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Ownership Structure, Board Attributes and the Level of Voluntary Disclosure in GCC Listed Firms

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Abstract

This thesis examines the impact of a number of ownership structures and board of directors' attributes on the level of voluntary disclosure in the context of the Gulf Cooperation Council (GCC). The sample consists of 220 non-financial listed firms in seven GCC stock exchanges over a three-year period (2014-2016). The study utilizes a disclosure index in order to assess the level of voluntary disclosure. The results of the descriptive statistical analysis reveal a low voluntary disclosure, averaging at 12 per cent, provided by firms in the GCC. The disclosure in terms of various components of voluntary disclosure (e.g. strategic, financial and non-financial) also appears to be in the same range as total voluntary disclosure. In the country wide analysis, the UAE appears to be leading others with an average of around 20 per cent. The findings from the multivariate analysis show that family ownership is significantly associated with the overall voluntary disclosure and this finding seems driven by financial and non-financial components of voluntary disclosure. Institutional ownership is not associated with the overall voluntary disclosure score, however appears to be influencing the non-financial component disclosure. In similar vein, board members' ownership and audit committee ownership are not significantly associated with the total voluntary disclosure however both these aspects are associated with the strategic and financial components of voluntary disclosure. Board ownership appears to positively impacting the financial component of disclosure and negatively influencing the strategic component of disclosure while audit committee ownership exerts a positive impact on the strategic component of disclosure and a negative one on the financial component of disclosure.

Furthermore, the study finds largely consistent evidence that board size and the number of board meetings during the year exert a negative impact on the level of voluntary disclosure suggesting that smaller boards are more effective in promoting transparency, and more meetings during the year could indicate difficulties facing the firms resulting in less disclosure. The study also finds that the holding of additional directorships by the board members exerts a positive impact on the voluntary disclosure level, highlighting that high experience is associated with members sitting in multiple boards; hence they are more effective in enhancing transparency. The study also records a positive and significant relationship between the size of the audit

committee and voluntary disclosure. This result suggests that more members on the audit committee increase its effectiveness in monitoring the management and demanding more information. The results of this study also indicate that board independence is positively related to the strategic component of disclosure indicating that the independent members demand more strategic information since they are less involved in the firm compared to insider.

This study makes a major contribution to our understanding of the voluntary disclosure practice in the context of GCC firms and its association with a number of different corporate governance factors (ownership and board of directors). The findings of this study will have important policy implications as the GCC market regulators continue to improve the corporate governance environment and transparency level in order to attract more local and foreign investments.

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Chapter 1: Introduction

1.1 Introduction

This chapter provide an introduction to this thesis. It starts with a discussion of the role of disclosure in corporate governance, then it introduces the background of the study. The third section outlines the motivation for the study, including the research aim and objectives along with the research questions that the study seeks to answer. The fourth section presents the research methods used in the current study followed by a summary of the main findings. Section five outlines the study's contributions to the knowledge of voluntary disclosure and its determinants in the context of GCC listed firms. The final section of this chapter outlines the structure of the thesis.

1.2 The Role of Disclosure in Corporate Governance

Disclosure refers to the process of disseminating information to potential users; and corporate disclosure in particular is the communication of financial and non-financial information to the stakeholders of a firm (Kavitha and Nandagopal, 2011). Disclosure can be classified into mandatory and voluntary disclosures (Kavitha and Nandagopal, 2011). Mandatory disclosure refers to information that is required by the laws and regulations (Kavitha and Nandagopal, 2011), whereas voluntary disclosure is any information in excess of that required by the laws (Meek, Roberts and Gray, 1995; Watson, Shrives and Marston, 2002). Information reporting both mandatory and voluntary disclosure arises from the need to inform the participants in the market in which they operate to enable them to take appropriate financial decisions. Therefore, the information disclosed by firms is one of the main reliable sources that market participants can rely on when evaluating the firm.

In addition to the informative role of disclosure, it also serves as a monitoring mechanism (Armstrong, Guay and Weber, 2010). In its role as monitoring mechanism, it assists in the process of aligning the actions and choices of the managers with the interests of the shareholders (Armstrong, Guay and Weber, 2010). By providing relevant and reliable information, disclosure is considered to be a monitoring tool that allows the stakeholders to verify that the management's actions serve their interests in the best manner. Since, according to Jensen and Meckling (1976) the interests of owners and managers are misaligned when the ownership and

control elements are separated, the owners need to monitor the managers in order to protect their interests from any management opportunistic behaviours. Better disclosure is associated with higher transparency and lower information asymmetry between the firm and its investors (Diamond and Verrecchia, 1991; Healy and Palepu, 2001; Petersen and Plenborg, 2006), which leads to an increase in investors' ability to monitor the management.

The reduction in information asymmetry resulting from increased disclosure and financial reporting also influences the functioning of the stock market. Theoretically, disclosing more information voluntarily reduces the information asymmetries among the market participants and increases stock liquidity (Diamond and Verrecchia, 1991). Firms with a high disclosure level involve less risk and therefore gain investors' trust so that the firms' stocks are traded at a fair price, resulting in increased liquidity (Healy and Palepu, 2001). This indicates that market effectiveness and efficiency are impacted by investors' trust that can be gained through the availability and accessibility of timely, relevant, and transparent information. Gul and Leung (2004) argue that, in order for a stock market to function effectively, the disclosure of information needs to be increased. Thus, increased disclosure contributes to the corporate governance practice by supporting stock market development through increasing the market liquidity and mitigating the agency problem between the managers and outside investors.

Capital markets are of great importance in fostering countries' economic development (Baamir, 2008). Since disclosure is essential for the development of an efficient capital market, it is reasonable to expect a positive contribution of disclosure and transparency to a country's economy (Qu, Leung and Cooper, 2013). In the Gulf Cooperation Council (GCC) context where the current study is conducted, the national economies are heavily dependent on oil revenues since these countries are considered large producers of oil and gas. However, recently, after the decline in oil prices, the government in these countries have realized the need to diversify the economy to create a more diverse and sustainable economy regardless of oil prices changes. Economic diversification is one of the main initiatives in the countries'

national visions[1]. According to these visions, focusing on capital market development to further drive local and foreign investments is one of the essential goals toward achieving economic growth and diversity. Therefore, investigating the transparency of the GCC stock markets through examining the level of voluntary disclosure and its determinants is essential in the current stage of these countries' development plans. The findings of this study contribute to the GCC government effort toward enhancing the transparency level through identifying the current level of voluntary disclosure and highlighting the ownership structure and board of directors characteristics that promote the disclosure of more information voluntarily.

1.3 Background of the study

The current study adopts the view of a firm as a nexus of contracts (Jensen and Meckling, 1976; Fama and Jensen, 1983), including formal contracts such as employment and debt contracts and informal ones that manage the unwritten working agreements such as the contractual relationship between the CEO and the board of directors (Armstrong, Guay and Weber, 2010). These contractual arrangements are created to resolve agency conflicts between the contracting parties, mainly between the managers and the shareholders. When creating contractual agreements, information availability is an essential element. Armstrong, Guay and Weber (2010) argue that financial reporting is very important in achieving more efficient contracts because the contracting parties commit to a more transparent information environment; and having efficient contracts in a more informative environment helps to mitigate the agency problem. The current study focuses on the conflicts between the shareholders and the managers. While the shareholders provide the capital for the firm, they are not involved in the operation and organization of the firm; therefore, information asymmetry occurs since the managers have better information than the shareholders. This situation places the shareholders at an information disadvantage when monitoring and evaluating the managers (Jensen, 1993).

Indeed, the disclosure of relevant information is viewed as an essential element of the contractual agreement between the managers and the shareholders that enables the latter to monitor and evaluate whether the former have managed the firm's resources

[1] Saudi National Vision 2030, Qatar National Vision 2030, United Arab Emirates National Vision 2021, Kuwait National Development Plan 2019, Oman National Vision 2040, and Bahrain Economic Vision 2030.

in their best interests, which helps to reduce the agency conflicts between these two parties (Healy and Palepu, 2001). Depending on the type and amount of the holdings, shareholders may vary with regard to their preferences and priorities in terms of corporate risk, stability, and performance (Khlif, Ahmed and Souissi, 2017). Hence, different types of shareholders with different control rights are expected to monitor their interests differently. Therefore, the current study hypothesises that the difference in the shareholders' monitoring ability impacts on the level of voluntary disclosure provided by the managers to outside parties. Similarly, different attributes of the board of directors, such as board independence, board compensation, and board size, are expected to impact on the board's monitoring function and thus influences the demand for information reporting (Armstrong, Guay and Weber, 2010). Ownership structure and board composition are viewed by prior researchers as factors impacting on the level of disclosure (Akhtaruddin and Haron, 2010)

In the situation of agency conflicts, the need to monitor the managers' behaviours arises, which introduces corporate governance mechanisms by which the shareholders ensure that the managers' actions and decisions are aligned with their interests. The current study examines voluntary disclosure as a monitoring tool that enables the shareholders to safeguard their interests. It investigates the relationships between the level of voluntary disclosure and corporate governance mechanisms such as ownership structure and board of directors. The study aims to explore how different types of shareholders differ in terms of their ability to monitor their interests through demanding more information; and how different attributes of the board of directors affect its role in monitoring the shareholders' interests through the disclosure of information.

Prior empirical researches studies have investigated the relationship between voluntary disclosure and a number of factors, including firm characteristics, ownership structure, corporate governance, and cultural factors (Cooke, 1989b; Hossain and Rahman, 1995; Haniffa and Cooke, 2002; Watson, Shrives and Marston, 2002; Gul and Leung, 2004; Donnelly and Mulcahy, 2008). Such studies are mainly targeted at developed or East Asian countries, where the economic, institutional, and corporate governance environments differ systematically from those of emerging countries, which limits the possibility of generalising the results to the less developed markets such as those found in the GCC countries. Country-specific characteristics,

such as the social, economic, and political environment and the organizational structure, are one element that could explain the variation in the informativeness of the accounting information and the inconclusive results of the disclosure studies conducted in different countries (Ahmed and Courtis, 1999; Healy and Palepu, 2001). According to Haniffa and Cooke (2002), disclosure practice does not develop in a vacuum; rather, it reflects the underlying environmental influences found in different countries. These influences include the economy, capital markets, accounting and corporate regulations, enforcement level, and culture (Haniffa and Cooke, 2002). Disclosure practices in less developed countries are more likely to be influenced by the cultural environment in which they operate and also by the ownership and management structure (Jaggi and Charles, 2000). Cannizzaro and Weiner (2015) provide evidence supporting the claim that the context and its specific characteristics in which disclosure is examined impacts the results of the study. They investigate the voluntary disclosure of multinational enterprises listed on the US stock markets and find that firms disclose more when the social expectations of transparency in their home countries are high but disclose less when faced with political risk, suggesting that countries matter when investigating transparency and disclosure (Cannizzaro and Weiner, 2015).

Furthermore, agency theory, adopted in the current study to explain the relations between ownership structure, board attributes and the level of voluntary disclosure, was originally considered and formatted based on the Anglo-American context where the governance environment and social, economic, and political factors are different from any context found globally (Judge, 2012). Agency theory was developed based on an examination of a very specific set of large Anglo-American publicly listed firms with dispersed ownership (Judge, 2012). Even though GCC corporate governance codes are derived from the best international practice and international corporate governance principles employed in Anglo-American firms, the corporate, institutional, and social setting is distinctively characterised with a number of features; namely, the high ownership concentration, the domination of controlling shareholders, the high presence of political connections, and the secretive character of the culture (Shehata, 2017). Therefore, the assumptions of agency theory may differ in their applicability and implementation according to context as Judge (2012) emphasises, “the role that context plays in guiding governance behavior and

outcomes" (Judge 2012, p.124). As a result, examining agency theory predictions that were established in developed countries in a developing setting like the GCC where a different culture and corporate environment exist may lead to different conclusions. The examination of voluntary disclosure in the current study using agency theory is important to assess the eligibility and suitability of this theory to the context of GCC countries.

As suggested above, GCC countries are different in relation to their social, cultural, economic, political, and corporate governance environment, as described in details in chapter 3 of this thesis. They differ from developed countries and other developing countries. They are Islamic states with large oil dependent economies and a culture of secrecy and over-reliance on personal relationships, all operating under monarchy systems (Baydoun et al., 2013). Therefore, the current study aims to promote our understanding of the financial reporting environment in the GCC stock markets and its relations to ownership structure and board of directors' attributes where the corporate governance environment and disclosure practice are expected to be influenced by number of distinctive country features.

1.4 Motivations for the Study and Research Objectives

Although mandated financial reporting and disclosure are of great importance in communicating firm performance and governance to outside investors (Healy and Palepu, 2001), it is argued that the disclosure of additional information voluntarily is even more important in terms of helping investors to take proper investment decisions and maintaining stock market efficiency and transparency. More information available through disclosure reduces information asymmetry between the managers and shareholders, resulting in less severe agency problems. Furthermore, the disclosure of additional information is expected to aid investors more in performing their monitoring and evaluating role effectively, which decreases the agency costs (Donnelly and Mulcahy, 2008).

The management may be motivated or demotivated to voluntarily provide additional information over and beyond the disclosure requirements. It is hypothesized in the disclosure literature based on agency theory that the management decision to disclose information could be influenced by ownership structure and board of directors characteristics (Donnelly and Mulcahy, 2008). For example, as a reduced

level of managerial ownership, managers will have more incentives to serve their own interests and fewer incentives to maximize the firm performance and investors' returns. This conflict of interests increases the agency costs, especially the cost related to the direct monitoring performed by shareholders To reduce the agency costs associated with shareholders' monitoring activities, the management will provide voluntary disclosure to allow the shareholders to perform monitoring over management behaviours. An example of a corporate governance factor that may influence voluntary disclosure is the composition of board of directors. Shareholders monitoring is further supported by the existence of an independent board of directors. Board independence has been linked to voluntary disclosure in a number of studies (Gray, Meek and Roberts, 1995; Haniffa and Cooke, 2002; Barako, Hancock and Izan, 2006; Donnelly and Mulcahy, 2008); however the results regarding the impact of board independence on the disclosure level are mixed. While some find a positive relationship between the proportion of independent directors and voluntary disclosure, suggesting a complementary relation between monitoring and disclosure (Cheng and Courtenay, 2006; Lim, Matolcsy and Chow, 2007), others report a negative association, indicating that the monitoring provided by the board substitutes the need for disclosure (Eng and Mak, 2003; Barako, Hancock and Izan, 2006).

In addition to the inconclusive results found in the disclosure literature, there is a limited number of studies conducted in GCC countries. These studies can be classified into three groups. The first group includes studies that examine the level of compliance with the corporate governance disclosure requirements, and identify a number of firm characteristics and corporate governance factors that influence the level of compliance with corporate governance disclosure (Al-Razeen and Karbhari, 2004; Al-Moataz and Hussainey, 2013; Albassam, 2014). The limitation of these studies is that they only examine the level of compliance with the corporate governance provisions and recommendations and do not capture any additional information disclosed in excess of the requirements. This group of studies focus only on the underlying factors that may impact on the companies' level of compliance with the rules and regulations.

The second group of studies empirically examines the level of voluntary disclosure of a specific type of information, like social responsibility disclosure and corporate sustainability disclosure (Naser et al., 2006; Nobanee and Ellili, 2016).

These studies are limited to one type of information and do not reflect the level of voluntary disclosure regarding other information, that is also important in enabling investors to form their investment decisions, such as information on future prospects and information regarding stock price.

The third group of studies comprises of empirical research studies that investigate the level of voluntary disclosure of a more comprehensive set of information than the second group (Hossain and Hammami, 2009; Al-Shammari and Al-Sultan, 2010; Al-Janadi, Abdul Rahman and Omar, 2012; Al-Janadi, Abdul Rahman and Alazzani, 2016). Some of these studies have identified a number of factors determining the level of voluntary disclosure; however, they are limited by the relatively small number of items on the disclosure index such as 22 items in the study by Al-Janadi, Abdul Rahman and Omar (2012), a small sample such as 25 companies in Qatar in the study by Hossain and Hammami (2009), and one-year observations. As a result, the findings of such studies do not precisely reflect the level of transparency in the whole GCC stock markets, which raises the need for a comprehensive examination of the voluntary disclosure practice and its determinants in the context of GCC.

Therefore, the current study is motivated to extend the prior empirical work in order to develop a more complete understanding of the voluntary disclosure practice in the context of GCC listed firms. The study looks at a comprehensive set of ownership features (government, family, institutional, foreign, board members, and audit committee members) and board of directors' attributes (board size, board independence, board meetings, board attendance, board compensation, board cross-directorships, and audit committee size) and their impact on the level of voluntary disclosure of firms listed on the GCC stock markets.[2] The study utilises a comprehensive disclosure index, which includes 71 items divided into three key aspects of voluntary information namely strategic, financial, and non-financial. The study sample covers all seven markets in the six GCC countries over a 3-year period to achieve the intended objective, the current study seeks to answer the following questions:

[2] Saudi Stock Exchange (Tadawul), Kuwait Bourse, Bahrain Bourse, Muscat Securities Market, Qatar Stock Exchange, Abu Dhabi Stock Exchange, and Dubai Financial Market.

1. To what extent and form do listed firms in the GCC stock markets provide voluntary disclosure?
2. How do the different types of ownership structure influence the voluntary disclosure practice in the context of GCC listed firms?
3. How do board of directors' attributes influence the voluntary disclosure practice in the context of GCC listed firms?

The first question helps to identify the level and form of voluntary disclosure provided by the listed firms and pin point voluntary disclosure practice across countries and amongst big and small firms. The second and the third questions help determine the variation in the level of voluntary disclosure in relation to ownership structures and various board characteristics. The findings provide crucial insights into the voluntary disclosure practice in the GCC and the factors that contribute to the disclosure of information such as strategic, financial and non-financial information. These findings are of great interest to the GCC regulatory bodies that are intended to increase the market transparency and power to attract new investments.

1.5 Research Method

The study sample consists of 220 non-financial firms listed in the seven GCC stock markets during three years period, from 2014 to 2016. 660 annual reports were collected and analysed. The annual report collected includes the financial statements and the notes following them, the board of director report (or the corporate governance report as named in some countries). In some occasions when the company purplish full annual report including all the previous reports in one document, the study utilises this report

In order to achieve the objectives entailed in this research, the study utilises a disclosure index with 71 voluntary items that are divided into three main groups of information and further categorised into eleven different types of information. The study also employs four regression models. A descriptive analysis is applied using scores derived form the disclosure index to identify the level of voluntary disclosure in general and the level of each information type in particular such as corporate strategy information and future prospect information. Then the study implements four regression models in order to identify any significant relation between total voluntary disclosure and its three different groups of information (strategic, non-financial, and

financial) with a number of explanatory variables (ownership structure factors, and board of directors attributes).

1.6 A Summary of the Research Findings

1.6.1 Voluntary disclosure level

The level of voluntary disclosure found in this study is considered to be low at an average of 12 per cent across the study sample, ranging from as low as 3 per cent up to a maximum of 36 per cent. In terms of voluntary disclosure components, the mean of strategic and non-financial voluntary disclosure is 13 per cent with a minimum of zero per cent and a maximum of 29 per cent and 56 per cent, respectively. The level of financial voluntary disclosure is slightly less than that of the other two groups with a mean of 12 per cent starting from zero per cent to a maximum of 39 per cent. The low level of voluntary disclosure documented in GCC listed firms may be explained by a number of corporate governance and contextual factors. In terms of corporate governance, the concentrated ownership by large shareholders, the domination of government and family institutions and their significant presence on the board of directors, the limited foreign investors holdings, and the ineffective role played by institutional investors due to their low sophistication and experience level make it easier for major shareholders to extract information privately through their personal and political relationships. The low voluntary information disclosed in GCC markets is further explained by the secretive culture and the high reliance on family and friend relationships.

The mean of total voluntary disclosure by country is as follows; UAE firms at 20 per cent, followed by Oman and Bahrain at 13 per cent, Saudi Arabia and Qatar at 12 per cent, and lastly Kuwait at 8 per cent. The UAE is also proven to have the higher voluntary score in the three voluntary groups: strategic, non-financial and financial information. This result is attributed to the fact that the UAE has the most welcoming business environment for foreign investors (Al-Janadi, Abdul Rahman and Omar, 2012). This is reflected in the average foreign ownership of 13 per cent documented in the current study which is the highest among GCC countries. In addition, while the two UAE stock exchanges were the last to be established, they were well structured with a corporate governance code in 2007 that was amendment in 2016. Therefore, a combination of attractive business environment for foreign investors and well-

governed stock markets could explain the highest voluntary score found in the UAE relative to the other GCC countries. On the other hand, Kuwait has the lowest voluntary disclosure level. This is considered to be reasonable taking into account that Kuwait was the last country to consider corporate governance rules and regulations. A corporate governance code was issued in Kuwait for the first time in 2010, which was replaced with new corporate governance regulation in 2013, which have not been updated since then. This difference between the UAE and Kuwait in terms of voluntary disclosure was also apparent in the process of collecting data for the current study. Information is organised and easy to find in the UAE situation compare to Kuwait where information is difficult to locate.

Furthermore, the total voluntary disclosure by year suggests a trend toward increased disclosure across the countries. For instance, in 2014, the voluntary disclosure score in Saudi Arabia was 11 per cent, which increased to 12 per cent in 2016. In Kuwait, it increased from 8 per cent to 10 per cent, and in the UAE from 19 per cent to 21 per cent. Regarding the voluntary disclosure groups, the mean of each group also increases over the three-year period. Strategic voluntary disclosure shows an improvement in all countries except Kuwait and Oman, non-financial information disclosure shows the most improvement among voluntary groups, whereas, financial information disclosure shows an increase in only Saudi Arabia and Qatar, indicating that the disclosure of financial information observed a slight improvement compared to the other groups of disclosure. This improvement in voluntary disclosure across GCC countries reflect the recent trend toward developing stock exchanges through promoting good practice of corporate governance and increased disclosure and transparency. Almost all GCC countries have recently amended their corporate governance codes to include more provisions in the disclosure and transparency requirements.

Regarding the disclosure of information within the sub-groups of the three main groups, the mean of voluntary disclosure varies widely from as low as 1 per cent for future prospect information to a maximum of 55 per cent for general corporate information. The GCC listed firms appear to disclose more information in groups such as: general corporate, corporate strategy, acquisitions and disposals, foreign currency, and stock price. In contrast, they disclose minimal information in groups such as future prospects, segmental information, and financial reviews. This reflects

the secretive culture in GCC; since financial information like future prospects and financial ratios consider sensitive information, firms hesitate to disclose it while corporate strategy and other general information are less sensitive and are related to mandatory information such as company vision and mission and company main practice or products. Therefore, firms find it easier and less costly to reveal this type of general information.

Regarding voluntary disclosure by industry groups, the energy and services sectors provide more voluntary disclosure than do the manufacturing and real estate sectors. This result is reasonable taking into consideration the political sensitivity and competition factors in each industry.

1.6.2 Voluntary Disclosure and Ownership Structure

In relation to the six ownership structure aspects, family ownership is the only ownership type that has a significant and positive relationship with total voluntary disclosure at the 1% level. Family ownership is significantly associated with two components of disclosure, non-financial and financial, at the 1% and 5% significance levels respectively. This result can be referred to the importance of family in the GCC societies. Families in the GCC care about their names and reputations and if this name is related to a business, the eagerness to protect the family name becomes more important. Therefore, family firms tend to provide more information disclosure in order to maintain their relations with minority shareholders.

Institutional ownership is not associated with the overall voluntary disclosure score, yet is found to be related to non-financial information disclosure implying that institutional investors in GCC are able to impact disclosure of non-financial information such as social responsibility information and information about board members and employees. Board members' ownership and audit committee ownership are not significantly associated with the total voluntary disclosure. However, interestingly they have an opposite effect on strategic and financial voluntary disclosure. While board ownership negatively affects strategic information disclosure, it is positively associated with financial disclosure. Audit committee ownership positively relates to the level of strategic disclosure and negatively affects the level of financial disclosure. Government and foreign ownership are not statistically significant in any of the four models.

1.6.3 Voluntary Disclosure and Board Attributes

The results show a negative and significant relationship between board size and the level of total voluntary disclosure at the 1% level. This negative association also exists with regard to the strategic and financial information disclosure at the 1% and 5% levels respectively, suggesting that fewer members on the board helps to perform their monitoring role effectively and promote transparency. This result supports the view that suggests more coherence and decision making effectiveness within small groups. In contrast to expectations, the number of board meetings held during the year has a negative and significant impact on the level of total voluntary disclosure suggesting that the number of meeting held during the year is not a sign of board diligence and effectiveness rather could be a sign of struggles and difficulties facing the firm. The results also indicate that the average number of other directorships held by the board members is positively and significantly associated with the level of total voluntary disclosure and also with the non-financial and financial information disclosure. This result supports the argument that views multiple directorships held by the board members as a sign of expertise and knowledge. In GCC, board member who sits in multiple boards is more valuable in the market due to the expectation that he has high level of expertise and knowledge in different types of businesses; the result in this study regarding multiple directorships comes to support this notion. Audit committee size is positively and significantly related to the total voluntary disclosure as well as to strategic and financial information, suggesting that more members on the audit committee is associated with greater diligence and effectiveness and hence better voluntary disclosure. The results of this study also indicate that board independence, although positively related to total voluntary disclosure, is not statistically significant except in the case of strategic information disclosure. Firms provide more strategic information when boards contain more independent members. The lack of significance regarding board independence could be a result of a misclassification of independent members in the GCC firms. The nomination and selection of board members rely more in the personal relations and political connections. Regarding board compensations and board members' attendance, these are not statistically significant. The structure and policy of board members' compensation is not clear in the GCC firms. In most of the cases, compensations are not linked to the performance indicators. Board members are granted a previously

specified amount of remunerations. This may explain the lack of significance of the impact of board compensations.

In terms of voluntary information groups, board ownership, audit committee ownership, board size, and audit committee size are the determinants of strategic and financial information disclosure. Board meeting and firm size significantly explain the variation in the level of disclosure regarding strategic and non-financial information, while family ownership and the average number of directorships held by the board members determine the level of non-financial and financial information. Strategic and financial information share the most in common regarding how the ownership and board attributes variables affect their level. Non-financial information, although it has the highest adjusted R-square at 42%, is explained by a lower number of variables; namely, family ownership, Board meetings, average directorships, and firm size.

Furthermore, the results of a sample t-test indicate that, on average, larger firms provide more voluntary disclosure compared to smaller ones; the mean total voluntary disclosure as well as the mean of its three main groups is significantly higher in larger firms than in smaller ones. This finding supports the view that large firms can afford the costs associated with the production and preparation of information as well as the costs associated with such information being exploited by competitors. In GCC most of the large firms are oil and hydrocarbon related or telecommunications firms. GCC governments tend to invest in these large firms. This may add to the pervious explanation by suggesting that large firms in the GCC disclose more voluntary information due to their political sensitivity and adequate resources, which can be further supplied by the government if needed.

1.7 The Contribution of the Study

This research makes a number of key contributions to the knowledge on the determinants of voluntary disclosure. First, the study determines the level of voluntary disclosure provided by the listed firms on the seven GCC stock markets using a comprehensive disclosure index created by Meek et al. (1995) (Al-Shammari and Al-Sultan, 2010; Qu, Leung and Cooper, 2013; Scaltrito, 2016) after modifying it to fit the corporate reporting context of the GCC market. The index consists of 71 items divided into three groups of information: strategic, financial, and non-financial information. The modified version of the index that is utilised in the current study

could be used by the regulators and market participants for the purpose of future assessment and evaluation of the level of transparency and voluntary disclosure in the market. The scope of the study, seven different stock markets in six GCC countries over the three-year period, makes a valuable addition to the literature by providing evidence of the low voluntary disclosure level in the GCC markets, where the social, cultural, and economic environments are distinctive from those in any other developing or developed countries and where prior empirical findings are limited.

The study offers a contemporary analysis of the corporate governance factors' influencing the level of voluntary disclosure since it covers the most recent years of 2014-2016. The study is comprehensive not only in the selection of the voluntary disclosure items included in the index, but also in the selection of the potential factors which may impact on the voluntary disclosure level. The ownership structure elements examined in the current study include six types of ownership; namely, board ownership, government ownership, family ownership, institutional ownership, foreign ownership, and audit committee ownership. It seeks to explain the variation in the voluntary disclosure provided by firms by the variation in the percentage of stakes held by the different types of shareholders. In an environment of ownership concentration, the domination of government and family holdings, and the restrictions on foreign investments, the GCC markets provide an interesting context in which to examine whether the identity of the shareholders or the value they hold has the influence on their monitoring ability and as a result, on the disclosure level they demand. The current study is the first to investigate the impact of such a comprehensive list of ownership variables on the level of voluntary disclosure.

The study also seeks to establish the impact of some of the key board attributes on the level of voluntary disclosure. Prior research studies have extensively examined the impact of board independence on board performance and various financial reporting issues (Jaggi and Charles, 2000; Eng and Mak, 2003; Gul and Leung, 2004; Ajinkya, Bhojraj and Sengupta, 2005; Samaha et al., 2012). They consider non-executive directors when measuring board independence. This current study is different from most of the prior studies in terms of how it measures the independence of the board using only independent directors as classified by the firms to purely reflect the impact of independence on disclosure. The study also examines the voluntary disclosure in relation to board meetings and board members' attendance to provide the required

empirical evidence of important board attributes that have not been adequately examined in relation to disclosure previously. The study also provides support for the other less researched aspects of the board of directors, namely board compensation and cross directorships that could potentially play a key role in the voluntary disclosures practices of the firm. The findings of this study in relation to the board of directors' attributes have policy implications, as the regulators in the GCC capital markets continue to define and refine the most desired board characteristics which aim to achieve board monitoring effectiveness. Therefore, the results of this study are essential to ensure that future regulatory changes are well informed and help enhance the transparency and disclosure level in the GCC stock markets.

The study additionally contributes to the literature of agency theory in the context of developing countries. Agency theory in the current study partially explains the level of voluntary disclosure in GCC firms using ownership and board factors. Agency prediction regarding family ownership, board size, board meetings, board directorship, audit committee size, and firm size are supported. However, agency theory fails to provide support for other ownership types and board attributes such as institutional ownership, foreign ownership, board meeting and attendance, and board independence. This may imply that the concentration of ownership, the domination of government and family owners, the personal and political connection in addition to a group of economic, cultural, and social norms exist in GCC countries work together to prevent the agent-principle relationship and agency explanations form overly dominating (Judge, 2012; Shehata, 2017).

As big and small firms differ in their ownership structure and board attributes, the current study contribute to the disclosure literature by investigating the difference in the influence of these corporate governance mechanism on the voluntary disclosure level in big and small firms. Identifying the difference between big and small firms has important implications especially in situations where regulators follow 'one size fit all' approach.

Overall, the results of the current study contribute to the academic literature by providing a better understanding of the voluntary disclosure practice and its determinants; namely, ownership structure and board attributes in the context of the GCC markets. The results are also of great interest to current and prospective

investors as well as to financial analysts, regulators, and academics in order to enhance their understanding of the reporting and corporate governance environment in the seven stock markets operating across the six GCC countries.

1.8 Structure of the Thesis

Chapter 2 provides a review of the empirical literature in the area of corporate governance and voluntary disclosure. It starts by presenting an overview of the earliest works that investigated a number of firm financial characteristics as the main determinants of voluntary disclosure, such as firm size and listing status. The second section of the chapter aims to review studies that focused on the associations between different types and concentrations of ownership structure and the level of voluntary disclosure. Then the chapter continues to review the studies that explore the association between the board of directors and the level of disclosure. The chapter highlights the mixed results regarding the impact of ownership and board factors on the level of voluntary disclosure, which is attributed to studying different settings and adopting different measures of disclosure.

Chapter 3 presents a detailed description of the corporate governance environment in the GCC countries as the context of the study. It begins by presenting a historical background to the establishment of the Gulf Cooperation Council and its stated objective, followed by a historical overview of the GCC stock markets' development and their regulatory bodies. The overview also includes general information about the GCC stock markets, like foreign investors' participation, market capitalization, and value traded. Following this, the chapter provides a general review of the GCC social and corporate environment. The discussion is directed toward three aspects of the environment; namely: social and cultural norms, economic features, and the political system. This is followed by a detailed discussion of the development of the corporate governance codes by presenting an overview of the introduction and amendment of the governance codes in each of the GCC countries as well as a brief comparison of these. The chapter then concludes by providing a detailed description of the corporate governance environment; specifically, the ownership structure and board of directors.

Chapter 4 presents the research's theoretical underpinning, methodology, and method used in the study. It starts by outlining the research philosophy and paradigm in which this thesis is located. Then explaining the theoretical framework regarding corporate voluntary disclosure. This section illustrates the appropriateness of using agency theory as a base for forming the research hypotheses related to ownership structure and the board of directors. The following section is devoted to the hypotheses development. Following this, the chapter presents details of the sample selection and the data collection in addition to the research methods relevant to achieving the study objectives. Due to the nature of the study, a significant portion of the next section of this chapter is devoted to explaining and justifying the use of the disclosure index as an instrument for measuring the dependent variable, the level of voluntary disclosure. The following section of this chapter provides the definitions and measurements of the independent and control variables used in this research. The chapter then concludes with a brief explanation of the statistical analysis and tests employed in the current study.

Chapter 5 provides a comprehensive analysis and discussion of the impact of various ownership structures and board of directors-related factors on the level of voluntary disclosure. The first section of this chapter presents the descriptive statistics of the variables employed in the empirical analysis. The descriptive analysis first includes a detailed analysis of the dependent variable, the voluntary disclosure score. Then, it presents the descriptive statistics for the independent and control variables utilized in this study. The chapter then includes the results of the correlation matrix showing the Pearson correlation between all of the variables employed in the study. Following this, the chapter provides the results of a multivariate regression analysis that tests the hypotheses created in chapter 4. This section includes a detailed discussion of the results and their implications for the corporate governance environment of the GCC stock markets. The multivariate analysis is followed up by a comparative analysis of big and small firms. This includes the independent sample t-tests and the regression analysis. The chapter then concludes with a summary illustrating the main findings of the current study.

Chapter 6 then draws together the analysis and discussion presented in the previous paragraphs by providing a summary of the findings of the study and their

implications. In addition it provides recommendations regarding any potential future research. This chapter also discusses a number of research limitations of the study.

Chapter 2: Literature Review

2.1 Introduction

Although the initial work in the disclosure literature is understood to dates back to Cerf's (1961) contribution, this remains an active academic area seeking to identify the determinants and motivations of such practice in different settings and environments. The majority of disclosure studies have been developed based on agency theory viewing disclosure as a monitoring tool that results in less information asymmetry and so, accordingly; reduces the agency problems between shareholders and managers (Cooke, 1989b; Hossain and Rahman, 1995; Eng and Mak, 2003; Barako, Hancock and Izan, 2006; Mohd Ghazali and Weetman, 2006). The early disclosure studies focused on firm size and listing status as the main determinants of voluntary disclosure relying mainly on the assumption that disclosure policy is determined based on a costs and benefits evaluation of disclosure decisions (Cerf, 1961; Singhvi and Desai, 1971; Firth, 1979). The ensuing studies have continued to include firm size as a main factor in explaining the variation in information disclosure and added more firm characteristics to the equation, such as international listing, profitability, leverage, audit firm size, and industry type, expanding the vision for a clearer explanation of disclosure rather than a simpler trade-off between costs and benefits (McNally, Eng and Hasseldine, 1982; Chow and Wong-Boren, 1987; Cooke, 1989a; Craswell and Taylor, 1992; Cooke, 1993; Gray, Meek and Roberts, 1995; Hossain and Rahman, 1995; Meek, Roberts and Gray, 1995; Mitchell, Chia and Loh, 1995; Depoers, 2000; Watson, Shrives and Marston, 2002; Leventis and Weetman, 2004; Aksu and Kosedag, 2006; Hossain and Taylor, 2007; Iatridis, 2008). Table 2.1 summarizes the findings and methods of these earlier studies in the field that have focused on firm financial characteristics as the determinants of the disclosure practices.

The next generation of disclosure research aimed to examine in greater depth the suitability of agency theory for explaining the practice of disclosure. Therefore, these researchers examined a more comprehensive set comprising a number of corporate governance mechanisms to investigate to a greater extent the connection between these mechanisms, as monitoring tools, and disclosure. They linked the internal corporate governance mechanisms (mainly the board characteristics and ownership

structure) to the level of voluntary disclosure assuming that the monitoring role performed by such mechanisms impacts on the agency costs and consequently the managers' decisions to disclose additional information. Some focused on board attributes (Gul and Leung, 2004; Cheng and Courtenay, 2006; Gisbert and Navallas, 2013; Samaha, Khlif and Hussainey, 2015), others on different aspects of ownership structure (Chau and Gray, 2002; Mangena and Tauringana, 2007; Godfred and Zangina, 2009; Rouf and Al Harun, 2011), and the majority combined the analysis of board attributes and ownership structure into a single study in order to capture the overall influence of corporate governance on the voluntary disclosure level (BarakoHancock and Izan, 2006; Mohd Ghazali and Weetman, 2006; Huafang and Jianguo, 2007; Samaha et al., 2012). Even though they all document the existence of an association between corporate governance and disclosure, the results are inconclusive. For example, while government ownership clearly has an impact on the level of voluntary disclosure, this impact is documented to be positive in some studies (Eng and Mak, 2003; Wang and Claiborne, 2008; Al-Bassam et al., 2015) but negative in others (ChoiSami and Zhou, 2010; Choi et al., 2013; Qu, Leung and Cooper, 2013). Similarly, board independence is documented as influencing the level of disclosure; yet, it resulted in increased disclosure in some studies (Huafang and Jianguo, 2007; Abdullah, Percy and Stewart, 2015), but in decreased disclosure in others (Eng and Mak, 2003; Barako, Hancock and Izan, 2006).

The third generation of the literature recognised the influence of environmental factors on disclosure practice. Hence, a number of studies have examined the impact of external factors, such as the legal, political, social, cultural, and capital market environment, on the firms' disclosure policies (Haniffa and Cooke, 2002; Bauwhede and Willekens, 2008; García-Meca and Sánchez-Ballesta, 2010; Abdullah, Percy and Stewart, 2015; Samaha, Khlif and Hussainey, 2015). They provide evidence that such factors explain to some extent the variation in disclosure level in different settings.

Due to the presence of mixed results regarding the determinants of disclosure, as documented in different settings, and the recognition of the impact of environmental elements on the disclosure practices outlined in several studies, the current study aims to examine the voluntary disclosure in the GCC countries, where the social, culture, legal, and corporate governance environments are distinct from those found in developed and other developing countries. The first section of this chapter will

therefore review the literature concerning the relationship between ownership structure aspects and voluntary disclosure. The second section of the chapter then considers the impact of board attribute on the level of voluntary disclosure provided by corporations. Throughout, this chapter provides an overview of both the board of directors and the ownership structure influences on the disclosure level as the primary corporate governance monitoring mechanisms.

Table 2.1 Voluntary Disclosure and Firm Financial Characteristics

Author, Date, and Journal	Research Method	Key Findings
Cerf (1961) *University of California Press*	Examines the influence of a number of variables on information disclosure quality in New York stock exchange using a weighted disclosure index consisting of 31 items.	Size, profitability, and number of shareholders impact positively on disclosure quality.
Singhvi and Desai (1971) *The Accounting Review*	Examines the characteristics of corporations in the US that are associated with the quality of corporate disclosure.	Firm size, listing status, number of shareholders, and audit firm size are positively associated with disclosure quality.
Firth (1979) *Accounting and Business Research*	Examine the relationship between voluntary corporate disclosure and firm characteristics in the UK using a disclosure index of 48 weighed items.	Firm size and stock market listing are positively and significantly related to the level of disclosure. Audit firm size is not significant in influencing disclosure.
McNally et al. (1982) *Accounting and Business Research*	Examine the disclosure practice of listed companies in New Zealand using a disclosure index of 41 weighted items.	A correlation analysis indicates a significant and positive relationship between firm size and disclosure level.
Chow and Wong-Boren (1987) *The Accounting Review*	Examine the relations between firm size, financial leverage, and assets in place and the extent of voluntary disclosure by 52 Mexican firms using regression analysis and a disclosure index comprising of 24 Items; weighted and un-weighted.	Firm size is positively related to the level of voluntary disclosure. Leverage and assets in place were found to be unrelated to voluntary disclosure. The results from the weighted and un-weighted disclosure index are equivalent.

Author, Date, and Journal	**Research Method**	**Key Findings**
Cooke (1989) *Journal of International Financial Management and Accounting*	Examines the level of voluntary disclosure by 90 Swedish listed and unlisted firms using a disclosure index with 146 items and regression analysis models.	Quotation status and firm size are positively related to the level of voluntary disclosure. Trading companies disclose significantly less than other industry sectors. Parent company relations are found to be insignificant.
Craswell and Taylor (1992) *Journal of Business Finance and Accounting*	Investigates the disclosure decision regarding estimated reserves by 98 oil and gas companies in Australia	The type of audit firm is significantly and positively related to the disclosure of reserves. Choosing a big audit firm is a signal that reflects a high quality auditor and financial reporting.
Cooke (1993) *Journal of Business Finance and Accounting*	Measure the level of disclosure (mandatory and voluntary) in 48 Japanese listed corporations depending on their quotation status (unlisted, listed on the Tokyo Stock Exchange, and multinational listing).	Quotation status is significantly related to disclosure. Multinational corporation provide more disclosure of information compared to domestically listed and unlisted firms.
Gray et al. (1995) *Journal of International Financial Management and Accounting*	Investigate the impact of international capital market pressure on the level of voluntary disclosure using a disclosure index of 128 items classified into strategic, non-financial, and financial information.	Internationally listed corporations disclose significantly more strategic and non-financial information than domestically listed firms in US. However, no difference in the level of overall disclosure is found between internationally listed and domestically listed firms in the UK. Participation in the international capital markets is significantly associated with increased voluntary disclosure.
Hossain and Rahman (1995) *Journal of International Financial management and Accounting*	Empirically examine the relationship between five firm characteristics and the level of voluntary disclosure by 55 New Zealand firms using regression analysis and a disclosure index consisting of 95 items.	Firm size, foreign listing and leverage are significantly and positively related to the level of voluntary disclosure. Audit firm size is not a significant explanatory variable.

Author, Date, and Journal	Research Method	Key Findings
Meek et al. (1995) *Journal of international business studies*	Examine a number of factors influencing the level of voluntary disclosure by 226 multinational corporations in the US, UK, and several continental European countries using a disclosure index consisting of 85 items categorized into strategic, non-financial, and financial information.	Company size, listing status, and country/region are all significant in explaining the variation in the level of disclosure. Larger firms provide more financial and non-financial information. Multi-listed companies provide more strategic and financial but not non-financial information. Industry type is related to financial and non-financial information. Leverage is significant, but, negatively related to disclosure contrary to expectation. Profitability is not significant.
Mitchell et al. (1995) *Accounting and Finance*	Examine the motivation regarding the voluntary disclosure of segment information in 29 multi-product Australian firms.	There is a positive association between voluntary segment disclosure and firm size and leverage.
Depoers (2000) *European Accounting Review*	Examines the determinants of disclosure in the annual report of 102 French listed companies using a disclosure index consisting of 65 financial and non-financial items.	Firm size and foreign activities are positively related to the extent of voluntary disclosure. Ownership diffusion, audit firm size, and leverage are not statistically significant. The study also finds that the extent of disclosure decreases with proprietary costs resulting from the potential entry of new competitors.
Watson et al. (2002) *The British Accounting Review*	Investigate the voluntary disclosure of accounting ratios in the corporate annual report of 313 UK companies and its association with a number of characteristics using multivariate analysis.	Firm size and industry have a significant positive effect on the level of ratios disclosure. Performance measures including profitability and leverage appear to have a limited effect on ratios disclosure. No significant relation exists for liquidity.

Author, Date, and Journal	Research Method	Key Findings
Leventis and Weetman (2004) *Advances in International Accounting*	Examine the association between the voluntary disclosure of environmental, social, and financial information and a number of firm characteristics of 87 companies listed on the Athens Stock Exchange using regression analysis. The disclosure index consists of 72 items based on Meek et al. (1995)	Firm size and is positively and significantly related to the overall voluntary disclosure. Profitability, liquidity, and gearing are found not to be significant in influencing disclosure. Different factors influence different types of information.
Aksu and Kosedag (2006) *Corporate governance: An International Review*	Examine the transparency and disclosure practice by the 52 largest firms on the Istanbul Stock Exchange using an index consisting of 106 items in three groups.	Larger and more profitable firms exhibit a higher transparency and disclosure score. Leverage was found not to be significant.
Hossain and Taylor (2007) *Corporate Ownership and Control*	Empirically use a regression analysis to investigate the effect of firm characteristics on the voluntary disclosure of 22 commercial banks in Bangladesh. The disclosure index consists of 45 items	Bigger banks and banks that are audited by an audit firm that has an association with an international audit firm tend voluntarily to disclose more information.
Latridis (2008) *International Review of Financial Analysis*	Analyses the financial characteristics of firms that provide extensive disclosure in the UK.	The study shows that in order to raise finance in the capital market, firms tend to provide extensive accounting disclosure. Firms that provide extensive disclosure tend to be large firms, that are highly leveraged, more liquid and profitable indicating that firms that perform well financially tend to provide more detailed information in order to impress the market participants. Accounting disclosure reduces the level of risk and, as a result, the cost of raising capital.

2.2 Ownership Structure and Voluntary Disclosure

Whether ownership is concentrated or dispersed and its relation to the disclosure of information has been intensively examined in the literature. Recently, however, researchers have realized that the type of ownership, regardless of its concentration, is also an important and influential factor that governs managers' actions and impacts on the disclosure policy (Godfred and Zangina, 2009; Laidroo, 2009; Rouf and Al Harun, 2011; Jalila and Devi, 2012; Liang, Lin and Chin, 2012). Ownership structure plays a central role in determining the extent to which the interests of managers and owners are aligned and thereby the level of monitoring needed in this agency relationship. For instance, different owners will monitor and control managers differently depending on their varying investment objectives and horizons, control rights, and ability to gather and process information (Connelly et al., 2010; Khlif, Ahmed and Souissi, 2017). Thus, both the identity and concentration of ownership are significant in identifying the level of monitoring managers and the level of disclosure that managers are willing to provide to meet the owners' needs. This section reviews the literature regarding the influence of different classes of ownership and concentration level on the corporate voluntary disclosure policy.

2.2.1 Ownership Concentration

The underlying assumptions regarding the relationship between information disclosure and ownership concentration derive from agency perspectives. Using agency theory, the dominant prior studies have provided evidence of a negative impact of concentrated ownership on the level of disclosure (Chau and Gray, 2002; Fan and Wong, 2002; Faten, 2005; Tsamenyi, Enninful-Adu and Onumah, 2007; Bauwhede and Willekens, 2008; Jiang and Habib, 2009; Laidroo, 2009; García-Meca and Sánchez-Ballesta, 2010; Jiang, Habib and Hu, 2011; Samaha et al., 2012; Khlif, Ahmed and Souissi, 2017; Jankensgard, 2018; Lepore et al., 2018). These studies from both developing and developed countries (all characterized by high concentration structure settings), support the view that the presence of large block holders reduces agency conflicts that arise between managers and major shareholders. When a small number of shareholders hold a large portion of the firm's stock, this helps to align the interests of major shareholders and managers. This alignment of interests reduces the need for monitoring by outside minority shareholders because

they assume that major shareholders have superior power and control rights to closely monitor managers' behaviours. As a result, the demand for information by minority shareholders for monitoring purposes is expected to decrease, which results in less information disclosure. At the same time, large shareholders with significant control rights may intervene in the board's monitoring function by appointing their representatives and convey private information for their own benefits, which may not coincide with the minority's interests, causing the level of information asymmetry to increase between the firm and the minority shareholders (Jiang, Habib and Hu, 2011).

On the other hand, when control rights are widely spread over a large number of shareholders, the conflicts of interests between managers and shareholders arise and the demand for high quality disclosure and financial reporting to monitor managers become significantly important. Thus, ownership diffusion is found to be positively associated with the level of voluntary disclosure (Hossain, Tan and Adams, 1994; Babío Arcay and Muiño Vázquez, 2005; Patelli and Prencipe, 2007). So, financial reporting and disclosure seem to be more important in dispersed ownership structure where outside shareholders are the main monitoring body, who lack first-hand access to information, which leads to greater information and transparency demand than is the case within a concentrated ownership structure, in which major shareholders bear the responsibility for monitoring the management using their right to convey private information. Thus, the literature tends to conclude that a highly concentrated ownership can compensate for weak governance by effectively monitoring the management and positively impacting on firm performance, which consequently reduces the need for disclosure (Abdallah and Ismail, 2016).

However, several studies have failed to identify a significant impact of ownership concentration on the level of voluntary disclosure (Gisbert and Navallas, 2013; Scaltrito, 2016). One of these studies was conducted in Spain and another in Italy, where ownership structure is typically highly concentrated. One explanation of the lack of a significant negative effect of concentrated ownership on disclosure level could be the existence of other effective corporate governance mechanisms that play a substitute role of monitoring and promoting transparency, which outweighs the role of the major shareholders. For example, Gisbert and Navallas (2013) find that the presence of independent directors is significantly related to higher voluntary disclosure even in a concentrated ownership structure. This mean that the role of the

independent director is not impaired by the existence of major shareholders. Similarly, the positive impact of ownership diffusion is not significant in a number of studies; Raffournier (1995) find no relationship between the extent of voluntary disclosure in Swiss corporations' annual reports and ownership diffusions; Depoers (2000) shows that ownership diffusion is unrelated to the level of voluntary disclosure in France; and Alsaeed (2008) document no association between ownership diffusion and voluntary disclosure in Saudi Arabia. These studies are either old or were conducted in less developed countries, which may imply that the minority shareholders' rights are not fully developed or weakly enforced resulting in a moderate impact of such ownership in terms of monitoring their interests and demanding more information.

2.2.2 Government Ownership

There is no consensus concerning the relationship between government ownership and disclosure in the literature. Most of the studies that examine government ownership are mainly conducted in East Asian countries, such as China, Malaysia, and Singapore or in other developing markets, where the government institutions tend to hold a significant stake of listed companies. Empirically, government ownership is recognized as having a positive impact on the financial reporting and disclosure policies (Eng and Mak, 2003; Mohd Ghazali, 2007; Wang and Claiborne, 2008; Jiang and Habib, 2009; Laidroo, 2009; Ntim et al., 2012; Al-Bassam et al., 2015; Haddad et al., 2015; Muttakin and Subramaniam, 2015). Even though government ownership is not thoroughly examined in GCC countries, where such ownership is highly concentrated, a couple of recent studies have identified a significant positive effect of government ownership on firm performance (Zeitun, 2014; Abdallah and Ismail, 2016).

The positive impact of government ownership on disclosure and performance is supported by multiple explanations. First, using agency theory argumentation, the presence of government shareholders increases moral hazard and agency problems due to the conflict between commercial and political objectives and the easier access to different sources of finance, thereby motivating management to provide more voluntary disclosure in order to relieve investors' concerns regarding management quality (Eng and Mak, 2003; Wang and Claiborne, 2008). Second, government

keenness to maintain its reputation as a promoter of transparency and good governance practices, in addition to its eagerness to obtain foreign capital, may encourage firms with high government ownership to increase their disclosure to signal the government efforts regarding market developments and also to legitimise the firm operations (Ntim et al., 2012; Al-Bassam et al., 2015). Abdallah et al. (2016) support this explanation by showing that government investments in GCC countries are targeted more toward firms with better governance. Third, in line with the same legitimacy assumption in the second explanation, firms with high government ownership are more politically sensitive since their actions and activities are always under public attention (Jiang and Habib, 2009; Muttakin and Subramaniam, 2015). Therefore, government shareholders are more likely to exert some pressure over the management to provide more disclosure in order to gain public trust and live up to the society's expectations.

However, government ownership is negatively associated with disclosure in some studies (ChoiSami and Zhou, 2010; Choi et al., 2013; Qu, Leung and Cooper, 2013). Qu et al. (2013) suggest that government ownership in China lacks incentives to encourage disclosure because more voluntary disclosure means enabling other shareholders to monitor the management's related party transactions more closely. In addition, government shareholders have privileged access to private information. Similarly, in China, Choi et al. (2013) and Choi et al. (2010) provide evidence that government ownership is related to more information asymmetry in the market, indicating that government ownership chooses to exploit their private information advantage for their own interests rather than improving the general market transparency. All three studies were conducted in China during the period from 1995 to 2003. Two of the studies have examined government ownership pre and post 2000 and find that, while the negative effect of government ownership remains, this is not significant after 2002, suggesting that the institutional changes that took place in the Chinese stock market had a positive impact on the corporate governance environment, which affected the role of government ownership in the information environment.

In spite of the significant positive impact of government ownership documented in the literature and the negative effect of such ownership recognized in the Chinese market in the early period of 1995-2000, a number of studies found no explanatory power of government ownership on the level of voluntary disclosure (Mohd Ghazali

and Weetman, 2006; Naser et al., 2006; Huafang and Jianguo, 2007; Jalila and Devi, 2012; Sepasi, Kazempour and Mansourlakoraj, 2016). Huafang and Jianguo (2007)'s result of no significant effect of government ownership in 2002 is consistent with Chinese studies where the significant negative impact of government ownership disappeared from 2002 onward, due to several institutional reforms on the stock market environment. In Malaysia, Mohd Ghazali (2007) and Mohd Ghazali and Weetman (2006) show inconsistent results regarding government ownership. The underlying reason for this is that Mohd Ghazali (2007) examined social responsibility disclosure and found the government to be an influential corporate governance factor in increasing this type of disclosure, which could be explained based on legitimacy theory, while Mohd Ghazali and Weetman (2006) examine voluntary disclosure in general after the financial crisis of 1997 and find no significant association. The remaining studies that failed to find any statistical significance for government ownership were conducted in countries like Iran, Qatar, Malaysia, and China.

2.2.3 Institutional Ownership

The disclosure literature mainly suggests a positive impact of institutional ownership on the disclosure level, recognizing the active role played by institutional shareholders in monitoring the management and controlling the agency costs through reducing information asymmetry (Khlif, Ahmed and Souissi, 2017). Institutional ownership is confirmed to be associated with higher voluntary disclosure in a number of studies (Barako, Hancock and Izan, 2006; Laidroo, 2009; Khodadadi, Khazami and Aflatooni, 2010; Rouf and Al Harun, 2011; Ntim et al., 2012; Al-Bassam et al., 2015). Due to their level of knowledge and expertise, and their large ownership holdings and control rights, institutional shareholders have extra incentives to monitor the management and demand additional information reporting. Moreover, as outside professionals with a high level of information demand, institutional investors are unable to directly oversee the management activities, which increases the managers' motivations to provide more information voluntarily in order to meet their demand.

However, when the institutional ownership is highly concentrated in the hands of a few large institutions who maintain a long-term relationship with the firm, they might act as insiders. Consequently, they fail to place pressure on the management for higher disclosure while securing private information for their own benefits, which

results in lower voluntary disclosure (Ajinkya, Bhojraj and Sengupta, 2005; Jiang and Habib, 2009; Choi et al., 2013). Jiang and Habib (2009) and Ajinkya et al. (2005) empirically support this argument by providing evidence that the positive impact of institutional ownership on voluntary disclosure becomes negative when such ownership is highly concentrated, suggesting that concentrated institutional ownership is likely to have an adverse effect on the level of transparency and disclosure, taking into consideration their ability to obtain private information and their readiness to provide a big portion of the capital. This could motivates managers to collaborate with them in the expropriation of other capital providers, specifically when the type of institutions is banks or investments management companies (Choi et al., 2013).

Institutional ownership is not significant in a number of studies (Haniffa and Cooke, 2002; Donnelly and Mulcahy, 2008; Jalila and Devi, 2012). Two of these studies were conducted in Malaysia and one in Ireland. This may indicate that institutional investors in these markets are insufficiently eager to demand extra information in order to evaluate the managers' decisions or they have an alternative channel besides annual reports to extract valuable information (Donnelly and Mulcahy, 2008).

In summary, institutional ownership is well documented in the literature to have a positive impact on the level of voluntary disclosure until it reaches a certain level of concentration that enables such ownership to obtain private benefits. This adverse influence at a high concentration level is also driven by other factors, such as the power of institutions as capital providers, the effectiveness of corporate governance in the capital market, and the amount of protection provided for minority shareholders.

2.2.4 Family Ownership

In the case of family ownership, the disclosure literature targets East Asian countries such as Malaysia, Hong Kong, and Singapore because holding a large stake by the founding family members is very common in these countries. Studies conducted in this context, with a culture of a high level of secrecy and strong uncertainty avoidance, document a negative association between disclosure level and both family ownership and the proportion of family members on the board (Jaggi and Charles, 2000; Ho and Wong, 2001; Chau and Gray, 2002; Haniffa and Cooke, 2002; Mohd Ghazali and Weetman, 2006; Jalila and Devi, 2012). The results of these

studies imply that firms with substantial family ownership have little incentive to disclose information in excess of the mandatory requirements since the separation of ownership and control is limited, which gives the main owners (the family members) great access to private information in order to monitor their interest; thus, demand for public disclosure will be relatively low compared to within a firm with a wider ownership structure. Unlike other types of ownership, the family interests are aligned with those of the other shareholders because the wealth of the family is closely linked to the firm's value. Therefore, the demand for information for monitoring purposes by other shareholders will be limited. In addition, the presence of family ownership may impair the positive impact of other corporate governance mechanisms, like the influence of independent directors on the board through the nomination of family representatives to the board, allowing only the minimum number of outside independent directors to participate. Thus, family firms' boards tend to be less independent and dominated by family member representatives (Anderson and Reeb, 2003; Al-Ghamdi and Rhodes, 2015). Ali et al. (2007) find that family firms are less likely to provide voluntary disclosure, especially information regarding corporate governance practice, in order to facilitate the appointment of family members to the board. Jaggi and Charles (2000) show that the positive association between board independence and financial disclosure is weaker in family controlled firms, suggesting that the monitoring role of independent directors is impaired by family shareholding, which consequently reduces the level of disclosure provided over and above the mandatory.

Even though firms with family ownership face less severe agency problems between the owners and managers, they encounter more serious agency problems that arise between the majority family shareholders and other minority shareholders (Ali, Chen and Radhakrishnan, 2007). Therefore, it is argued that firms with significant family holdings are motivated to provide more information in order to reduce the type two agency costs and satisfy the minority's needs (Wang, 2006). In the USA, Ali et al. (2007) conclude that family firms provide better financial reporting and report higher quality earnings than non-family firms. Facing substantially higher agency conflict between the controlling and non-controlling shareholders, family firms are more likely to warn of bad news and offer more accurate and informative forecasts. Wang (2006) provides comparable results, showing that founding family ownership is

significantly associated with higher earnings quality and informativeness. Similarly, Cascino et al. (2010) document that family firms provide higher quality earnings compared to their non-family counterparts in Italy, concluding that family financial reporting is both more transparent and less managerially manipulated. In addition, family ownership is characterized by a long-term investment horizon and a desire to maintain their family name's reputation, generation after generation. This, among other reasons, makes the family members who hold managerial positions keen to increase the value of the firm as a whole and satisfy the corporate demand for transparency. Al-Ghamdi and Rhodes (2015) find that managerial ownership in Saudi family firms is associated with higher firm performance. In summary, the relationship between family ownership and financial reporting is influenced by the level of severity of type two-agency conflict occurring between the family and the minority shareholders, as well as, by the unique nature of family shareholders as long-term investors who care most about their family reputation.

2.2.5 Foreign Ownership

There exists a considerable body of literature that associates higher disclosure with a larger proportion of foreign ownership (Depoers, 2000; Haniffa and Cooke, 2002; Faten, 2005; Barako, Hancock and Izan, 2006; Huafang and Jianguo, 2007; Mangena and Tauringana, 2007; Wang and Claiborne, 2008; Webb, Cahan and Sun, 2008; Liang, Lin and Chin, 2012; Qu, Leung and Cooper, 2013; Alhazaimeh, Palaniappan and Almsafir, 2014; Muttakin and Subramaniam, 2015). These studies are diversified in terms of their contexts; some are conducted in East Asian countries like Malaysia, China, and Taiwan, some in African countries such as Kenya and Zimbabwe, and some in European countries like France. Prior studies attribute the positive impact of foreign shareholding on the level of disclosure and transparency to the information disadvantage facing foreign investors compared to domestic ones. Foreign investors bear higher information asymmetry due to their geographical distance, language barriers, and lack of knowledge of the local accounting and corporate environment, which make them more vulnerable to expropriation by corporate managers and controlling shareholders. Therefore, the management is motivated to provide voluntary information to satisfy the foreign ownership needs, retain their funds, and attract new investments. Retaining and attracting foreign ownership will benefit the general information environment, especially in emerging

economies, bearing in mind that they probably come from more developed and transparent corporate settings and have high expectations regarding information disclosure. Foreign ownership is considered to be an important type of shareholding in emerging markets because of their long-term investment horizon, which helps to stabilize the stock volatility, and also because of their fundamental research they conduct on potential markets raising the level of awareness and knowledge for all market participants (Liang, Lin and Chin, 2012).

Contrary to the above arguments, foreign ownership is found inversely to affect the level of disclosure in Ghana and Baltic countries (Godfred and Zangina, 2009; Laidroo, 2009). These results may be attributed to the size of foreign ownership. The average foreign shareholding on the Ghanaian stock exchange is 31 % while on the Baltic's three stock exchanges it is 32%, which is considered to be high compared to the mean in other studies. This may suggest that, when foreign investors become major shareholders, they will have the ability to extract information privately, so the management will have fewer incentives for disclosure and transparency since funds are mainly acquired from foreign investors (Laidroo, 2009). However, this argument is insufficiently supported by the literature since Choi et al. (2010), in China, find a similar negative impact of foreign ownership on information transparency while the average foreign shareholding is very low, at 6.8%. Therefore, it is unclear whether the negative impact of foreign ownership is to be attributed to high concentrated shareholding or to other environmental features.

The minimal proportion of foreign ownership could reduce the explanatory power of such a factor in recognizing its impact on the level of disclosure. Jalila and Devi (2012) find no significant relationship between foreign ownership and voluntary segment disclosure in Malaysia, while Zeitun (2014) shows an insignificant effect of foreign ownership on firm performance in the GCC, which he attributes to limited foreign ownership investment in the GCC markets.

2.2.6 Board Ownership

The theoretical justifications for the relations between board ownership and information disclosure originate from two hypotheses. Considering board ownership as a corporate governance mechanism that acts as a substitute for monitoring and disclosure anticipates a negative relationship between board ownership and voluntary

disclosure (Chau and Gray, 2002; Eng and Mak, 2003; Mohd Ghazali and Weetman, 2006; Mohd Ghazali, 2007; Akhtaruddin and Haron, 2010; Pergola and Joseph, 2011; Rouf and Al Harun, 2011; Haddad et al., 2015; Sepasi, Kazempour and Mansourlakoraj, 2016). The convergence of interest hypothesis suggests that the alignment between the management and shareholders resulting from managerial shareholdings reduces the agency conflict and so, consequently, reduces the need for monitoring by outside shareholders (Jensen and Meckling, 1976), which lowers the need for voluntary disclosure. Managers who own shares in the firm are expected to work to increase the firm value. Al-Ghamdi and Rhodes (2015) show a positive relationship between managerial ownership and firm performance in Saudi Arabia, suggesting that there exists a better association of the goals of the shareholders and managers when the managers hold stocks in the firm. When the management holds a smaller stake, on the other hand, the management entrenchment hypothesis applies. They are motivated to prioritize the maximization of their benefits over the benefit of the firm. In this instance, outside shareholders may need to monitor their interests more closely, which means incurring additional agency costs. To reduce the cost associated with monitoring, managers are willing voluntarily to increase the disclosure to enable the outside shareholders to evaluate the management behaviours.

However, Jiang and Habib (2009) argue that managerial ownership is negatively related to disclosure at a low ownership concentration level, and a high proportion of managerial ownership has a positive impact on the disclosure level. They suggest that when, managers hold a substantial amount of shares, they will be motivated to accommodate the shareholders' disclosure preferences. Managers with large shareholdings are willing to extract share-market benefits through better disclosure. Nevertheless, this argument needs more investigation to order ascertain its validity.

Some studies have failed to identify any significant impact of managerial ownership on voluntary disclosure (Huafang and Jianguo, 2007; Donnelly and Mulcahy, 2008; Jalila and Devi, 2012; Samaha et al., 2012). The absence of a significant association may be due to the low proportion of managerial ownership in the market, as in the study of Huafang and Jianguo (2007) in which the mean of such ownership is 0.48%, or may be attributed to the type of information disclosure under investigation, as in Jalila and Devi's (2012) study, which focuses on the disclosure of segment information.

2.2.7 Audit Committee Ownership

The presence of an audit committee has been positively linked to corporate disclosure practice in the literature (Ho and Wong, 2001; Babío Arcay and Muiño Vázquez, 2005; Barako, Hancock and Izan, 2006; Al-Shammari and Al-Sultan, 2010; Samaha, Khlif and Hussainey, 2015). These researchers view an audit committee as an effective monitoring mechanism that mitigates the agency cost and improves the quality of the financial reporting presented to the stakeholders, suggesting that an audit committee plays an important role in overseeing the corporate reporting process (Ghafran and O' Sullivan, 2013) and fulfilling the shareholders' need for more transparent disclosure. Therefore, the existence of an audit committee is shown to encourage firms to convey more information voluntarily in order to give the shareholders a chance to evaluate the management behaviour and take appropriate investment decisions.

However, previous studies have almost exclusively focused on the existence of an audit committee as a variable explaining the level of disclosure. As far as we know, no previous research has investigated the ownership of the audit committee members and its association with the voluntary disclosure level. Therefore, the current study is motivated to examine the effect of the ownership held by audit committee members and the level of voluntary disclosure by GCC firms. Does holding a stake in the firm increase the incentives for audit committee members to perform their monitoring role more effectively and improve the reporting environment? Or do such shareholdings reduce the demand for more disclosure by outside shareholders since insiders who hold the firm's share conduct the role of monitoring?

To summarize, the above section reviews the academic literature concerning the association between ownership structure and the level of voluntary disclosure. Table 2.2 contains details and findings summarising of the studies undertaken in the area of ownership structure and corporate disclosure. It is noticeable that there is no consensus regarding the effect of the different types and concentration of ownership on voluntary disclosure. Shareholders' identity and concentration have both a positive and negative impact depending on both the jurisdiction and the time period under investigation. In addition, due to their nature as both dependent and independent variables, voluntary disclosure, ownership structure, and board attributes are largely

influenced by corporate governance practices, the legal environment, and the cultural setting. Therefore, the current study is motivated to examine the relationship between ownership structure and voluntary disclosure in GCC firms. GCC countries are different due to multiple factors. Hence, voluntary disclosure in the GCC environment may be explained differently in terms of its determinants and their impact compared with previous research studies.

Table 2.2 Voluntary Disclosure and Ownership Structure

Author, Date, and Journal	Research Method	Key Findings
Hossain (1994) *International Journal of Accounting*	Examines the relationships between voluntary disclosure and a number of firm characteristics in 67 Malaysian firms using a disclosure index consisting of 78 items.	Firm size, ownership diffusion, and foreign listings are positively associated with the level of disclosure. Leverage and audit firm size are found to be insignificantly related to disclosure.
Raffournier (1995) *The European Accounting Review*	Examines the association between the level of voluntary disclosure and a number of determinants in 161 Swiss firms using a disclosure index comprising 30 items.	Large firms and internationally diversified firms tend to disclose more information than small domestic ones. Audit firm size and profitability are also significantly and positively related to disclosure. No relationship is found between disclosure and ownership diffusion and leverage.
Depoers (2000) *European Accounting Review*	Examines the determinants of disclosure in the annual report of 102 French listed companies using a disclosure index consisting of 65 financial and non-financial items.	Firm size and foreign activities are positively related to the extent of the voluntary disclosure. Ownership diffusion, audit firm size, and leverage are not statistically significant. The study also finds that the extent of disclosure decreases with the proprietary costs resulting from the potential entry of new competitors.
Jaggi and Charles (2000) *Journal of Accounting and Public Policy*	Examines if any relationship exists between mandatory financial disclosure and the proportion of independent non-executive directors in family controlled firms compare to non-family ones in Hong Kong using a disclosure index consisting of 30 items.	The ratio of independent directors on the board is positively associated with the comprehensiveness of the financial disclosure and this association tends to be weaker in family controlled firms.

Author, Date, and Journal	Research Method	Key Findings
Ho and Wong (2001) *Journal of International Accounting, Auditing, and Taxation*	Study the relationship between four corporate governance attributes and the extent of voluntary disclosure by listed firms in Hong Kong using a weighted disclosure index consisting of 20 items.	The existence of an audit committee is significantly and positively related to the level of voluntary disclosure while family members on the board is negatively associated with voluntary disclosure. Independent non-executive directors is not significant.
Chau and Gray (2002) *International Journal of Accounting*	Examine the association of ownership structure with the voluntary disclosure of listed companies in Hong Kong and Singapore. The disclosure index is based on that developed by Meek et al. (1995)	The level of information disclosure is likely to be lower in firms with more insider (concentrated ownership) and family shareholders. A wider ownership structure found to affect the level of disclosure positively.
Fan and Wong (2002) *Journal of Accounting and Economics*	Examine the relationship between earnings informativeness and ownership structure in997 companies in seven East Asian countries	High ownership concentration is associated with low earnings informativeness.
Haniffa and Cooke (2002) *ABACUS*	Statistically, using multiple regression analysis, examine the association between voluntary disclosure in Malaysia and a number of corporate governance mechanisms and firm characteristics. The disclosure index consists of 65 items selected based on previous studies.	Firms with non-executive chairperson disclose less than companies with an executive one. They also provide evidence that family members on the board negatively impact the level of disclosure and that foreign ownership is positively associated with voluntary disclosure. Cross-directorship is not statistically significant.

Author, Date, and Journal	Research Method	Key Findings
Eng and Mak (2003) *Journal of Accounting and Public Policy*	A quantitative regression analysis of the impact of ownership structure and board composition on voluntary disclosure in 158 firms listed on the Singapore Stock Exchange. The disclosure index consists of 44 items and is grouped into three information types.	Disclosure decreases with greater managerial ownership and increases with government ownership. They also find that increased presence of outside directors is associated with reduced disclosure. The level of disclosure is not significantly related with blockholder ownership.
Ajinkya et al. (2005) *Journal of Accounting Research*	Examine the association of outside directors and institutional investors with management earnings forecasts occurrences.	Firms with higher institutional investors and outside directors are more likely to issue management forecasts. Yet, when institutional investors are highly concentrated, the effect of earning forecast becomes negative.
Babio Arcay and Muino Vazquez (2005) *Advances in Accounting, Incorporating Advances in International Accounting*	Examine the relationship between firm and corporate governance characteristics and the disclosure policy of 91 Spanish firms using a disclosure index consisting of 15 items.	Firm size, independent directors, and the existence of an audit committee are all positively associated with greater voluntary disclosure. Board size is not significantly associated with disclosure level. Ownership concentration is found to be negatively associated with the adoption of good governance practices in general.
Faten (2005) *Review of Accounting and Finance*	Studies the relationship between voluntary earnings disclosure and a set of corporate governance attributes in 207 French firms	Voluntary earnings disclosure is negatively related to ownership concentration and positively associated with foreign institutional ownership. Board size and independent directors are not statistically significant in explaining disclosure. Large firms and firms with multiple listing provide more earnings disclosure voluntarily.
Alsaeed (2006) *Managerial Auditing Journal*	Assess the level of disclosure and its associations with a number of firm characteristics in 40 Saudi Arabian firms using a disclosure index of 20 items.	The mean of the disclosure score is low at 33 per cent. Larger firms disclose more voluntary information. Ownership dispersion, leverage, profitability, liquidity and audit firm size are not significantly related to the level of disclosure by Saudi firms.

Author, Date, and Journal	Research Method	Key Findings
Barako et al. (2006) *Corporate Governance: An International Review*	Investigate the extent to which the corporate governance attribute, ownership structure, and firm characteristics impact on the voluntary disclosure practice of companies listed in Kenya. The disclosure index consists of 47 items classified into four categories	The presence of an audit committee significantly and positively influences the level of voluntary disclosure, and the proportion of non-executive directors is negatively related to voluntary disclosure. They also find that institutional and foreign ownership positively impacts the level of disclosure. Large firms and firms with high debt disclose more voluntary information. Liquidity, profitability, and the type of audit firm are not statistically significant.
Ghazali and Weetman (2006) *Journal of International Accounting, Auditing and Taxation*	Examines the association between ownership structure and board attributes with voluntary disclosure in the annual reports of 87 Malaysian firms after the financial crisis of 1997 using a disclosure index with 53 voluntary items categorized into three groups and a multiple regression analysis.	Director ownership and the proportion of family members on the board are negatively associated with voluntary disclosure. Government ownership is not significant in any information disclosure category. Size and profitability show a positive effect on the level of voluntary disclosure. Board independence is not significant.
Naser et al. (2006) *Advances in International Accounting*	Investigate the determinant of voluntary corporate social disclosure by 21 Qatari listed firms using a disclosure index of 34 items.	Firm size and leverage are positively related to corporate social disclosure. Government, institutional, and blockholders ownership are all not significant.
Wang (2006) *Journal of Accounting Research*	Examines the association between founding family ownership and the quality of financial reporting using 500 companies from Standard and Poor's index.	Founding family ownership is associated with higher earnings quality

Author, Date, and Journal	Research Method	Key Findings
Ali et al. (2007) *Journal of Accounting and Economics*	Compare family and non-family firms regarding their disclosure practice in 500 US firms using a disclosure index of 98 transparency and disclosure questions collected by the Standards and Poor's.	Compared to non-family firms, family firms are more likely to warn of bad news, have better quality earnings, have more analysts following them and more informative forecasts. However, family firms are less likely to make voluntary disclosure about their corporate governance practice, possibly in order to facilitate the appointment of family members to the board without any intervention by other shareholders.
Ghazali (2007) *Corporate Governance: The International Journal of Business in Society*	Investigates the influence of ownership structure on corporate social responsibility disclosure in 87 Malaysian firms using a disclosure checklist containing 22 items.	Companies with a high proportion of board (managerial) ownership significantly disclose less social responsibility disclosure and companies with more government ownership report more information.
Huafang and Jianguo (2007) *Managerial Auditing Journal*	Test the relations between different types of ownership, board compositions, and the level of voluntary disclosure in China using regression analysis	Higher blockholder and foreign ownership is associated with increased voluntary disclosure; however, managerial and government ownership are unrelated to disclosure. Board independence and firm size positively impact the level of disclosure.
Mangena and Tauringana (2007) *Journal of International Financial Management and Accounting*	Empirically, using multiple regression analysis, examine the relationship between foreign ownership and disclosure practice in Zimbabwe. The disclosure index is developed base on that of Meek et al. (1995).	Foreign share ownership is more likely to be greater in firms that provide more disclosure, have more non-executive directors on the board, and have more independent members on the audit committee. They prove that effective corporate governance structure and disclosure policy are important in attracting foreign investors.

Author, Date, and Journal	Research Method	Key Findings
Patelli and Prencipe (2007) *The European Accounting Review*	Empirically test the relationship between two control mechanisms, voluntary disclosure and independent directors in a setting where a dominant shareholder is present in 175 Italian companies using a disclosure index and multiple regression analysis.	The relationship between independent directors and voluntary disclosure is positive and significant; thus the two mechanisms tend to coexist. Firm size is positively related to voluntary disclosure. Ownership diffusion is significant at the 10% level and positive in influencing disclosure. Leverage and profitability were found not to be significant determinants of the level of disclosure.
Tsamenyi et al. (2007) *Managerial Auditing Journal*	Examine the corporate governance and disclosure practice of 22 firms listed on the Ghanaian Stock Exchange using a correlation matrix.	Larger firms and firms with a dispersed ownership structure tend to provide more disclosure. They document a negative relationship between blockholder ownership and disclosure level.
Bauwhede and Willekens (2008) *Corporate Governance: An International Review*	Examine the determinant of corporate governance disclosure by 130 firms from the European Union using a disclosure index of 14 corporate governance items.	Firms whose shares are more concentrated disclose less corporate governance information. Companies from non-common law countries report less information than firms in common law countries.
Donnelly and Mulcahy (2008) *Corporate governance: An International Review*	Investigate the relationship between voluntary disclosure and corporate governance in Ireland.	Greater disclosure is associated with a greater proportion of non-executive directors on the board. Institutional and managers ownership are not significant in relation to disclosure.
Wang et al. (2008) *Journal of International Accounting Auditing and Taxation*	Empirically examine the determinant of voluntary disclosure in Chinese listed firms. The disclosure index is adopted from Meek et al. (1995).	The extent of voluntary disclosure is positively related to foreign ownership, state ownership, firm performance, and the reputation of the auditor (big 4). They also find no relation exist between the level of voluntary disclosure and the cost of debt capital.

Author, Date, and Journal	Research Method	Key Findings
Webb et al. (2008) *The International Journal of Accounting*	Examine the effect of globalization (measured by foreign sales, number of foreign subsidiaries, and number of foreign listings) and legal environment on the level of voluntary disclosure in 643 firms from 30 countries using a disclosure index of 11 items.	Voluntary disclosure increases with globalization, indicating that foreign involvement motivates firms to improve their disclosure. This effect is greater for firms from a weak legal environment.
Godfred and Zangina (2009) *Managerial Auditing Journal*	Examine the effect of corporate governance and disclosure on foreign share ownership in Ghana using a disclosure index consisting of 106 items.	There is a significant but inverse interaction between foreign ownership and disclosure and transparency contrary to expectations. Foreign ownership has a positive and significant relationship with market capitalization as a measure of size. Leverage is negatively related to foreign share holdings.
Jiang and Habib (2009) *Accounting Research Journal*	Investigate the impact of different type of ownership concentration on the level of corporate voluntary disclosure in New Zealand.	Concentrated institutional ownership negatively affects voluntary disclosure while firms with high government and management concentration disclose more voluntary information, suggesting a positive monitoring effect of government and management ownership at a high concentration level. They also find that the negative effect of institutional investors becomes positive when they are not concentrated.
Laidroo (2009) *Corporate Governance: An International Review*	Studies the impact of ownership structure on annual report disclosure in the context of public announcements in three stock exchanges from the Baltics.	Public announcement disclosure is negatively associated with ownership concentration and foreign ownership and positively associated with institutional ownership government ownership.
Akhtaruddin and Haron (2010) *Asian Review of Accounting*	Examine the linkage between board ownership and independence of the audit committee and corporate voluntary disclosure in 124 listed companies in Malaysia.	Board ownership is associated with lower voluntary disclosure. This association becomes weaker in firms with a more independent and expert audit committee.

Author, Date, and Journal	Research Method	Key Findings
Al-Shammari and Al-Sultan (2010) *International Journal of Disclosure and Governance*	Examine the relationships between a number of corporate governance mechanisms and voluntary disclosure in 170 Kuwaiti companies using a disclosure index consisting of 76 items.	Only the existence of an audit committee is significantly and positively related to the level of voluntary disclosure. The proportion of non-executives on the board, audit firm, and leverage are not statistically significant.
Cascino et al. (2010) *Family Business Review*	Examine the impact of family ownership on the quality of accounting information reporting measured by earning quality based on accounting and market based attributes in 114 Italian firms.	Family firms report higher quality earnings compared to their non-family counterparts.
Choi et al. (2010) *China Journal of Accounting Research*	Examine the effect of government ownership on information asymmetry measured by the bid-ask spread.	They find that government ownership raised the bid-ask spread in the early periods between 1995-2000 implying that more government ownership is associated with more information symmetry. However, in the period between 2001-2003, after changes in the ownership structure and corporate governance mechanisms in China, the link between government ownership and information asymmetry becomes insignificant.
Garcia-Meca and Sanchez-Ballesta (2010) *European Accounting Review*	A meta-analysis of 27 empirical studies to examine the association between ownership concentration and board independence and the level of voluntary disclosure.	Firms with more independent directors on the board and less concentrated ownership structure are more likely to disclose more voluntary information. They also prove that investor protection and the measurement of variables may explain the variability between the results of disclosure studies. A positive association between board independence and voluntary disclosure only occurs in countries with high investor protection rights and high legal enforcement.

Author, Date, and Journal	Research Method	Key Findings
Khodadadi et al. (2010) *Business Intelligence Journal*	Investigate the relations between corporate governance attributes and voluntary disclosure provided by 106 Iranian firms using a disclosure index consisting of 31 items.	Voluntary disclosure increases as the percentage of institutional investors increases. Board independence is not statistically significant.
Jiang et al (2011) *The British Accounting Review*	Investigate the impact of ownership concentration on information asymmetry measured by the bid-ask spreads and on voluntary disclosure in 103 firms in New Zealand. The disclosure index consists of 39 items.	A positive association exists between ownership concentration and information asymmetry. Specifically, when the ownership is concentrated by managerial ownership, more voluntary information is provided in order to reduce the information asymmetry.
Pergola and Joseph (2011) *Corporate Governance: the International Journal of Business in Society*	Investigate the association between board ownership and earnings quality to document whether the convergence of interests theory or entrenchment theory apply in this relationship.	Entrenchment theory is supported. There is a negative impact of board ownership on earnings quality suggesting that board members who own shares are entrenched and do not act in the interests of the shareholders.
Rouf and Al Harun (2011) *Pakistan Journal of Commerce and Social Science*	Examine the relations between ownership structure and the voluntary disclosure of 94 Bangladeshi firms using a disclosure index comprising of 68 items.	The level of voluntary disclosure is negatively associated with managerial ownership and positively related to institutional ownership. Profitability is negatively associated with the level of voluntary disclosure and firm size is not statistically significant.
Jalila and Devi (2012) *Procedia Economic and Finance*	Examine the association between ownership structure and the segment disclosure provided by Malaysian listed firms.	The higher the percentage of shareholding by the family, the less the extent of segment disclosure by Malaysian firms. Segment disclosure is not statistically associated with government, institutional, foreign, and managerial ownership.

Author, Date, and Journal	Research Method	Key Findings
Liang et al. (2012) *Review of Quantitative Finance and Accounting*	Examine the association between foreign institutional ownership and the likelihood of holding conference calls in Taiwan using regression analysis.	Foreign institutional ownership, despite its small shareholding, impacts on the management's decision to hold conference calls. The presence of such ownership improves the corporate transparency for the investing public.
Ntim et al. (2012) *Journal of Applied Accounting Research*	Investigate the major factors influencing the voluntary corporate governance disclosure by 169 South African corporations using regression analysis and a disclosure index consisting of 50 corporate governance items.	Blockholder ownership significantly reduces voluntary disclosure while board size, audit firm size, government ownership, and institutional ownership significantly increase disclosure.
Samaha et al. (2012) *Advances in Accounting, Incorporating Advances in International Accounting*	Assess corporate governance voluntary disclosure and its relations to a number of board attributes and ownership aspects in 100 listed firms in Egypt using a multiple regression model and a disclosure index of 53 items divided into five categories.	Corporate governance disclosure decreases with increasing ownership concentration and increases with more independent members on the board. Board size and director ownership are found not to be significant. Firm size is positively related to disclosure and leverage is not significant in any information category.
Choi et al. (2013) *Asia-Pacific Journal of Financial Studies*	Examine the effect of foreign ownership on information asymmetry measured by bid-ask spread in the emerging market of China.	Firms with higher foreign ownership have a higher information asymmetry. Similarly, government and institutional ownership is positively associated with information asymmetry.

Author, Date, and Journal	Research Method	Key Findings
Gisbert and Navallas (2013) *Advances in Accounting, Incorporating Advances in International Accounting*	Study the role of independent directors in promoting transparency in a high ownership concentration setting in 62 Spanish firms using a disclosure index consisting of 76 items.	Even in the presence of significant blockholder, independent directors affect the quantity of voluntary disclosure positively; thus, a high ownership concentration dose not outweigh the role of independent directors in enhancing transparency. Firm with a larger board engage in more voluntary disclosure. Ownership concentration is found not to be significant.
Qu et al. (2013) *Managerial Auditing Journal*	Investigate the stakeholders' impact on firm disclosure decisions in 297 listed Chinese firms during a 12 year period using stakeholders theory and a disclosure index of 50 voluntary items.	The higher the percentage of government ownership, the lower the voluntary disclosure of the corporation and the higher the foreign ownership, the more voluntary disclosure the firms make. They also find that the number of board meetings and board independence are positively and significantly related to the level of voluntary disclosure; however, board size is not statistically significant in affecting disclosure decisions. Leverage is found to be positively related to voluntary disclosure and profitability negatively impacts voluntary disclosure.
Al-Bassam et al. (2015) *Business and Society*	Investigate the voluntary compliance and disclosure of the recommended good corporate governance practice in 145 Saudi listed firms. The index consists of 65 corporate governance provisions.	The average corporation compliance with the corporate governance provisions is 44.61 per cent. Government and institutional ownership are positively impact the level of compliance and disclosure of Saudi firms. Also, firms audited by one of the big four and have big board of director disclose significantly more corporate governance information. Blockholder ownership is negatively associated with the level of disclosure.
Alhazaimeh et al. (2014) *Procedia – Social and Behavioural Sciences*	Investigate the relations between corporate governance and ownership structure on voluntary disclosure in Jordan.	Blockholder ownership negatively affects the level of disclosure, while foreign ownership and board compensation impact disclosure positively. Board size, board meetings, and board independence are not significant.
Zeitun (2014) *Review of Middle East Economics and Finance*	Investigates the impact of ownership structure and concentration on firm performance of 203 firms listed in five GCC countries	Government ownership positively affects firm performance in the GCC while foreign and institutional ownership are not significant in impacting performance. Ownership concentration is positively associated with performance.

Author, Date, and Journal	Research Method	Key Findings
Al-Ghamdi and Rhodes (2015) *International Journal of Economics and Finance*	Examine the determinants of corporate performance for Saudi firms, comparing family firms with non-family ones using regression analysis.	The performance of Saudi firms increases as ownership concentration increases in family firms. Managerial ownership is also associated with better performance in family firms. Board size is positively related to firm performance in family firms.
Haddad et al. (2015) *Eurasian Business Review*	Examine the impact of ownership structure, family board domination and the level of voluntary disclosure in 57 Jordanian companies using a disclosure index containing 62 items.	Voluntary disclosure is positively associated with government ownership and negatively related to managerial ownership.
Muttakin and Subramaniam (2015) *Sustainability Accounting, Management and Policy Journal*	Investigate the relations between ownership structure, board characteristics and corporate social disclosure in India using a disclosure index of 17 items.	Corporate social disclosure is positively associated with government ownership, foreign ownership, and board independence and negatively related to CEO duality.
Samaha et al. (2015) *Journal of International Accounting Auditing and Taxation*	Using a meta-analysis of 64 empirical studies, examine the association between board and audit committee characteristics and voluntary disclosure.	Country geographic location affects the association between board size, board composition, CEO duality and voluntary disclosure. They also find that investor protection; the type and method of disclosure, and measures of the explanatory variables impact the relations between some corporate governance mechanisms and voluntary disclosure. Board size and independent directors are positively and significantly associated with voluntary disclosure but not in the MENA region. Audit committee is positively related to voluntary disclosure.
Abdallah et al. (2016) *Journal of International Financial Markets, Institutions and Money*	Investigate how different levels of ownership concentration affect the relationship between corporate governance and corporate performance in GCC listed firms.	Well-governed firms outperform other firms, with Muscat, Bahrain, and Abu Dhabi being in the lead while Riyadh and Kuwait are last. They find that ownership concentrations of 5% or 10% strengthen the positive relationship between governance and performance especially when the major shareholder is the government. However, when the concentration is 20% or higher, no significant association is found between governance and performance.

Author, Date, and Journal	Research Method	Key Findings
Scaltrito (2016) *EuroMed Journal of Business*	Examine the determinants of voluntary disclosure by 203 Italian listed firms using a disclosure index consisting of 38 main group of items.	Firm size and the big 4 audit firms impact positively and significantly the level of voluntary disclosure. Ownership concentration, leverage, and profitability are found not to be significant in determining the level of disclosure in Italy.
Sepasi et al. (2016) *Procedia Economics and Finance*	Examine the association between ownership structure and disclosure quality for a sample of 80 Iranian firms.	Managerial ownership has a significant negative impact on disclosure quality and government ownership is not significant in affecting disclosure.
Jankensgard (2018) *International Review of Financial Analysis*	Examines the relation between ownership structure and voluntary disclosure in Sweden using 188 firms in the period between 2007 and 2012. The disclosure is measured using ranking of disclosure by Swedish firms.	Ownership structure influences the level of voluntary disclosure significantly. The presence of block ownership improves the voluntary disclosure. However, at high level of block ownership an entrenchment effect is evident.
Lepore et al. (2018) *Corporate Governance*	Examines the disclosure of corporate governance information in relation to ownership structure in 75 non-financial firms listed in Italy in 2016 using content analysis of the corporate governance statement.	There is a negative association between ownership concentration and the corporate governance disclosure and this relationship become stronger when a dominant financial shareholder is among the owners of the firm.

2.3 Board Attributes and Voluntary Disclosure

Along with ownership structure, the board of directors is perceived as the central internal supervising and monitoring tool through which shareholders can exercise control over the management (Donnelly and Mulcahy, 2008). In order to mitigate the agency problems that may arise between the shareholders and the management, the board of directors has a duty to evaluate the management's performance and safeguard the shareholders' interests. Hence, the effectiveness of the board in performing its monitoring role will have an impact on the financial reporting practice since the level of monitoring is connected to the level of disclosure in the corporate literature (Eng and Mak, 2003). To determine the association between the board of directors and the level of disclosure, it is important to examine how different board attributes impact on board effectiveness and consequently influence the disclosure policies of firms. The following section reviews the empirical literature that associates a number of board characteristics with the level of disclosure provided by firms.

2.3.1 Board Independence

The empirical evidence concerning the association between independent directors and the disclosure level is inconclusive. Consistent with agency theory, which argues that the presence of independent directors on the board increases its effectiveness and monitoring capability over managerial opportunism (Fama and Jensen, 1983), a number of studies have documented a positive relationship between board independence and disclosure level (Jaggi and Charles, 2000; Ajinky, aBhojraj and Sengupta, 2005; Babío Arcay and Muiño Vázquez, 2005; Cheng and Courtenay, 2006; Huafang and Jianguo, 2007; Lim, Matolcsy and Chow, 2007; Patelli and Prencipe, 2007; Donnelly and Mulcahy, 2008; García-Meca and Sánchez-Ballesta, 2010; Samaha et al., 2012; Gisbert and Navallas, 2013; Qu, Leung and Cooper, 2013; Abdullah, Percy and Stewart, 2015; Muttakin and Subramaniam, 2015; Samaha, Khlif and Hussainey, 2015; Al-Janadi, Abdul Rahman and Alazzani, 2016). In an intense monitoring environment where outside independent directors exist, managers will be less likely to withhold information to use it for expropriation purposes. Hence, the information reporting is expected to be more transparent and informative. In addition,

independent directors as outsiders, with high expertise, a professional reputation, and no management role or ownership ties to the company, are more likely to promote voluntary disclosure in order to signal that they are fulfilling their duty of monitoring and reducing the information asymmetry, and also to protect their reputation as expert independent directors in the market (Lim, Matolcsy and Chow, 2007; Patelli and Prencipe, 2007). In these situations, a complementary relationship is suggested between the two monitoring mechanisms (voluntary disclosure and independent directors).

However, in some empirical studies, board independence is found to have a negative impact on the disclosure level (Eng and Mak, 2003; Gul and Leung, 2004; Barako, Hancock and Izan, 2006; Al-Moataz and Hussainey, 2013). These studies suggest a substitute relationship between the proportion of independent directors and the level of voluntary disclosure. Their argument is based on the balance between costs and benefits. If the presence of independent outside directors effectively monitors and prevents any management opportunistic behaviours, the need for additional disclosure will be reduced since disclosure does not come free of charge, taking into account the proprietary costs associated with more disclosure. Therefore, voluntary disclosure and independent directors are seen as alternative mechanisms. While some researchers support the substitute relationship between these two controls, others attribute the negative association to the possibility of collusion between independent directors and the major shareholders (Barako, Hancock and Izan, 2006). They claim that outside directors may not be truly independent since they may be appointed by the large shareholders based on their personal relations rather than their qualifications. This may harm board members' independence and inversely affect their duty of monitoring. While this argument maybe applicable in certain settings, it is not supported in a highly concentrated ownership context. Gisbert and Navallas (2013) in Spain and Patelli and Prencipe (2007) in Italy provide evidence that independent directors still exercise control and monitoring over the management even in the presence of a dominant shareholder suggesting that the agency and reputation theories still apply to the case of major shareholders' dominance in these contexts. The reason

underpinning such a result could be the strong investor protection and legal environment that prevent any collaboration between independent members and major shareholders at the expense of the minority, or the results might simply imply that the major shareholders desire more disclosure in order to extract capital market benefits (Gisbert and Navallas, 2013).

Moreover, a number of studies document a lack of significance of the relationship between board independence and voluntary disclosure (Ho and Wong, 2001; Faten, 2005; Mohd Ghazali and Weetman, 2006; Al-Shammari and Al-Sultan, 2010; Khodadadi, Khazami and Aflatooni, 2010; Allegrini and Greco, 2013; Alhazaimeh, Palaniappan and Almsafir, 2014). This Failure to find a link between independent directors and disclosure may be due to the measure of board independence adopted in the study (García-Meca and Sánchez-Ballesta, 2010). Some include non-executive directors who do not hold a management position, yet maintain personal or professional relationships with the firm. The inclusion of non-executive directors who are not fully independent may explain the insignificant impact of board independence in some studies.

Altogether, the question remains whether board independence and voluntary disclosure tend to coexist or are alternatives to each other. The context of the study plays a crucial role in answering this question. The legal environment, investor protection programmes, corporate governance structure, and minimum independent representation on the board required by law are all elements that determine whether these two mechanisms complement or substitute for each other.

2.3.2 Board Size

While the majority of the literature focuses on examining the impact of board independence on the level of disclosure, a few studies have included board size as a variable that could provide an additional explanation for the variation in disclosure level. Earlier studies that were conducted in the 1990s suggest that smaller boards are more effective in performing their duties (Lipton and Lorsch, 1992; Goodstein Gautam and Boeker, 1994; Yermack, 1996). Despite the argument that smaller boards limit the diversity and pool of expertise, these

studies provide evidence that the benefits of a having more diverse board are offset by the costs associated with having a slower and less effective decision-making process. As the board of directors grow in size, it becomes less productive due to communication, coordination, and decision-making problems, which hinders its role as an internal monitoring and control mechanism. In contrast, when boards are small, the members get to know each other, and can involve in productive discussions that lead to a consensus regarding strategic decisions. Thus, some researchers believe that the difficulty that large board members face in expressing their ideas and opinions freely and frequently outweighs the advantage of having a more diverse group with a variety of perspectives and views. Moreover, when boards exceed seven or eight members, it become easier for the CEO to control them; whereas, smaller boards with fewer executive members are less likely to be influenced by the CEO (Jensen, 1993). Yermack (1996) confirms this argument by documenting that smaller boards are more likely to replace CEOs following periods of poor performance.

However, most recent studies have found a positive association between board size and firm performance and disclosure (Lim, Matolcsy and Chow, 2007; Ntim et al., 2012; Allegrini and Greco, 2013; Gisbert and Navallas, 2013; Abdullah, Percy and Stewart, 2015; Al-Bassam et al., 2015; Al-Ghamdi and Rhodes, 2015; SamahaKhlif and Hussainey, 2015). Large boards are characterized by diversity in terms of experience and knowledge, which increases the monitoring capacity of the board resulting in a positive impact on transparency and disclosure. The positive association documented by these studies may be explained by the high concentrated ownership structure associated with these settings. To mitigate any controlling behaviour by the dominant shareholders over the board of directors, increasing the other shareholders' representation may be one solution. Larger boards, with more independent directors may help to manage the board toward effectively performing their supervisory and monitoring role. In other words, larger boards are more representative of the shareholders' interests in situations of high ownership concentration level. Supporting this claim, Abdullah et al. (2015) find that board size is positively associated with firm performance in family-

controlled firms in Saudi Arabia, yet, this association disappears in non-family firms. This indicates that boards in family-owned firms become more effective as they grow in size aiming to increase the representation of the minority shareholders.

Despite that board size is considered a significant indicator of monitoring quality (Jensen, 1993), some studies have found a limited or even no relationship between board size and voluntary disclosure as a monitoring tool (Faten, 2005; Cheng and Courtenay, 2006; Samaha et al., 2012; Qu, Leung and Cooper, 2013; Alhazaimeh, Palaniappan and Almsafir, 2014). Therefore, the impact of board size on corporate governance and financial reporting remain an empirical issue that needs further investigation.

2.3.3 Board Meetings and Attendance

Board meetings and attendance are used in the literature to measure board due diligence. Board members are considered to fulfil their duties when they attend board meetings, review the meeting materials, engage in a productive discussion, and exercise their independent judgment. Thus, the frequency of meetings and the attendance behaviour may affect the supervisory and monitoring effectiveness of the board which, according to agency theory, will have an impact on the financial reporting practice. Board meetings' time is an important resource for improving board performance, especially when firms face difficulties (Vafeas, 1999). Vafeas (1999) finds that boards that meet more frequently have less market value based on the share price, suggesting that the role of the corporate board becomes increasingly important during crisis. His study provides empirical evidence that boards meet more frequently after crises and that the firm performance increases accordingly. Studies that directly link the number of board meetings during the year with the level of disclosure are limited. Some studies document a positive relation between board meeting frequency and the level of voluntary disclosure (Karamanou and Vafeas, 2005; Allegrini and Greco, 2013; Qu, Leung and Cooper, 2013). The results of these studies indicate that managers who are well-monitored and supervised by an effective board that meets more frequently face greater pressure to provide more information voluntarily. However, this association is not significant in the

study of Alhazaimeh et al. (2014). Therefore, the current literature is insufficient to draw a firm conclusion regarding the association between board meetings as a reflection of board effectiveness and information disclosure practices.

Having more frequent board meetings with a low attendance rate could limit the effectiveness of the board of directors. Therefore, it is reasonable to examine the association between board attendance and voluntary disclosure level. However, the literature lacks such an attempt. Lin et al. (2014) investigate the association between board meeting attendance and board supervisory quality and firm performance. They suggest a positive relationship between board attendance and board monitoring quality that positively impacts firm performance. They show that directors who fail to attend meetings have less time to perform their duties of monitoring and, thus, inversely impact board effectiveness. In order to support this relationship thoroughly, more research in different corporate governance settings is required.

2.3.4 Board Compensation

Directors' compensation is seen as one of the corporate governance mechanisms that motivates directors to work in the best interests of the firm and shareholders. It is recommended that directors should be compensated adequately for the amount of time and effort associated with accepting a directorship (Lipton and Lorsch, 1992). Some studies assume a relationship between the Board of directors' remunerations and firm performance based on the notion that well-compensated members provide more effective monitoring, which positively impacts firm performance (Cordeiro, Veliyath and Neubaum, 2005; Aggarwal and Ghosh, 2015). Aggarwal and Ghosh (2015) find that directors' remuneration has little impact on the overall performance of the firm, but a significant correlation with profit after tax as an absolute measure of firm performance. Cordeiro et al. (2005) also demonstrate a positive association between firm performance and stock options as directors' compensation. However, an investigation into the linkage between board compensations and disclosure practice is absent in the literature. Therefore, assuming and exploring such a relation based on agency theory premises will add value to both the remuneration and disclosure literature.

2.3.5 Board Members' Cross-directorship

Two competing hypotheses regarding cross-directorship are present in the literature; namely: the busyness hypothesis and the experience and reputation hypothesis. Under the premises of the former, holding multiple seats on the board of other companies, leaves board members with insufficient time to perform their duty of monitoring and supervision (Ferris, Jagannathan and Pritchard, 2003). This claim is supported by the study of Lin et al. (2014) who find that multiple directorships significantly and negatively correlate with board attendance, meaning that members who hold multiple seats on the boards of other companies are overly busy, preventing them from attending meetings. However, Ferris et al. (2003) fail to find the negative relationship, predicted by the busyness hypothesis, between multiple directorships and firm performance. On the contrary, they support the reputation hypothesis by providing evidence that firm performance has a positive effect on the number of the board seats held by a director, suggesting that directors holding multiple seats in different, well-performing companies have developed a reputation capital as experts.

Therefore, the number of other directorships held by the board members has been used as a proxy for their reputation capital (Vafeas, 1999) claiming that directors with cross-directorships have more experience and networking that enables them to effectively monitor the management and demand more disclosure. Thus, they are less likely to engage in opportunistic behaviours with the management since that will result in tremendous damage to their reputation (Vafeas, 1999). Based on this hypothesis, some studies have predicted a positive association between other directorships and firm performance and disclosure level; but find no significant relationship (Haniffa and Cooke, 2002; Abdullah, Percy and Stewart, 2015), or a negative one (Gul and Leung, 2004). It is hard to decide which hypothesis is more applicable since the empirical evidence is minimal. Therefore, more research on the impact of multiple directorships on firm performance and disclosure practices would enhance the corporate governance and disclosure literature.

The previously-reviewed studies regarding board attributes provide an insight into the existing literature and the gaps where further investigation is

needed in order to make a valid interpretation of any board attribute and its impact on the corporate disclosure practices. Table 2.3 contains details and summaries of finding of the studies undertaken in the area of board of directors' attributes. It is obvious that the relation between some board attributes and voluntary disclosure is not clearly defined based on the inconsistent results, while other attributes have not yet been investigated in relation to financial reporting and voluntary disclosure in particular. Therefore, the current study is an attempt to further explore the impact of board attributes on the level of voluntary disclosure in GCC countries where the corporate governance environment significantly differs from that found in developed or East Asian countries, in addition to some unique features regarding economics, culture, and social norms.

2.3.6 Audit Committee Size

The audit committee is viewed as a corporate governance monitoring mechanism that supervises the preparation and communication of the financial information (Forker, 1992). It is suggested by agency theory that an audit committee mitigates the agency costs through reducing the information asymmetry (Samaha et al., 2012). Audit committee characteristics have been linked to disclosure in Prior empirical work. The size of audit committee which refer to the number of members in the committee is found to be positively related to the disclosure implying that bigger audit committees have adequate expertise to discharge the committee's monitoring and reporting responsibilities (Appuhami and Tashakor, 2017). However, there is a downside of large audit committees such as the potential poor communication usually associated with large groups (Jensen, 1993). Empirical evidence regarding the association between audit committee size and disclosure are both limited and mixed. Some studies document a positive relationship between audit committee and disclosure of information (Ahmed Haji, 2015; Appuhami and Tashakor, 2017). In contrast, other studies find no significant relationship between the size of the audit committee and the disclosure (Naimah and Mukti, 2019).

Table 2.3 Voluntary Disclosure and Board Attributes

Author, Date, and Journal	Research Method	Key Findings
Lipton and Lorsch (1992) *The Business Lawyer*	Recommend a proposal for improving corporate governance in the United States.	Smaller boards are more effective. The optimum number of members in the board is eight or nine, with at least two independent directors. It is suggested that directors should spend more than 100 hours annually on each board and should be compensated adequately.
Goodstein et al. (1994) *Strategic Management Journal*	Examine the association between board size and diversity with board performance in the health care industry using 334 US hospitals.	A bigger and more diverse board initiates fewer strategic changes, so, there is a negative association between board size and strategic change.
Yermack (1996) *Journal of Financial Economic*	Evaluates the relationship between board of directors size and firm value in the largest 500 U.S listed corporations	He finds an inverse association between board size and firm value.
Vafeas (1999) *Journal of Financial Economics*	Examines the impact of board meeting frequency on corporate governance and board performance	Boards that meet more frequently are valued less by the market based on share price decline, suggesting that the board of directors' role becomes increasingly important in time of difficulty; thus, boards are likely to be more active as performance declines.
Jaggi and Charles (2000) *Journal of Accounting and Public Policy*	Examine if any relationship exists between mandatory financial disclosure and the proportion of independent non-executive directors in family-controlled firms compared to non-family ones in Hong Kong using a disclosure index consisting of 30 items.	The ratio of independent directors on the board is positively associated with the comprehensiveness of the financial disclosure and this association tends to be weaker in family-controlled firms.

Author, Date, and Journal	Research Method	Key Findings
Ho and Wong (2001) *Journal of International Accounting, Auditing, and Taxation*	Study the relationship between four corporate governance attributes and the extent of voluntary disclosure by listed firms in Hong Kong using a weighted disclosure index consisting of 20 items.	The existence of an audit committee is significantly and positively related to the level of voluntary disclosure while family members on the board is negatively associated with voluntary disclosure. Independent non-executive directors is not significant.
Haniffa and Cooke (2002) *ABACUS*	Statistically, using multiple regression analysis, examine the association between voluntary disclosure in Malaysia and a number of corporate governance mechanisms and firm characteristics. The disclosure index consists of 65 items selected based on previous studies.	Firms with a non-executive chairperson disclose less than companies with an executive one. They also provide evidence that family members on the board negatively impacts the level of disclosure and that foreign ownership is positively associated with voluntary disclosure. Cross-directorship is not statistically significant.
Eng and Mak (2003) *Journal of Accounting and Public Policy*	A quantitative regression analysis of the impact of ownership structure and board composition on voluntary disclosure in 158 firms listed on the Singapore Stock Exchange. The disclosure index consists of 44 items and is grouped into three information types.	Disclosure decreases with greater managerial ownership and increases with government ownership. They also find that the increased presence of outside directors is associated with reduced disclosure. The level of disclosure is not significantly related to blockholder ownership.
Ferris et al. (2003) *Journal of Finance*	Examine the impact of additional directorships held by board members on other companies.	They provide no support for the busyness hypothesis. They provide evidence consistent with the reputation effect in the market of directors, suggesting that directors who have served in well-performing firms are more likely to receive multiple appointments in the future.

Author, Date, and Journal	Research Method	Key Findings
Gul and Leung (2004) *Journal of Accounting and Public Policy*	Investigate the linkage between board structure and voluntary corporate disclosure in Hong Kong using a disclosure index containing 44 items.	Firms with a higher proportion of expert independent directors (measured by other directorships) are associated with a lower level of voluntary disclosure.
Ajinkya et al. (2005) *Journal of Accounting Research*	Examine the association between outside directors and institutional investors with management earnings forecast occurrences.	Firms with higher institutional investors and outside directors are more likely to issue a management forecasts. Yet, when institutional investors are highly concentrated, the effect of earning forecasts becomes negative.
Babio Arcay and Muino Vazquez (2005) *Advances in Accounting, Incorporating Advances in International Accounting*	Examine the relationship between firm and corporate governance characteristics and the disclosure policy of 91 Spanish firms using a disclosure index consisting of 15 items.	Firm size, independent directors, and the existence of an audit committee are all positively associated with greater voluntary disclosure. Board size is not significantly associated with disclosure level. Ownership concentration is found to be negatively associated with the adoption of good governance practices in general.
Cordeiro et al. (2005) *Journal of Applied Business Research*	Investigate the association between stock-based compensation for outside directors and firm performance in the USA.	Provides evidence that stock options and stock grants are positively related to future firm performance, suggesting that board compensation is an effective tool for aligning the board members' interests with those of the firm's shareholders.
Faten (2005) *Review of Accounting and Finance*	Studies the relationship between voluntary earnings disclosure and a set of corporate governance attributes in 207 French firms	Voluntary earnings disclosure is negatively related to ownership concentration and positively associated with foreign institutional ownership. Board size and independent directors are not statistically significant in explaining disclosure. Large firms and firms with multiple listings provide more earnings disclosure voluntarily.

Author, Date, and Journal	Research Method	Key Findings
Karamanou and Vafeas (2005) *Journal of Accounting Research*	Examine the association between corporate board and audit committee with voluntary financial disclosure practice, measured by management earnings forecasts.	Firms making management forecasts have a hgher proportion of institutional investors, their audit committee meets more frequently, and they tend to be large.
Cheng and Courtenay (2006) *The International Journal of Accounting*	Examine the association between board monitoring and the level of voluntary disclosure in Singapore using a disclosure index of 72 items.	The results suggest that firms with boards containing a high proportion of independent directors disclose more voluntary information. Board size; however, is not associated with voluntary disclosure.
Barako et al. (2006) *Corporate Governance: An International Review*	Investigate the extent to which the corporate governance attribute, ownership structure, and firm characteristics impact on the voluntary disclosure practice of companies listed in Kenya. The disclosure index consists of 47 items classified into four categories.	The presence of an audit committee significantly and positively influences the level of voluntary disclosure, and the proportion of non-executive directors is negatively related to voluntary disclosure. They also find that institutional and foreign ownership positively impact the level of disclosure. Large firms and firms with high debt disclose more voluntary information. Liquidity, profitability, and the type of audit firm are not statistically significant.
Ghazali and Weetman (2006) *Journal of International Accounting, Auditing and Taxation*	Examine the association between ownership structure and board attributes with voluntary disclosure in the annual reports of 87 Malaysian firms after the financial crisis of 1997 using a disclosure index with 53 voluntary items categorized into three groups and a multiple regression analysis.	Director ownership and the proportion of family members on the board are negatively associated with voluntary disclosure. Government ownership is not significant in any information disclosure category. Size and profitability have a positive effect on the level of voluntary disclosure. Board independence is not significant.

Author, Date, and Journal	Research Method	Key Findings
Huafang and Jianguo (2007) *Managerial Auditing Journal*	Test the relations between different type of ownership, board compositions, and the level of voluntary disclosure in China using regression analysis	Higher blockholder and foreign ownership is associated with increased voluntary disclosure; however, managerial and government ownership are unrelated to disclosure. Board independence and firm size positively impact the level of disclosure.
Lim et al. (2007) *European Accounting Review*	Examine the association between board composition and voluntary disclosure in the annual report of 181 Australian listed companies using a disclosure index consisting of 67 items based on that created by Meek et al. (1995)	There is a positive association between board independence and board size with overall voluntary disclosure. The positive relationship specifically exists between board independence and forward looking and strategic information. On the other hand, board independence is not significant in explaining non-financial and historical financial voluntary disclosure.
Patelli and Prencipe (2007) *The European Accounting Review*	Empirically test the relationship between two control mechanisms, voluntary disclosure and independent directors in a setting where a dominant shareholder is present in 175 Italian companies using a disclosure index and multiple regression analysis.	The relation between independent directors and voluntary disclosure is positive and significant; thus the two mechanisms tend to coexist. Firm size is positively related to voluntary disclosure. Ownership diffusion is significant at the 10% level and positive in influencing disclosure. Leverage and profitability are not found to be significant determinants of the level of disclosure.
Donnelly and Mulcahy (2008) *Corporate governance: An International Review*	Investigate the relationship between voluntary disclosure and corporate governance in Ireland	Greater disclosure is associated with a greater proportion of non-executive directors on the board. Institutional and managers ownership are not significant in relation to disclosure.

Author, Date, and Journal	Research Method	Key Findings
Al-Shammari and Al-Sultan (2010) *International Journal of Disclosure and Governance*	Examine the relationships between the number of corporate governance mechanisms and voluntary disclosure in 170 Kuwaiti companies using a disclosure index consisting of 76 items.	Only the existence of an audit committee is significantly and positively related to the level of voluntary disclosure. The proportion of non-executives on the board, audit firm, and leverage are not statistically significant.
Garcia-Meca and Sanchez-Ballesta (2010) *European Accounting Review*	A meta-analysis of 27 empirical studies to examine the association between ownership concentration, board independence and the level of voluntary disclosure.	Firms with more independent directors on their board and a less concentrated ownership structure are more likely to disclose more voluntary information. They also prove that investor protection and the measurement of variables may explain the variability in the results of different disclosure studies. The positive association between board independence and voluntary disclosure only occurs in countries with high investor protection rights and high legal enforcement.
Khodadadi et al. (2010) *Business Intelligence Journal*	Investigate the relation between corporate governance attributes and voluntary disclosure provided by 106 Iranian firms using a disclosure index consisting of 31 items	Voluntary disclosure increases as the percentage of institutional investors increases. Board independence is not statistically significant.
Ntim et al. (2012) *Journal of Applied Accounting Research*	Investigate the major factors influencing the voluntary corporate governance disclosure by 169 South African corporations using regression analysis and a disclosure index consisting of 50 corporate governance items	Blockholder ownership significantly reduces the voluntary disclosure while board size, audit firm size, government ownership, and institutional ownership significantly increase disclosure.

Author, Date, and Journal	Research Method	Key Findings
Samaha et al. (2012) *Advances in Accounting, Incorporating Advances in International Accounting*	Assess corporate governance voluntary disclosure and its relation to a number of board attributes and ownership aspects in 100 listed firms in Egypt using multiple regression model and a disclosure index of 53 items divided into five categories	Corporate governance disclosure decreases with more ownership concentration and increases with more independent members on the board. Board size and director ownership were found not to be significant. Firm size is positively related to disclosure and leverage is not significant in any information categories.
Allegrini and Greco (2013) *Journal of Management and Governance*	Examine the relations between corporate governance and voluntary disclosure in Italian listed corporations using a disclosure index of 60 items.	Board size and meeting frequency are positively related to the level of voluntary disclosure. Board independence is not statistically significant. Firm size is positively associated with disclosure level. Profitability and leverage are not significant.
Al-Moataz and Hussainey (2013) *Journal of Economics and Management*	Examine the relation between some corporate governance mechanisms and the level of compliance with corporate governance disclosure requirements in 97 Saudi firms.	Board independence is negatively associated with disclosure practice in Saudi Arabia. They also find that audit committee size is positively and significantly related to disclosure and that more profitable and more liquid firms are more likely to follow the corporate governance guidance.
Gisbert and Navallas (2013) *Advances in Accounting, Incorporating Advances in International Accounting*	Study the role of independent directors in promoting transparency in a high ownership concentration setting in 62 Spanish firms using a disclosure index consisting of 76 items.	Even in the presence of significant blockholders, independent directors affect the quantity of voluntary disclosure positively; thus, high ownership concentration does not outweigh the role of independent directors in enhancing transparency. Firm with a larger board make more voluntary disclosure. Ownership concentration is found not to be significant.

Author, Date, and Journal	Research Method	Key Findings
Qu et al. (2013) *Managerial Auditing Journal*	Investigate the stakeholder impact on firms' disclosure decisions in 297 listed Chinese firms over a 12 years period using stakeholders theory and a disclosure index of 50 voluntary items.	The higher the percentage of government ownership, the lower the voluntary disclosure made by corporations and the higher the foreign ownership, the more voluntary disclosure the firms make. They also find that the number of board meeting and board independence are positively and significantly related to the level of voluntary disclosure; however, board size is not statistically significant in affecting disclosure decisions. Leverage is found to be positively related to voluntary disclosure and profitability negatively impacts voluntary disclosure.
Alhazaimeh et al (2014) *Procedia – Social and Behavioural Sciences*	Investigate the relations between corporate governance and ownership structure on voluntary disclosure in Jordan.	Blockholder ownership negatively affects the level of disclosure, and foreign ownership and board compensation impact disclosure positively. Board size, board meetings, and board independence are not significant.
Lin et al. (2014) *Total Quality management and Business Excellence*	Examine the relationship between board attendance as a proxy for board supervisory quality and firm performance in Taiwan.	Higher board attendance is associated with higher firm accounting performance. In addition, higher director shareholdings and board independence are positively related to board attendance; however, other directorships, the number of meetings, and board size negatively affect board attendance.
Abdullah et al. (2015) *Journal of Contemporary Accounting and Economics*	Investigate the determinants of the voluntary corporate governance disclosure of 67 Islamic banks in southeast Asian and the GCC region using a multiple regression analysis and self-constructed disclosure index.	Strong corporate governance (board independence, board size, audit committee size) is highly and positively associated with more voluntary corporate governance disclosure by Islamic banks. They also find that bigger Islamic banks disclose more and banks operating in countries with more freedom in their political and civil systems tend to provide more corporate governance disclosure.
Aggarwal and Ghosh (2015) *International Journal of Law and Management*	Study the relationship between directors' remuneration and firm performance in 34 Indian companies	Directors' remuneration has little impact on firm performance; however, a significant correlation is found between remuneration and profit after tax

Author, Date, and Journal	Research Method	Key Findings
Al-Bassam et al. (2015) *Business and Society*	Investigate voluntary compliance and disclosure regarding the recommended good corporate governance practice in 145 Saudi listed firms. The index consists of 65 corporate governance provisions.	The average corporation compliance with the corporate governance provisions is 44.61 per cent. Government and institutional ownership positively impact the level of compliance and disclosure by Saudi firms. Also, firms audited by one of the big four and with a big board of directors disclose significantly more corporate governance information. Blockholder ownership is negatively associated with the level of disclosure.
Al-Ghamdi and Rhodes (2015) *International Journal of Economics and Finance*	Examine the determinants of corporate performance of Saudi firms by comparing family firms to non-family ones using regression analysis.	The performance of Saudi firms increases as the ownership concentration increases in family firms. Managerial ownership is also associated with better performance in family firms. Board size is positively related to firm performance in family firms.
Muttakin and Subramaniam (2015) *Sustainability Accounting, Management and Policy Journal*	Investigate the relations between ownership structure, board characteristics and corporate social disclosure in India using a disclosure index of 17 items.	Corporate social disclosure is positively associated with government ownership, foreign ownership, and board independent and negatively related to CEO duality.
Samaha et al. (2015) *Journal of International Accounting Auditing and Taxation*	A meta-analysis of 64 empirical studies to examine the association between board and audit committee characteristics and voluntary disclosure.	Country geographic location affects the association between board size, board composition, CEO duality and voluntary disclosure. They also find that investor protection; the type and method of disclosure, and measures of the explanatory variables impact the relation between some corporate governance mechanism and voluntary disclosure. Board size and independent directors are positively and significantly associated with voluntary disclosure but not in the MENA region. Audit committee is positively related to voluntary disclosure.
Al-Janadi et al. (2016) *Managerial Auditing Journal*	Examine the effect of government ownership on the association between corporate governance and voluntary disclosure in 87 Saudi firms using a disclosure index consisting of 22 items.	Non-executive directors on the board, board size, and audit firm all have a positive impact on the level of voluntary disclosure. However, the positive association between these variables and voluntary disclosure is weakened by the existence of government ownership.

Author, Date, and Journal	Research Method	Key Findings
Appuhami and Tashakor (2017) *Australian Accounting Review*	Examines the influence of audit committee characteristics on the voluntary corporate social responsibility disclosure in the annual reports of 300 Australian listed firms using a checklist consists of 98 items categorise in eight groups.	Audit committee size, the frequency of its meetings, committee independence, and its level of gender diversity are found to be positively associated with the level of disclosure
Naimah and Mukti (2019) *Asian Journal of Accounting Research*	Investigates the influence of a number of audit committee's and firm's characteristics on intellectual capital disclosure in Indonesia using a checklist comprises of 61 items.	Audit committee size is not statistically significant in impacting intellectual capital disclosure. The frequency of audit committee meeting and company size are positively influencing the intellectual capital disclosure. Leverage is found to be negatively associated with the intellectual capital disclosure

2.4 Summary

Over the last few years, voluntary disclosure has attracted very significant attention. The academic interest in voluntary disclosure has developed in parallel with regulatory moves toward boosting the level of transparency in the stock market above and beyond what is mandatory by the law and regulations. Most researchers view voluntary disclosure as a governance mechanism that could provide an effective substitute for monitoring. Since monitoring is achieved by a number of corporate governance mechanisms, and the empirical work have focused on the relationships between these mechanisms and the level of voluntary disclosure that the management is willing to provide. Therefore, the academic literature has moved its earlier focus on the level of compliance with mandatory disclosure requirements and the factors influencing the management's decision to comply or not to the determinants of voluntary disclosure provided by firms. More recent work acknowledges the influence of ownership structure and board attributes as the main corporate governance determinants of voluntary disclosure practices in many countries.

This chapter sought to review the academic literature on voluntary disclosure by seeking to segregate it into two groups. The First consists of studies that focused on the associations between different types and concentrations of ownership structure and the level of voluntary disclosure. Overall, there is clear evidence that ownership concentration negatively impacts voluntary disclosure suggesting that major shareholders have the power and rights to monitor their interests internally, which reduces the demand for more disclosure. Whereas, when the ownership structure is more diffused, investors will demand more information disclosure in order to monitor the management behaviours and management is motivated to meet this demand in order to reduce the agency costs. Regarding the different types of ownership, the results are very mixed depending on the jurisdiction and the time period of the study. The findings regarding the impact of the government, institution, family, board, audit committee, and foreign ownership on the level of voluntary disclosure are inconclusive, implying that other context elements may influence this relationship.

A second group of research studies considered the impact of a variety of board attributes, mainly board independence and size, on the level of voluntary disclosure. The reported findings regarding board independence are mixed having both a positive and negative effect on the level of disclosure depending on either the complementary or substitute relationship between board independence and disclosure as monitoring tools. Similarly, board size results are incomparable with a negative impact, supporting the poor communication hypothesis and a positive impact aligned with the reputation and experience hypothesis. The existing research on the other board attributes, such as board meetings and attendance, and other directorships, has only focused on the impact of these attributes on firm performance. Thus, further investigation is needed in order to provide empirical results on the impact of such attributes on the level of voluntary disclosure.

Chapter 3: Corporate Governance Environment and Characteristics in GCC Countries

3.1 Introduction

This chapter seeks to describe the corporate governance environment within GCC countries. It starts by presenting a historical background of the Gulf Cooperation Council establishment, followed by a historical overview of the GCC capital markets development and regulatory reforms. Then the chapter moves to outline the unique social, economic, and political features present in GCC countries. Since the study focus is on ownership structure and board attributes, the remaining of the chapter then specifically present the distinctive features of the ownership patterns and board of directors as the main corporate governance mechanisms.

3.2 History and Background

3.2.1 Gulf Corporate Council (GCC)

The GCC was formed on May 25th 1981 as a cooperation of six Arab countries, including Saudi Arabia, Kuwait, Bahrain, Oman, Qatar, and the United Arab Emirates, aiming to achieve a high level of institutional coordination and integration in the economic, social, political, defence and security sectors in order to establish unity between them. Deep religious, cultural, and social ties link these six states (Pillai and Al-Malkawi, 2016). These ties are enhanced by geographical, political, and economic factors. They all share a deeply rooted Islamic beliefs, follow a civil law legal system, have a monarchy political regime, and possess significant oil and gas reserves with a high gross domestic product (GDP) per capita (Baydoun et al., 2013). Hence, the common characteristics found across these six states underpin the rationale for combining them into a single study to investigate the impact of corporate governance mechanisms on the level of voluntary disclosure. This closeness suggests that their voluntary disclosure practices will be similar. Section 3.3 discusses the common features of GCC countries in detail in order to understand the setting in which the current study is conducted, and consequently make sense of the empirical results.

It is argued that corporate financial reporting, as an important tool for maintaining investor confidence, as well as corporate decisions are influenced by a number of environmental factors, including economic, cultural, political, stock market development, law and enforcement tools, and corporate characteristics (AlNodel and Hussainey, 2010; Shehata, N.F., 2015). Therefore, each of these factors is expected to affect the nature and availability of information in any settings, and helps us to understand why a specific level of financial reporting and its determinants are evident in a particular setting. The following part of this chapter presents an overview of the history and development of the GCC stock markets, an outline of the GCC economic and cultural features, a review of the development of the corporate governance codes, and a discussion of the unique structure of the GCC corporate setting.

3.2.2 GCC Capital Markets

Equity markets in the gulf region are relatively new compared to the global financial markets. Most of them were formally established in the 1980s and 90s, and only recently have they adopted an electronic trading platform where trading can be performed through official trading websites, and where every listed company is required to publish historical and fundamental information frequently (Jamaani and Roca, 2015).

Stock trading first began in Saudi Arabia in 1935 when shares in the Arabian Automobile Company were floated (Alajlan, 2004; Bley and Chen, 2006). This was followed by the offering of shares in the Saudi Cement companies and the privatization of three electricity companies. The next market to emerge was in Kuwait in 1952 with the incorporation of Kuwait's first joint stock company, the National Bank of Kuwait, followed by the formation of the National Bank of Bahrain in 1957 (Al-Ajmi and Kim, 2012). These equity markets remained disorganized until the 1980s and 90s, when the GCC countries started to regulate them officially. Table 3.1 presents information about the GCC stock exchanges.

During the early 1980s, the oil prices increased rapidly, resulting in large liquidity and investment opportunities. As a result, investing in the capital markets became highly appealing, which necessitated a form of regulation and supervision over the stock exchanges in the GCC countries. The first market to be regulated in the region was the Kuwaiti Stock Exchange (KSE) in 1983, which was administered by an

executive committee until 2010 when the Kuwaiti Capital Market Authority was established with the purpose to oversee stock trading, enhance transparency, and enforce and implement good corporate governance practice. The next market to be officially organized was the Saudi Stock Exchange (Tadawul) in 1984. The capital market was first regulated by the Saudi Arabian Monetary Agency (SAMA) until the Saudi Capital Market Authority (CMA) took over responsibility for supervising and controlling all aspects of financial activities in the stock market in 2003. Then, the Bahrain stock Exchange (BSE) was formed in 1987, which was replaced by the Bahrain Bourse (BB) in 2010. The Central Bank of Bahrain is the capital market's regulatory body that governs all listed companies (Bley and Chen, 2006; Shehata, 2015). Muscat Securities Market (MSM) was the next to be formed in 1988. The exchange is a governmental entity regulated by the Oman capital market authority. Then, the trading on the Doha Securities Market (DSM) started in 1997 with only 17 listed companies at that time. The Qatar Financial Market Authority (QFMA) regulates and supervises the trading in the Doha securities Market. The youngest markets in the region are the Dubai Financial Market (DFM) and Abu Dhabi securities Exchange (ADX), which were founded in 2000 under the supervision of the Emirates Securities and Commodities Authority (SCA) (Bley and Chen, 2006).

All GCC stock exchanges are fully government-owned except for the Dubai Financial Market, as which 20% of its shares were listed to be traded by the general public on March 7th 2007 (Al-Ajmi and Kim, 2012). Even though the GCC countries are heavily dependent on the oil sector for economic growth and government revenue, none of the oil companies are fully or partially listed on any of the exchanges. They are all exclusively state owned enterprises. Regarding stock market classification, MSCI, one of the largest providers of stock market indices, upgraded the UAE and Qatar capital markets from frontier to emerging markets in May 2014, classified Kuwait, Oman, and Bahrain as frontier markets, and recently, in May 2019 has upgraded the Saudi Stock Exchange from a standalone market to an emerging one. According to the MSCI framework, market classification is based on a selection of criteria; namely, economic development, size and liquidity requirements, and market accessibility criteria, which include openness to foreign ownership, ease of capital inflows/outflows, availability of investments instruments, and the efficiency and stability of the operational and institutional framework.

Over the last few years, market regulators in GCC have realized the important role played by foreign investors in developing the market and promoting transparency. Therefore, the restrictions on foreign investments have begun to ease, even though some of these markets remain not fully open to international investments. The most restrictive market was in Saudi Arabia until 2015 when the capital market authority allowed qualified foreign institutional investors to hold up to 49% of listed companies after they were exclusively permitted to invest through mutual funds. In Qatar, the limit on foreign investments was raised in 2014 to up to 49%, from the previous limit of 25%. Qatar, Kuwait, and the UAE allow up to 49% of foreign investments. In Oman foreign ownership is limited to 49% that can be increased up to 65% or 100% subject to government entities approval. Bahrain was the earliest to open its market and the most relaxed in relation to foreign investment; foreign ownership reaches 100% in some of the financial institutions and banks. Despite the relaxation on foreign investment's limitation, foreign ownership remains very low in the GCC stock markets. This limited success in attracting foreign investors may be attributed to the significant government ownership of listed companies, the limited number of analysts who publish recommendations and forecasts, and the low level of transparency and disclosure (Al-Ajmi and Kim, 2012). Some also attributes the low foreign participation to the economic and political uncertainty exist in the region (Bley, 2011). GCC stock markets are highly sensitive to the fluctuations on oil prices and regional political events (Bley, 2011).

In terms of market capitalization, the Saudi Stock Exchange is by far the largest of the GCC markets, as illustrated in table 3.1, followed by Qatar, UAE, and Kuwait; while Bahrain and Oman are the smallest. Similarly, Saudi Arabia clearly dominates the GCC stock markets' activities and has the largest trading value, followed by Kuwait, Qatar, and the UAE while Bahrain and Oman have the least value traded among the GCC exchanges.

The GCC stock markets are similar concerning the markets' trading trends and market level of development. Evidence of market integration and linkages between the GCC markets are acknowledged in a number of studies (Mohammed and Hassan, 2003; Al-Khazali, Darrat and Saad, 2006; Jamaani and Roca, 2015). They document a long-term relation between share prices in the GCC stock markets, indicating that future movements in one market can be predicted by the historical trends of another

market. The financial markets linkages in the GCC countries are further enhanced by the social, economic, and political ties among them.

Table 3.1 GCC stock markets

Country	Saudi Arabia	Kuwait	Bahrain	Oman	Qatar	UAE	UAE
Exchange	Tadawul	KSE	BB	MSM	DSM	ADX	DFM
Stock trading began in	1934	1952	1957	1988	1997	1989	1989
Date of establishment	1984	1983	1987	1988	1997	2000	2000
Electronic trading since	1990	1995	1999	1998	2002	2000	2000
Securities regulator	Saudi Capital Market Authority (CMA)	Kuwait Capital Market Authority	Central Bank of Bahrain (CBB)	Oman Capital Market Authority (CMA)	Qatar Financial Market Authority (QFMA)	Emirates Securities and Commodities Authority (ESCA)	Emirates Securities and Commodities Authority (ESCA)
Year of establishment (regulator)	2003	2010	2006	1998	2005	2000	2000
Number of listed companies, end of 2016	176	216	44	131	42	68	61
Number of listed companies, 1Q of 2019	201	216	44	131	42	70	67
Market capitalization ($ millions), end of 2016	448,305	87,288.5	19,222	44,904.2	154,739	120,947	91,928
Market capitalization ($ millions), Q1 of 2019	557,602	104,482.4	22,992	47,857.0	155,924	140,908	95,390
Value traded ($ millions), end of 2016	79,861	2,978.1	125.3	571.7	4,307.8	3,287	11,426
Value traded ($ millions), Q1 of 2019	47,214	6,133.3	236.9	392.6	4,882.7	3,244	3,080

Where: Tadawul, Saudi Stock Exchange; KSE, Kuwait Stock Exchange; BB, Bahrain Bourse; MSM, Muscat Securities Market; DSM, Doha Securities Market; ADX, Abu Dhabi Securities Exchange; and DFM, Dubai Financial Market.

Source: Bley and Chen (2006); Al-Ajmi and Kim (2012); Arab Monetary Fund Report 2016 and 2019.

3.3 Common Features of the GCC Countries

This section provides a general review of the unique nature of the GCC environment. The discussion is directed toward three aspects of the environment; namely, the social and cultural norms, economic features, and the political system. Understanding the environmental factors in the GCC countries helps to explain the corporate governance practice regarding the disclosure in general and voluntary disclosure strategy in particular. Disclosure practice is a reflection of the underlying environmental influences in different countries including the economy, capital market, enforcement mechanisms, culture, and political system (Haniffa and Cooke, 2002; AlNodel and Hussainey, 2010). Thus, disclosure decisions may be established in response to social values and informal cultural norms. AlNodel and Hussainey (2010) argue that the weakness of the capital financing reporting in Saudi Arabia could be explained by obtaining the required information from the related parties to the loan agreement rather than the traditional and formal reporting avenues. Further, the environmental factors effect may extend to the corporate governance and firm characteristic factors as the main determinants of voluntary disclosure. For instance, the government and family dominance in GCC markets and the reliance on informal relationships could impact the effectiveness of some corporate governance mechanisms such as ownership structure and board independence, and therefore impact the influences of these mechanisms over the corporate governance and disclosure practices. Hence, the aim of this section is to describe briefly the distinctive environment in GCC countries in order to clarify the voluntary disclosure practices and their relations with a number of determinants (ownership structure and board attributes), as documented in chapter five of this thesis, the empirical analysis chapter.

3.3.1 Social and Cultural Norms

The GCC's social and cultural values although similar to those in certain developing countries, are distinctive in several ways. In particular, the GCC countries are Islamic states (Hussainey and Al-Nodel, 2008), where Islamic principles and Shariah law provide a common foundation for the rules, regulations, and codes (Baydoun et al., 2013). These religious principles cover all aspects of life including business, economic, politics, and social issues, making Islamic societies committed to fundamental Islamic values and views in their daily activities (Abu-Tapanjeh, 2009).

Therefore, it is reasonable to presume that these values influence the society as a whole, including the corporate operations. Islam embrace the core values of honesty, trust, accountability, justice, morality, transparency, and truthfulness (Baydoun et al., 2013).

In the religious context, accountability is one of the essential Islamic values that is used to describe the relationship with God and the responsibility of individuals' actions (Alkhamees, 2012). Accountability, therefore, is an indication of the Muslims responsibility to fulfil their duties as illustrated by Islamic principles. It is also a reference to Muslims' fulfilment of the financial trust placed in them when conducting business transactions. This feeling of responsibility, therefore, is expected to spread into the financial reporting practice by encouraging transparency and the disclosure of accurate and trusted information to the public. It is likely to produce adequate and accurate information that is needed to form a proper business decision (Abu-Tapanjeh, 2009). It is also an important value when it comes to calculating the right amount of Zakat[3], which is the 2.5% in alms that is taken annually from capital, based on true and sufficient information (Abu-Tapanjeh, 2009). The strong belief in accountability in Islamic society is likely to have a major impact on people' lives, and therefore predicted to extend into the business and corporate environment also.

Another essential value in Islam is fairness and honesty in conducting businesses and a prohibition against all kinds of exploitations, particularly, riba (interest) (Abu-Tapanjeh, 2009). Accordingly, Muslims avoid dealing with businesses that involve riba and, on the other hand strongly support businesses that forbid any trading linked with riba, as well as those that provide alternative financing products which comply with Islamic principles. Thus, the level of compliance with Islamic values and principles may influence the disclosure decisions, especially those relating to the capital structure and financing information. Businesses may be motivated to make voluntarily disclosure about their financing information when they are avoiding riba in order to gain public trust and support; in contrast, they may withhold information about their capital structure when involving interest to avoid a negative reaction from the public, who disapprove such practice. One study, conducted in a conservative Muslim society like Saudi Arabia, investigated investors' reaction to announcements

[3] Paying zakat is the third of the five pillars of Islam.

of bank loans granted to listed firms depending on their compliance with Islamic principles (Almansour and Ongena, 2018). Interestingly, they find that investors react negatively to the announcements of non-compliance loans with respect to cumulative abnormal returns, suggesting that Islamic-compliant loans are associated with positive returns while conventional loans are associated with negative ones. Furthermore, A research that examined the impact of religious preferences on the performance of Islamic and conventional stock returns in Saudi Arabia found that Islamic stocks are more liquid, have a higher turnover, and have a broader investor base than conventional stocks (Alhomaidi et al., 2019). This suggests that a firms compliance with the religious and social norms has an effect on the investor decisions in a predominant Islamic market such as the Saudi Stock Exchange. Another study conducted on the GCC stock markets found that non-Islamic stocks are neglected and have lower liquidity relative to Islamic stocks (Al-Awadhi and Dempsey, 2017), suggesting that investors' investment choices in these highly-religious societies are guided by the social norms. Therefore, firms that comply with the religious principles may be motivated voluntarily to demonstrate their compliance through information reporting while they may be unwilling to report any additional information when their practice fail to match the public's preferences.

Another trait of GCC culture and society is the high level of secrecy and conservatism (Hussainey and Al-Nodel, 2008; AlNodel and Hussainey, 2010; Baydoun et al., 2013; Abdallah and Ismail, 2016). Specifically, Arabs in general are not open about disclosing their wealth, so, financial and corporate information are considered confidential (Piesse, Strange and Toonsi, 2012). For instance, the disclosure of the shareholders and their proportion of stocks in GCC listed companies is limited to the major shareholders who own 5% or more, which is required by law. Almost all of the companies in the GCC stock market fail to provide any information about the shareholders who own less than 5% of the company. Private companies in the MENA region, including the GCC do not publish any financial information and most of the listed companies comply only with the minimum disclosure requirements (Piesse, Strange and Toonsi, 2012). Secrecy is also apparent when the researchers and analysts seek basic information from companies (Piesse, Strange and Toonsi, 2012). For instance, information about the ownership structure in Saudi Arabia is unavailable to outsiders and researchers alike (Alajlan, 2004). The information does not need to

be sensitive or proprietary in order for companies to be reluctant to share it; it is not about the nature of the information but, rather, a culture of extreme secrecy. For the purpose of this study, efforts were made to obtain data on the ownership structure of listed companies by contacting the official departments, like the capital market authorities and stock exchanges, or emailing the companies directly. They either declined claiming that such information is confidential or did not respond. Therefore, this feature of GCC countries may explain the level of voluntary disclosure by the listed companies.

GCC society is also characterized by the influence of informal and personal social relations (Baydoun et al., 2013). Families in the gulf region have very strong ties between the members, which can be extended to distant relatives and even the members of the tribe. These strong ties are also applicable among different families that are linked by marriage. Family and friendship relations are highly valued to the extent that they exceed the power of the regulations (AlNodel and Hussainey, 2010). It is common for family firms to be dominated by relatives, implying that employees are hired not solely based on their qualifications or experience but out of consideration of personal relations and loyalty. Opportunities are given to informal relations over formal rules. Most GCC firms recruit their board members based on seniority from a fairly small circle of elites (Hertog, 2012). Hertog (2012) presents numerous examples where board members were chosen based on their political connections and personal relations, which resulted in having boards that staffed with directors with political connection, limited specialised knowledge and expertise, and limited spare time due to their multiple directorships. This practice is likely to have a significant impact on the corporate governance settings in these countries, which might result in having board members who are not fully independent because they gained their seat through help from their personal relations, with a higher level of information asymmetry since stakeholders have their informal/personal avenues for collecting the required information, and a higher chance of conflicts of interest and related party transactions. Understanding the role of the family and friend relations in the GCC may enhance our interpretations of how the ownership structure and board of directors, as corporate governance mechanisms, impact the financial reporting practice.

3.3.2 Economic Features

GCC countries are oil-exporting countries where the economies are heavily dependent on oil, and governments strongly control the major economics activities (Hussainey and Al-Nodel, 2008; Piesse, Strange and Toonsi, 2012). Saudi Arabia accounts for around 25% of the world's total oil reserves, and Qatar represent 5% of the world's total gas reserves (Shehata, 2015). The collective GCC oil and gas reserves in 2011 were 33.5% and 21.3%, respectively, of the total world reserves (Jamaani and Roca, 2015). The hydrocarbon sector in GCC has generated the majority of Gross Domestic Product (GDP) and government revenues, as shown in table 3.2, and is expected to remain the main contributor in the future. Oil revenues represent between 50 and 90 per cent of the total government revenues during 2012 to 2015 in the six GCC states (The International Monetary Fund, 2016). This substantial reliance on oil revenues could create economic challenges when the value of this natural resource fluctuates or becomes unavailable.

Oil price volatility has forced the GCC policy makers to look for new resources to depend on for local and economic growth. Since 2015, oil prices have rapidly declined resulting in a sharp cut in GCC government spending and a decline in economics activities. The fiscal deficit for GCC countries is expected to grow and is projected to be above 4 per cent of GDP in 2021 (The International Monetary Fund, 2016). GCC governments have realised these economic issues and initiated several plans aimed at diversifying their economies. One of these initiatives is stock markets development through enhancing their efficiency and making them attractive to new investment (Jamaani and Roca, 2015). Relaxing the limitations on foreign investment in the GCC countries' markets could be an opportunity that serves the plan of economic diversification through developing the stock markets into well-functioning markets that employ the best international corporate governance practices including transparency and disclosure. Therefore, the need to diversify the economy could lead to transparency enhancement in the stock market, which may have an impact on the disclosure practice in GCC listed companies.

Table 3.2 GCC countries' revenue structure

	2012	2013	2014	2015
As a percentage of the GDP				
Total revenue	46.4	45.7	41.9	31.8
Non-oil revenue	6.6	7.8	7.9	10.0
Oil revenue	39.8	37.9	33.9	21.8
As a percentage of total revenue				
Non-oil revenue	14.2	17.0	19.0	31.6
Oil revenue	85.8	83.0	81.0	68.4

Source: The International Monetary Fund (2016)

3.3.3 Political System

The political setting in the GCC is a family monarchical system (Eulaiwi et al., 2016), which is concentrated by royal family, state officials, and tribal leaders (Hussainey and Al-Nodel, 2008). Personal relations with royal family members can remarkably facilitate business activities and access to the market in the GCC countries. Having a member of the royal family on the board helps entrepreneurs to gain a major advantage in the market (Mazaheri, 2013). This highly concentrated political system is therefore expected to extend into the business environment and its practice of corporate governance. Mazaheri (2013) argues that the political setting in the GCC helps to initiate a program of business environment reform; he states that "monarchies are better able to solve the credible commitment problem between the government and existing private sector elites than non-monarchical, authoritarian states" Mazaheri (2013, p. 296) suggesting that governments in a monarchical system facilitate business reform by being able to provide a reliable assurance to the private sector elites that their interests are protected during the reform process.

Furthermore, the political system of the GCC countries implies the minimal or even an absence of activist groups, specifically shareholder activism (Piesse, Strange and Toonsi, 2012). This suggests that the dominant shareholders and royal family members are able to intervene in corporate decisions and exercise strong control over firm management. In particular, they can effectively govern the appointment of the board members and the top management positions (Piesse, Strange and Toonsi, 2012). Many GCC listed firms have at least one royal family member on the board of

directors (Al-Hadi, Taylor and Al-Yahyaee, 2016). This dominance of the royal family and major shareholders has an impact on the corporate governance setting. The political power of the ruling family members may exacerbate the agency problem between the board and management or between the minority and majority shareholders (Al-Hadi, Taylor and Al-Yahyaee, 2016). Al-Hadi et al. (2016) provide evidence supporting the claim that the ruling family members on the board transfer wealth to their own interests at the expense of the other stakeholders. They find that the strong representation of the royal family on GCC boards is negatively and significantly associated with the extent and the quality of the risk disclosure, suggesting that the political orientation of the board members is influenced by their political power, which as a result impacts their level of transparency. Hence, the common feature of monarchical systems in the GCC, such as the reliance on family relations, and the favouritism in hiring and promoting royals and their relatives (Eulaiwi et al., 2016) could have an impact on the corporate governance practice in the GCC stock markets.

3.4 GCC Corporate Governance Codes

In line with the region's rapid economic growth and the move toward diversifying the economy, developing the stock markets, and enhancing transparency, there is an increased focus on improving the corporate governance codes across the GCC. Improving the governance codes implies upgrading the corporate governance environment to make it more appealing for new local and foreign investments. The focus on the corporate governance codes in GCC considerably increased after the collapse of many firms due to their failure to meet their liabilities and obligations to the financial institutions and investors during the global financial crisis and the crash of 2006 in the GCC markets. In 2006, the Saudi market dropped significantly losing 45% of its market value (Hussainey and Al-Nodel, 2008), resulting in a massive demand from the banks and investors to raise the corporate governance standards and increase disclosure and transparency (Hussainey and Al-Nodel, 2008; Eulaiwi et al., 2016). This necessitates the introduction of new or the amendment of the existing corporate codes in the GCC countries. The GCC market regulators became aware of the important role of corporate governance in the recovery process from the crisis for retrieving market confidence, improving foreign and minority shareholder protection,

diversifying the economy, and creating investments opportunities (Eulaiwi et al., 2016).

A corporate governance code was first introduced in Oman in 2002 by the Omani capital Market Authority (Baydoun et al., 2013). This version of the code was revised in 2003 and then replaced with a newer version in 2015, which came into force in 2016. In 2006, the Capital Market Authority in Saudi Arabia followed suit by issuing and implementing the corporate governance code that was issued as part of the CMA efforts to overcome the losses due to the 2006 market crash and regain investor confidence in the stock market (Hussainey and Al-Nodel, 2008; Shehata, 2015). The Saudi stock market lost about 45% of its value in the crash of 2006 (Hussainey and Al-Nodel, 2008). As a result, all of the GCC stock markets witnessed similar losses that year, which motivated the market regulators to introduce corporate governance rules that mainly focus on disclosure requirements regarding insider trading and related party transactions (Amico, 2016). The Saudi corporate governance code was amended in 2009, then reintroduced in 2017 and recently amended in May 2019. In the United Arab Emirates, the Emirates Securities and Commodities Authority issued the corporate governance codes in 2007; yet, companies had three years to adapt to the new regulation; it became mandatory to comply in 2010. The code of 2007 was replaced with a new one in 2016. In 2009, the Qatar corporate governance code was implemented by the Qatar Financial Market Authority and amended in 2016. Kuwait and Bahrain were the last to issue corporate governance codes. In Kuwait, the Capital Standards Rating Agency issued the corporate governance code in 2010, which was replaced with the corporate governance regulations issued by the Kuwait Capital market Authority in 2013. In Bahrain, the Ministry of Industry and Commerce in cooperation with Bahrain Central Bank issued the corporate governance code in 2010; all listed companies had to comply with the code by the end of 2011. Before generating corporate governance codes in Kuwait and Bahrain, company laws were the source of corporate governance-related matters, such as the board of directors' obligations, composition, and voting rights (Shehata, 2015). It is clear that most of the codes were issued after 2006 and have been recently amended which reflects the intention of the GCC governments and market regulators to develop their corporate government environments and diversify their economies.

A comparison between the GCC corporate governance codes reveals that the codes differ is some of their provisions as shown in table 3.3 based on the most recent corporate governance code issued in each GCC country. In terms of their enforcement requirements, the code in the UAE is the strictest since it is based on mandatory compliance (comply or penalty), whereas in Saudi Arabia the code was voluntary except for certain provisions that were mandatory to comply with until 2017 when the code was reintroduced and became mandatory with the exception of some guided voluntary provisions. The rest of the GCC codes are on the basis of comply or explain. In terms of disclosure provisions, the GCC codes are comparable with some differences in the disclosure requirements. For example, information about shareholders' stakes is only required in Bahrain and Oman and only recently in the UAE by the new code of 2016. Similarly, market capitalization and the share price trends during the year are only obligated by the Omani corporate governance code and the UAE's new corporate code of 2016. The identifications and positions of the senior managers are not required in Saudi Arabia and Oman, while these are required to be disclosed by companies in Qatar, In Kuwait and Bahrain, this information is required to be available upon shareholders' request, and in the UAE such information was not required until the code of 2016 was issued. Another disclosure requirement that differs in the GCC codes is the education qualifications and commercial experience of the board members. While the Qatar and Bahrain codes request that this information is made available but not necessarily in the annual report, Kuwait, the UAE, and Oman do not require the disclosure of such information and in Saudi Arabia, companies were not required to disclose board education and experience until the code of 2017 which explicitly requires the disclosure of this information in the board of directors' report.

The latest versions of the corporate codes in most GCC countries have raised the level of disclosure requirements as a means of enhancing the transparency within their stock markets. For instance, the newly-issued Saudi corporate code in 2017 includes more disclosure requirements like details of the company' social contributions, a description of the company's significant plans and decisions including changes to the structure or operations and the future expectations, and information on any operational, financial, or market-related risks facing the company and the policy for managing and monitoring these risks. Similarly, the code of 2016 in the UAE has

upgraded the disclosure and transparency requirements stated in the 2007 code to include details and justifications of any compensation paid to any member of the board or its sub committees, details of the positions, appointment date, and salaries and bonuses for the first and second lines of company management, and the establishment of investor relations services through companies' websites. This upgrading of the corporate codes illustrates the recent notion about enhancing the market transparency by the GCC market authorities and the importance of corporate codes to facilitate the communication process with the market participants in order to achieve market development and economic objectives. Some of these provisions updates may not be reflected in the current study's results due to a misalignment between the period of the study and the year in which these new codes become enforceable. However, it reflects the recent awareness of the need to change and improve the corporate reporting environment where disclosure and transparency are necessary for making these changes. Therefore, the current study is motivated further to prove the need for greater attention to be paid to the disclosure provisions of the corporate governance codes as a means of improving the GCC stock market to attract new local and foreign investments and become an essential part of these countries' economies.

Table 3.3 A comparison between the six GCC corporate governance codes

Item	Saudi Arabia	Kuwait	Bahrain	Oman	Qatar	UAE
Name of the code	Corporate governance regulations	Corporate governance code	Corporate governance code	Code for corporate governance of public listed companies	Governance code for companies and legal entities listed in the main market	Discipline and governance of public shareholding companies
Date of publication/ Last version	2006/2019	2010/2013	2010	2002/2015	2009/2016	2007/2016
Legal status	Mandatory with the exception of some guided voluntary provisions.	Comply or explain basis	Comply or explain basis	Comply or explain basis	Comply or explain basis	Comply or penalise
Board independence	At least one third of the board or two members, whichever is greater	At least one member and shall not exceed half of the members of the board	At least three members	At least one third of the board or a minimum of two members	At least one third of the board	At least one third of the board
Roles of the chairman and CEO	Must be separated	Must be separated	Must be separated	Must be separated	Must be separated	Must be separated
Board size	A minimum of three and not more than eleven	Not specified	Not more than 15 members	Not specified	Not specified	Not specified
Board meeting frequency per year	At least four meetings per year	At least six meetings per year	At least four meetings per year	At least four meetings per year	At least six meetings per year	At least four meetings per year
Number of other directorship holdings allowed	A maximum of five directorships	Not specified	A maximum of three directorships	Not specified	A maximum of three directorships	Not specified
Audit committee	Required	Required	Required	Required	Required	Required
Nomination committee	Required	Required	Required	Required	Required	Required
Remuneration committee	Required	Required	Required	Required	Required	Required
Risk management committee	Required	Required	Required	Not required	Not required	Not required

3.5 Corporate Governance Mechanisms

3.5.1 Ownership Structure

Another key contextual factor of the corporate governance environment in GCC countries is the ownership structure of listed corporations. Unlike the diverse shareholder ownership found in most developed countries, the control in GCC listed firms is strongly concentrated in a small number of shareholders[4] (Baydoun et al., 2013; Santos, 2015). In most cases, government and family ownership are the dominant shareholders in GCC listed corporations (Alajlan, 2004; Piesse, Strange and Toonsi, 2012; Al-Janadi, Abdul Rahman and Alazzani, 2016). Other forms of ownership found to a lesser extent in GCC firms include the institutional, foreign, and managerial.

Government ownership is highly present in the GCC stock markets through a number of institutions, such as the General Organization of Social Insurance, the General Retirement Organization, and the Public Investment Fund in Saudi Arabia, the Social Insurance Organization in Bahrain, the Kuwaiti Investment Authority, the Government and Ministry of Finance in Oman, the Qatar Investment Authority and Qatar Holdings, the Dubai Investments corporation, the Emirates Investment Authority, and Sharjah Assets Management in the UAE. While government ownership is spread across the market sectors, it is more central in capital–intensive sectors like petrochemicals and telecommunications (Piesse, Strange and Toonsi, 2012). Governments in GCC countries tend to invest in the stock markets through their treasury funds, which explain the high percentage of government shareholdings in market capitalization. Moreover, GCC governments still maintain control over governmental corporations after being listed in the stock market as a result of the privatization reform that took place at the end of the twentieth century (Al-Janadi, Abdul Rahman and Alazzani, 2016). For example, the Saudi government still holds 70% of both Saudi Basic Industries (SABIC) and the Saudi Telecom Company (STC), and 81.22% of Saudi Electricity. In the UAE, the Abu Dhabi government holds 74.05% of the Abu Dhabi National Energy Company, and Emirates Investment Authority holds 50.12% of the Emirates Integrated Telecommunication Company (du) and 60% of the Emirates Telecom Group Company (Etisalat).

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[4] Average block holders ownership in GCC firms documented in the current study is 45%

Family ownership is also present in the GCC stock markets. Founding families and their descendants maintain control over their companies after these are listed on the market and usually hold senior managements positions (Piesse, Strange and Toonsi, 2012). The power of the family exceeds the power of individuals in the GCC region (Eulaiwi et al., 2016). Piesse et al. (2012) show the benefits of concentrated family ownership as stated by a number of executive managers in Saudi Arabia and Egypt; family firms benefit from quick decision making, better knowledge of the business, the stability of the share price due to the large stake held by the family over a long period of time, low internal transaction costs between companies in a holding group due to the lower degree of information asymmetry compared to transactions between unrelated parties, and the families' ability to provide capital when their companies are struggling financially. Moreover, a well-known family with good connections benefits the company and all shareholders by using their influence over direct policy-making and government funding in their companies' interests (Piesse, Strange and Toonsi, 2012). This shows the significant importance of family and personal relations in forming the corporate environment in the GCC business setting.

Another distinctive feature of the ownership structure found in the MENA region, and more specifically in the GCC markets, is that government and family ownership are the two largest sources of institutional capital whereas investment funds and insurance companies dominate the institutional investments in the western markets (Amico, 2016). Institutional investors play a crucial role in monitoring the management and promoting transparency (Ajinky, aBhojraj and Sengupta, 2005; Rouf and Al Harun, 2011; Ntim et al., 2012); however, in GCC countries, the role of institutional investors is minimal (Piesse, Strange and Toonsi, 2012; Amico, 2016), owing to the fact that the majority of institutional investors are either the government or family members, in addition to the low participation by large foreign institutional investors in the GCC markets. Government and family ownership in the MENA region represent over a third and almost a quarter of the total value held by institutional investors in the region, respectively (Amico, 2016). Particularly in the GCC markets, the government and family institutions hold about 53% and 21% of the overall value held by institutional investors, respectively (Amico, 2016). Government institutions in the GCC countries dominate the institutional investors' holding compared to other countries in the MENA region; 75% in the UAE, 66% in Qatar,

49% in Bahrain, and 45% in Saudi Arabia compared to the regional average of 41% (Amico, 2016). Therefore, the impact of institutional investors as professionals with long-term investment objectives is limited. As a result, the most predominant investors in terms of market trading activities in the GCC are retail investors who mostly act in accordance with the economics changes, resulting in wide market volatility (Amico, 2016). This strand distinguishes the GCC markets from other global developed markets where institutional investors represent a large stake of the market and have an effective role in monitoring the management and developing the market both in terms of promoting transparency and supporting market stability due to their long-term investments horizon and large holdings.

Furthermore, foreign ownership in the GCC market is relatively low (Piesse, Strange and Toonsi, 2012; Amico, 2016). The main reason for the low degree of foreign participation evident in the GCC stock markets is the restrictions imposed by the market regulators on foreign ownership along with the low level of transparency resulting from weak financial market development (Jamaani and Roca, 2015). Foreign investors are allowed directly to own up to 49% of listed companies in the UAE, Kuwait, Qatar, and recently Saudi Arabia, while they can own up to 100% of Bahraini and Omani companies subject to government approval. Nevertheless, foreign ownership in these markets remains relatively below the maximum allowance. For example, as of 2012, foreign investors participate in only 6%, 3.3%, and 28% of listed companies in Kuwait, Saudi Arabia, and Oman (Jamaani and Roca, 2015), which indicates that regulatory restrictions are not the only reason discouraging foreign investors from actively participating in the stock markets. The low foreign capital flows might be attributed to the lack of transparency and market development. Mangena and Tauringana (2007) provide evidence supporting this claim by documenting how foreign investors have a preference for companies with effective corporate governance and less information asymmetry. They tend to invest in companies where they are well informed and their investments are well protected. Therefore, information availability and corporate governance effectiveness appears to play an important role in foreign investors decision to invest in a particular market. This could explain the low participation by foreign investors in the GCC stock markets where the level of transparency and market development are low (Jamaani and Roca, 2015).

In conclusion, ownership in the GCC stock markets is characterized by a high concentration level, the domination of the government and family institutions over institutional investments, and low foreign investor participation.

3.5.2 Board of Directors

In corporate governance, the board of directors represents the shareholders' interests and supposedly act according to their preferences. Therefore, it is likely that the board will be influenced by the structure of the shareholders in the firm. Thus, the role of the board as a corporate governance mechanism monitoring the management could be inversely affected by the concentred ownership structure present in the GCC companies. Major shareholder representatives are populating the boards in GCC countries, which implies the domination of the major shareholders' role over the role of the board (PiesseStrange and Toonsi, 2012; The Institute For Corporate Governance (Hawkamah), 2017). By dominating the board, the major shareholder could significantly control the management, decision-making process, and voting agenda (Piesse, Strange and Toonsi, 2012). Consequently, corporate governance in the MENA region is described as shareholder-centric rather than board-centric (The Institute For Corporate Governance (Hawkamah), 2017). More specifically, the boards of family firms in the GCC markets are dominated by family members, their friends and relatives (Baydoun et al., 2013; Shehata, 2015; Eulaiwi et al., 2016). Major shareholders maintain control over the board of directors through influencing the process of nominating and appointing board members suggesting that the appointment of non-executive independent directors with no relations to the major shareholders is not a common practice in the MENA region (Santos, 2015). Even though the structure of the board and its composition are relatively well-governed by the rules and regulations outlined in the GCC corporate governance codes, major shareholders can exercise their power to undermine the rules and harm the nomination process (Piesse, Strange and Toonsi, 2012). This situation would notably impair board independence since members who have been selected based on the independence criteria set out by the market regulations are acting in accordance with their loyalty to the major shareholders rather than seeking to fulfil their duties as independent board members. As a result, the GCC corporate governance environment suffers from a lack of protection of minority shareholders' interests, related party transactions, conflicts

of interests and information asymmetry (The Institute For Corporate Governance (Hawkamah), 2017).

Likewise, the multiple appointments of board members in GCC firms may further complicate the issues of the related party transactions and conflicts of interests. It is common for board members in the GCC to sit on more than one board (Santos, 2015). The restrictions on the number of directorships allowed for each member are not clearly defined in the GCC codes. For instance, the corporate governance code in Saudi Arabia and Bahrain restricts the number of seats on another company's board to five and three, respectively, yet the number is not specified in the other countries codes. Closely-related links created as a result of cross directorships could exasperate the problem of related party transactions and conflicts of interest between corporations, which may negatively impact the corporate governance environment in the GCC.

In addition, board member remuneration is a key corporate governance mechanism (Jensen and Meckling, 1976). It is suggested by agency theory that providing board members with appropriate incentives is essential to motivate them to carry out their board responsibilities to their best ability. In the GCC, most firms disclose an aggregate amount of board members and senior managers' compensation. However; a detailed disclosure of the compensation, how it is structured, and whether or not it is linked to any performance indicators is not available (The Institute For Corporate Governance (Hawkamah), 2017). Therefore, the potential for improvement regarding the disclosure and policy of board compensation exists in GCC firms. It is important for the compensation to be structured in a way that reflects the firm's strategic objectives, and creates a balance between fixed and variable incentives in order to achieve the effect of motivating board members to perform their role effectively (The Institute For Corporate Governance (Hawkamah), 2013). .

3.6 Summary

The aim of this chapter is to describe the distinctive features of the social, economic, political, and corporate environment of GCC countries. The illustration of the unique characteristics found in the GCC help in the understanding of the practice of corporate reporting and its determinants. More specifically, it assists in making

sense of the relationships between the voluntary disclosure and corporate governance factors documented in the current study.

The GCC provides an interesting environment in which to study the level of voluntary disclosure and its determinants due to its distinct characteristics that are not found collectively in any other developed or developing countries. The GCC are Islamic states with oil dependent economies and concentrated political systems. The majority of their population are Muslims who are determined to follow Islamic values and principles thorough their life activities. The GCC economies are heavily dependent on oil; however, there have been recent initiatives to diversify their economy through developing their stock markets to attract new investments. Politically, they are all related to monarchy regimes where royal families control the political system.

In terms of the corporate governance environment, the GCC corporate settings are distinguished by a high level of ownership concentration that is dominated by the government and family shareholders, in addition to the minimal role of institutional shareholders who are in most cases either government or family institutions, and the low participation of foreign investors. Regarding the board of directors, the board independence is questionable due to the intervention of the major shareholders in the process of nominating and selecting board members. Multiple cross directorships exist in GCC listed firms, resulting in the potential for related party transactions and conflicts of interests when conducting business among these firms. Lastly, disclosure of detailed board members' compensation and the related policy are unavailable implying that the structure of compensation and how far it is related to performance indicators are difficult to determine.

In light of these unique features that characterize the GCC environment, one is motivated to investigate the impact of different types of ownership and the board of director's attributes on the functionality and effectiveness of these corporate governance mechanisms in monitoring the management and consequently affecting the reporting practice, more specifically voluntary disclosure. The level of significance of the association between voluntary disclosures in the annual reports of GCC listed firms and the number of independent variables investigated in this study

(ownership structure and board attributes) could be easier to appreciate after gaining a clear understanding of the environment where these listed firms operate.

Chapter 4: Theoretical Framework, Methodology and Methods

4.1 Introduction

A review of the disclosure literature reveals that firms provide information in excess of that required by statute or other corporate governance rules. This literature also provides evidence of an association between disclosure practice and corporate governance (Firth, 1979; Meek, Roberts and Gray, 1995).

Using agency theory, the prior research hypothesises that corporate disclosure is related to information asymmetry between the management and owners (Diamond and Verrecchia, 1991). Disclosure tends to be mostly linked to a number of firm-specific characteristics and corporate governance mechanisms in disclosure researches as a way of explaining the variation in the level of disclosure among corporations. Agency theory has helped to make sense of the significant relations identified between disclosure and several firm and corporate governance factors (Cooke, 1989b; Hossain, Tan and Adams, 1994; Meek, Roberts and Gray, 1995).

The purpose of this chapter is to elaborate the theoretical framework of this study based on agency theory, and to develop a number of hypotheses in order to explain the variation in the level of voluntary disclosure among GCC listed firms from ownership and board of directors' perspectives. The first part of this chapter will elaborate upon the methodology and methods of the study while the second part is dedicated to hypotheses' development.

4.2 Methodology and Methods

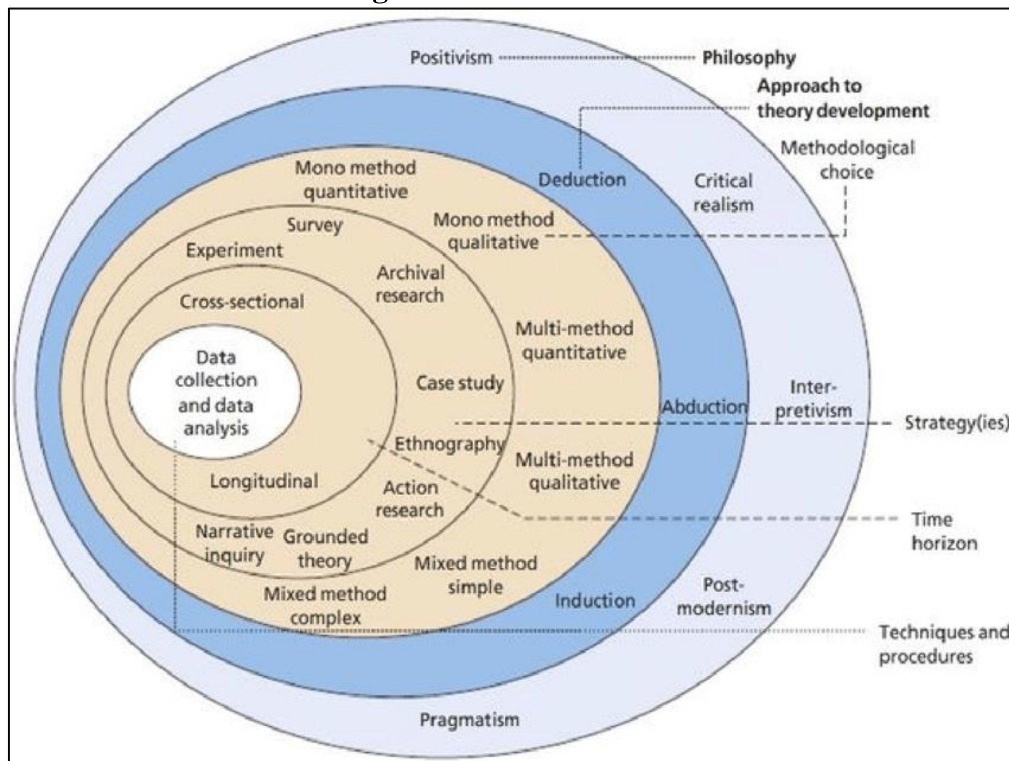
The underlying meta-theoretical and methodological (in the sense of a philosophy of method) assumptions are implicit. In this section the focus will be to make these aspects more explicit as reflecting on these could even improve the particular choice of the research methods and the application thereof in this thesis (Laughlin, 1995). This current methodology section outlines the research philosophy and approach, and forms a link to the empirical methods of this study. The underlying philosophy of the method influences the research question of a study or how that question is approached (Gallhofer, Haslam and Yonekura, 2013) . The philosophy and the questions

influence the choice of specific research methods. Hence, reflecting on the study objectives which aim to measure the level of voluntary disclosure in GCC listed corporations and to explain the variation in the level of voluntary disclosure with reference to the size and type of ownership structure and board of directors attributes, this section focuses on the philosophical assumptions and paradigm in relation to the empirical methods that are appropriately adopted in order to achieve the objectives of the study.

4.2.1 Research Philosophy

A research process according to Saunders et al. (2015), involves a number of steps that are viewed as six layers of an onion; namely, the research philosophy, approach to the theory, methodological choices, strategies, time horizon, techniques and procedures, as shown in figure 4.1. Researchers are supposed to peel off each layer of the research onion, starting with the research philosophy, in order to proceed to the next step of their research journey.

Figure 4.1 The Research Onion



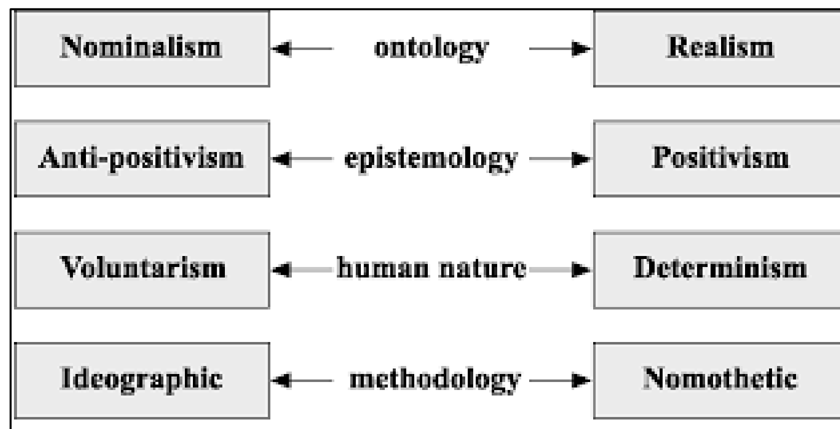
Source: Saunders et al. (2015, P.124)

The term 'research philosophy' refers to a set of beliefs and assumptions regarding knowledge and its development (Saunders, Lewis and Thornhill, 2015). All social

scientists carry out their research studies based on a number of assumptions about the nature of the social world and how it may be examined (Burrell and Morgan, 1979). Philosophical assumptions for Burrell & Morgan (1979) include assumptions about the nature of reality (ontology), about the ground of knowledge (epistemology), about the relationship between human beings and their environment (human nature), and about approaches to investigation (methodology). Each of these four assumptions has two different angles of perspectives regarding social science. Burrell and Morgan (1979) classify each philosophical assumption into two extreme dimensions, the subjective and the objective approach to social science, as shown in figure 5.2 below.

Figure 4.2 The Subjective – Objective Dimension

the subjective approach to social science | **the objective approach to social science**



Source: Burrell and Morgan (1979, P.3)

The first assumption, ontology, concerns the very essence of the phenomenon under investigation. In other words, it is about the question: whether the reality is external to the individual's cognition or a product of the individual's mind (Burrell and Morgan, 1979). Two contrasting positions can be classified in ontology: nominalism and realism. While the former suggests that the social world is nothing more than names, concepts, and labels that are used to structure the reality, the latter postulates that the social world and reality exist externally to individual cognition (Burrell and Morgan, 1979). For the realist, the social world has a reality of its own and exists independently of an individual's appreciation of it.

The second assumption is epistemology, which is interested in how the individual understands the world and communicates this as knowledge to the whole society (Burrell and Morgan, 1979). It deals with the question of whether knowledge is something that can be obtained as universal or as quite specific personal experience. Two positions are identified in epistemology: anti-positivism and positivism. For the anti-positivist, the individual needs to be directly involved in the activities that are under review; the social world can only be understood from the individual's point of view. It may also involve an interpretation of the views of others (an interpretation of interpretations). Anti-positivist research starts by investigating existing experience in order to formulate theories, and typically involves research methods such as action research, case studies, ethnography, feminist perspectives, and participative enquiry (Collis and Hussey, 2009). The positivist understanding of the social world is typically driven by determining a causal relationship between the world's elements and using these relations to predict and explain what happens in the social world (Burrell and Morgan, 1979). Thus, theories provide the basis for explanation and allow the anticipation of phenomena (Collis and Hussey, 2009).

The third assumption, human nature, relates to the relations between human beings and their environment. Two extremes positions can be identified within the field of human nature assumptions: Voluntarism and Determinism (Burrell and Morgan, 1979). While Voluntarism regards the human being as the creator of the environment, determinism views human beings and their experience as products of the environment; therefore, their activities can be completely determined by the situation or environment in which they are located (Burrell and Morgan, 1979).

Based on the above three assumptions, the last assumption regarding the nature of methodology in the sense of the actual methods is shaped or influenced. It concerns the methods used to investigate and obtain knowledge about the social world. Two approaches or tendencies can be identified within this assumption: the Ideographic and the Nomothetic. The Ideographic approach is based on the view that the social world can only be understood by obtaining first-hand knowledge of the investigated subject. This approach stresses the importance of direct involvement in the investigation process and the interpretation of interpretations (Burrell and Morgan, 1979). The nomothetic approach in contrast places emphasis on the importance of

basing research on a systematic protocol and technique and the use of hypotheses' testing (Burrell and Morgan, 1979).

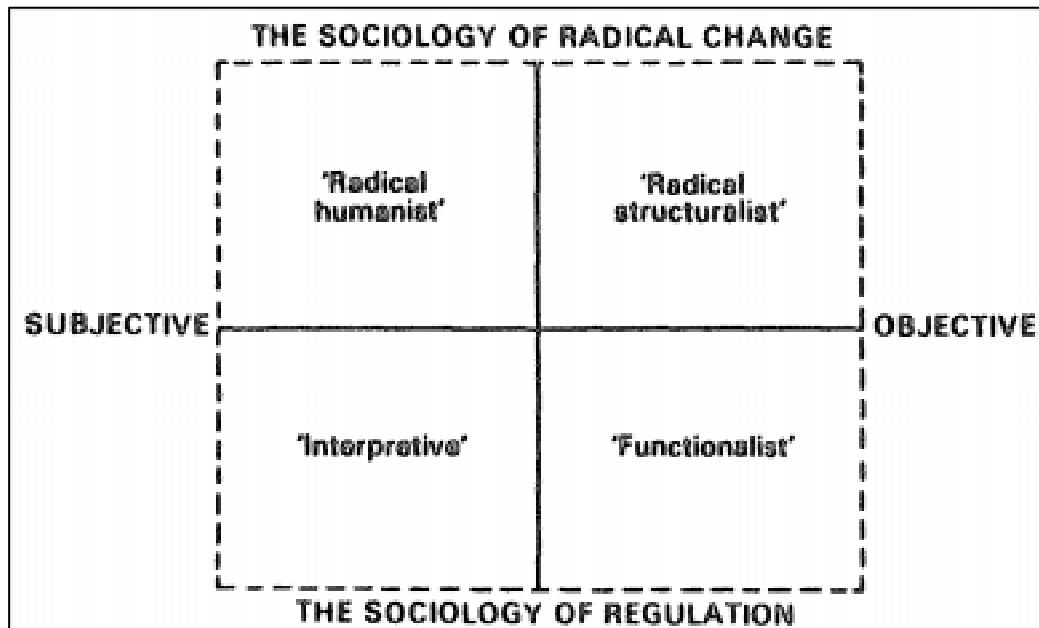
These four sets of assumptions about the nature of social science provide a framing for conducting studies and analyzing social theories. For the purpose of achieving the current study objectives, social assumptions that lean more toward the objective dimension are adopted. The important features of the corporate governance context of the current study have a concrete and accessible reality, and the study seeks to understand and explain the variation in the level of voluntary disclosure by searching for regularities and casual relationships based on a well-developed theory, and the understanding and interpretation of the results are based on hypotheses and analytical testing. Therefore, the current study embraces the four assumptions related to the objective approach in its attempt to understand the disclosure practices within GCC listed firms.

4.2.2 Research Paradigms

Like the subjective – objective dimension that comprises assumptions which deals with the nature of science, Burrell and Morgan (1979) suggest an additional dimension that includes two opposing assumptions regarding the nature of society namely, the regulation – radical change dimension. This dimension helps to differentiate between research philosophies related to the political or ideological standpoints adopted by researchers when investigating the social world (Saunders, Lewis and Thornhill, 2015). Researchers working within the regulation standpoint focus on the need to regulate societies and human behaviors. They effectively tend to accept the need for the current regulations and seek to improve them rather than radically change them. Business and management research is usually placed in this regulation stance since it investigates the society or organization with the aim of providing suggestions for improvement rather than radically challenging the current position (Saunders, Lewis and Thornhill, 2015). The radical change perspective on the other hand, seeks to solve the organizational problems by offering an insight to completely change the existing situation, including even society or the global context as a whole (Saunders, Lewis and Thornhill, 2015). It concerns more the alternatives to the current state rather than suggesting regulations for its improvement.

Burrell and Morgan (1979) combine the subjective–objective dimension with the regulation–radical change dimension to create a 2X2 matrix consisting of four distinctive paradigms for viewing the social and organizational world; namely, Radical humanist, Radical structuralist, Interpretive, and Functionalist, as shown in figure 4.3. These four paradigms are mutually exclusive. Burrell and Morgan (1979) view them as contradictive alternatives and therefore they cannot be combined.

Figure 4.3 Four Paradigms for the analysis of Social Theory



Source: Burrell and Morgan (1979, P.22)

In the top corner of the matrix, located within the subjective and radical change dimension, lies the radical humanist paradigm. Working on this paradigm means approaching the social and organizational world critically and aiming to change the status quo while adopting a subjective perspective of ontology, epistemology, human nature, and methodology (Saunders, Lewis and Thornhill, 2015).

The radical structuralist is located within the objective and radical change dimension. Although it shares the desire to achieve a fundamental change in the social world with the radical humanist paradigm, the radical structuralist paradigm adopts an objective perspective regarding social science assumptions (Saunders, Lewis and Thornhill, 2015).

The current study aims to investigate the corporate disclosure environment in the GCC countries with the purpose of evaluating the current state and suggesting some

recommendations about improving the transparency and disclosure regulations in the stock market; hence, the first two paradigms that stress on radical change are considered irrelevant to this study.

In the bottom right corner of the matrix lies the functionalist paradigm, which is where most of the business and management studies are positioned (Saunders, Lewis and Thornhill, 2015). It is located within the space created by the intersection of the objective and 'regulation' dimensions. Research that operates in the functionalist paradigm rationally examines the organizational world and provides rational explanations and suggestions designed to improve it; in doing so, it relies on the positivist research philosophy (Saunders, Lewis and Thornhill, 2015).

Finally, the interpretive paradigm is located in the bottom left corner, combining the subjective and regulation dimensions. Research in this paradigm focuses on discovering the irrationalities in the social and organizational world (Saunders, Lewis and Thornhill, 2015). It requires the researcher to be involved in the organization's everyday activities in order to understand and explain the situation rather than change it.

The current study is placed in the functionalist paradigm, leaning more toward the centre of the matrix. Due to the study objectives, the current research adopts a functionalist perspective in examining the voluntary disclosure environment and underpins this perspective with objective assumptions about the social world. Therefore, philosophically, the current study is epistemologically a positivist research.

4.2.3 Research Approach

The relation between a research project and the theory can determine whether the research adopts a deductive or inductive approach (Bryman and Bell, 2015; Saunders, Lewis and Thornhill, 2015). Deductive reasoning happens when the conclusion is rationally derived from a set of premises while in the inductive reasoning, there exists a gap between the conclusion and the premises, so observation is required in order to arrive at a conclusion (Saunders, Lewis and Thornhill, 2015). Otherwise stated, the deductive approach starts with an already developed theory that is used to design a number of hypotheses and test them to arrive at a conclusion that could be explained by the theory. In contrast, the inductive approach starts with data collection based on

a number of observations and explorations and then builds a theory based on conclusions from the data analysis. The following table 4.1 differentiates between the deductive and the inductive approach in terms of logic, generalizability, the use of data, and theory, according to Saunders et al. (2015).

Table 4.1 The Deductive and Inductive Approach to Social Science

	Deduction	**Induction**
Logic	When the premises are true the conclusion must be true	Unknown premises are used to generate an untested conclusion
Generalizability	Generalising from the general to the specific	Generalising from the specific to the general
Use of data	Data are used to evaluate hypotheses related to an existing theory	Data are used to explore a phenomenon, identify patterns, and create a framework
Theory	Theory is rejected or supported	Theory is created and built

Source: Saunders et al. (2015, P.145)

The direction in a deductive research goes from theory, observation, to findings; while, in an inductive research, it goes from observation, findings, to theory (Bryman and Bell, 2015). Bryman and Bell (2015) suggest that a deductive strategy of linking data and theory is typically associated with quantitative research; by contrast, an inductive approach to the relationship between theory and research is usually associated with qualitative research.

In addition to the role of theory in research (the deduction and induction approach), quantitative and qualitative research are different in a number of other aspects. Quantitative research is generally associated with positivism while qualitative research tends to be preferred by those emphasising an individual's interpretations of the social world (Bryman and Bell, 2015). Second, quantitative research views the social reality as an external, objective reality, whereas qualitative research views it as a product of an individual's creation (Bryman and Bell, 2015). Furthermore, the most obvious difference is the numerical measurements and statistical tests used by

quantitative research, and the naturalistic and interactive data collection techniques used in qualitative research (Saunders, Lewis and Thornhill, 2015).

The quantitative/qualitative distinction is present in classifying social science research. It is argued that research objectives and the way in which researchers pose research questions will inevitably impact on the choice between the quantitative and qualitative research approaches (Saunders, Lewis and Thornhill, 2015). The current study aims to assess the level of voluntary disclosure in the GCC stock markets and to identify the relationships between the ownership structure, board attributes and the extent of voluntary disclosure in the annual reports. The deductive approach and the use of quantitative methods are considered to be suitable for the purpose of this thesis, and they fit well with the functionalist paradigm and objective philosophy adopted in this study.

4.3 The Theoretical Framework for Corporate Voluntary Disclosure

In the context of corporate governance, it is argued that a commonly accepted theoretical base or framework does not exist (Parum, 2005). Different theoretical frameworks have been adopted to explain and investigate corporate governance practices and it may be noted that agency theory and stakeholder theory are popular in this respect (Abdel-Fattah, 2009). Similarly, regarding disclosure as an accounting principle, there is no single comprehensive theory that fully explains the practice of disclosure in general and voluntary disclosure in particular (Healy and Palepu, 2001). Several theories have been employed in the accounting literature to explain the reasons underpinning corporations' decisions to voluntarily disclose more and/or higher quality information. This study focuses on agency theory in explaining voluntary disclosure in GCC listed firms due to the nature of the independent variables included to explain the differences in the level of voluntary disclosure between firms; namely, ownership structure and board of directors' characteristics.

4.3.1 Agency Theory

Agency theory has been largely adopted by disclosure studies (e.g. Firth, 1980; Cooke, 1989; Lutfi, 1989; Taylor and Craswell, 1992; Hossain et al., 1994; Meek et al., 1995; Raffournier, 1995; Hossain and Rahman, 1995; Gray et al., 1995; Chau and Gray, 2002; Haniffa and cooke, 2002; Eng and Mak, 2003; Leventis and Weetman,

2004; Barako et al., 2006; Ghazali and Weetman, 2006; Huafang and Jianguo, 2007; Khodadadi et al., 2010; Rouf and AlHarun, 2011). Jensen and Meckling define an agency relationship “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” (Jensen and Meckling, 1976, p. 308). According to agency theory, a contract exists between a provider of capital (the principal) and a controller of capital (the agent). This separation of ownership and control introduce the need by the principals (shareholder) for some assurance that they will receive returns on their capital. They need to be assured that the agent (manager) is not expropriating their interests. Nevertheless, agents are expected to deviate from the interests of the principals, since those who initiate and implement important decisions are not the main residual claimants and therefore do not endure a substantial risk as a result of their decisions (Fama and Jensen, 1983). Both agent and principal wish to maximize their own utilities, the agent works to maximize his income while the principal invests to maximize his returns. Both outcomes depend on the efforts and decisions of the agent (Saam, 2007). Most modern corporations are characterized by the separation of the decision management from the residual risk bearing by separating the managers’ initiation and implementation activities and principals’ control and monitoring activities (Fama and Jensen, 1983). This separation of management and finance in the corporation contract creates a conflict of interests between the principals and agents, which is known as the agency problem.

The agency problem may be summarized as the principal always questioning if the managerial behaviors absolutely serve her or his interests and whether the managers are wasting funds on ineffective projects or projects that solely favor their interests over those of the firm. Principals need information regarding managers’ actions and motivations in order to evaluate their decisions and gain some assurance that their goals are being achieved. In agency theory, an information asymmetry is assumed to the advantage of the agent (Saam, 2007; Armstrong, Guay and Weber, 2010). Principals encounter two problems as a result of information asymmetry; namely, moral hazard and adverse selection (Saam, 2007). Moral hazard deals with hidden actions, as the agent has the freedom to choose from different actions to complete the job delegated to him (Saam, 2007). The agent’s actions cannot be easily observed and

evaluated by the principal; hence he cannot verify whether or not the agent is acting to the benefit of the firm (Husted, 2007). Adverse selection, on the other hand, deals with hidden information: information about agents' qualifications and skills, information on agent's intentions, and information relevant to evaluating agents' performance and work results (Saam, 2007). Under the lack of information, the principal is unable to verify whether or not his decision to hire an agent with certain characteristics and intentions was the right one, and also unable to evaluate the agent outcomes because of the absence of information and knowledge needed for such evaluation (Eisenhardt, 1989; Saam, 2007).

In order to solve the agency problem, the preferences of the shareholders and managers need to be aligned and the hidden actions and information need to be disclosed. It is suggested that rewarding a manger with incentives depending on his actions will motivate him to work hard to fulfil the shareholders' targets. That makes both shareholders and managers interested in achieving the same outcome, which is a high level of returns for shareholders that will lead to a high level of incentives for managers (Shleifer and Vishny, 1997; Saam, 2007). Monitoring, signalling, and bonding are recommended by Jensen and Meckling (1976) to deal with the problem of hidden actions and information. Shareholders are expected to collect information on managers' actions, activities, and performance in order to monitor their wealth. Managers are also expected to signal their special skills and characteristics to convince the shareholders of their ability to look after their wealth and help them to make an offer that is appropriate for the managers' characteristics and knowledge (Saam, 2007). Although these solutions could, to some extent, solve the agency problem, they have resulted in agency costs incurred by the shareholders related to monitoring activities and by the managers related to bonding activities. To avoid these costs, we can simply argue for more disclosure of information. If managers voluntarily provide information on their activities, qualifications, and performance, the shareholders will then be able to monitor their welfare at less cost (Healy and Palepu, 2001). Limiting the information asymmetry by disclosing more information contributes toward solving the agency problem and mitigating the agency costs. Therefore, disclosure in the corporate annual reports is considered a mechanism for helping to reduce the agency costs by reducing the need for direct monitoring and bonding expenditure. "Managers are predicted to disclose more information in annual

reports in order to reduce agency costs entailed in monitoring activities" (Huafang and Jianguo, 2007, p. 607). Accordingly, managers have the incentive to agree voluntarily to supply additional information that is relevant to an assessment of their work in order to reduce the costs associated with the agency problem (Craswell and Taylor, 1992).

Researchers view agency theory as a theory that explains the variations in disclosure in the annual reports of listed corporations. Corporate disclosure is considered an important corporate governance mechanism that limits the information asymmetry and agency conflicts between the managers and shareholders. This study employs agency theory to examine the relationship between ownership structure, board attributes and voluntary disclosure by GCC listed corporations. It seeks to explain the effect of different types of ownership (shareholders) and board characteristics on the level of voluntary disclosure based on the understanding of agency theory regarding the relationship between principal and agent.

4.3.2. Ownership Structure and Disclosure

According to the previous discussion, while managers manage the capital of the shareholders, they make more observations and obtain better information about the business. Shareholders request this private information for monitoring purposes in order to justify the managers' decisions and ensure that the allocation of the business resources is serving their interests. If the manager is the sole owner of the firm, he has the motivation and possesses the information needed to protect his own interests. This situation has zero agency costs as suggested by Jensen and Meckling (1976) and therefore, managers combine the rules of managing and monitoring. On the contrary, if the manager owns zero interest in the firm, he is expected to depart from the interests of the owners in order to favour her or his own interests. In this case, the agency costs are high and owners need to perform a powerful monitoring job. Agency costs are adversely related to managerial ownership (Ang, Cole and Lin, 2000). It is apparent that the ownership structure determines the level of agency costs and, as a result, the level of monitoring. That shareholders, especially large ones, exert their power to control corporations is evident from the corporate governance literature as an effective corporate governance mechanism (Shleifer and Vishny, 1997). Large shareholders aim to

maximize their returns, and have enough power and rights to have their interests respected (Shleifer and Vishny, 1997). Thus, the type and size of the shareholders will probably influence the amount of pressure they exert in requesting the information that enables them to monitor their interests.

Ownership structure is considered a reliable corporate governance mechanism for controlling conflicts of interest through the role of monitoring applied by different types of shareholders (Connelly et al., 2010). In the course of their monitoring, shareholders mainly rely on information disclosure and financial reporting. Ang et al. (2000) and Armstrong et al. (2010) document that high quality, transparent financial reporting lowers the agency conflict and so, consequently, the costs of direct monitoring. They highlight that the level of demand for public disclosure and financial reporting varies cross-sectionally with the structure of ownership in corporations. The attitudes of different types of owners regarding monitoring activities and demanding information are not homogenous, due to the various risk preferences, investment objectives, expectations, legal and regulatory environments, and the ability and power to request and process information (Connelly et al., 2010; Khlif, Ahmed and Souissi, 2017).

This study aims to explore the impact of ownership structure (namely government, family, institutional, foreign, board members, and audit committee ownership) on the level of voluntary disclosure in the annual reports of firms in GCC countries. The severity of the agency problem differs among countries depending on the ownership structure and level of development of the specific country (Al-Janadi, Abdul Rahman and Alazzani, 2016). Using agency theory, the study aims to capture how the voluntary disclosure in the annual report differs among corporations depending on the structure of ownership and the extent to which ownership structure might explain the variation in voluntary disclosure found among corporations' annual reports in the GCC countries.

4.3.3 Board of Directors and Disclosure

Another corporate governance mechanism is the board of directors. This is considered a primary venue for shareholders to employ control and monitoring over the management, and is ultimately an assuring tool that shareholders'

interests are favored and the agency costs are reduced (Donnelly and Mulcahy, 2008). According to the agency argument, that emphasizes the misalignment between the interests of the owners and managers, a monitoring instrument such as the board of directors is needed to reduce agency costs and confirm that the management decisions are in favor of the shareholders' interests. While the board members are fulfilling their monitoring duties, they may promote the disclosure of certain information in order to reduce the asymmetry of information between the shareholders and management. Such disclosure provides transparency and allows investors to better predict future returns (Cheng and Courtenay, 2006). According to Cheng and Courtenay (2006), the board's monitoring effectiveness is influenced by its composition, independence, and size, implying that the disclosure of information generated by the board members is determined by the board attributes. The disclosure decision is one of the corporate control functions of the board (Akhtaruddin and Haron, 2010) and investors can pressure the managers to provide more information through their representatives on the board. Thus, the board's monitoring capacity and ability to request the disclosure of information are likely to vary depending on the board characteristics such as the number of board members, the level of board independence, and the board remuneration policy.

Therefore, this study is motivated to investigate the impact of different board attributes (namely, board size, board independence, board compensation, board meetings and attendance, board cross-directorship, and audit committee size) on the level of voluntary disclosure in GCC countries where the socio-economic and political environments are unique.

4.4 Hypothesis Development

Following the previous section, which provides the theoretical framework for the study, this part aims to develop testable hypotheses to examine the relationship between ownership structure, board attributes and voluntary disclosure. Owners differ in terms of their preferences, wealth, competence, and objectives. This difference in owners' identities affects the way they exercise their power and rights to alter the management behaviors, so, it is expected that different types and sizes of owners have different impacts on corporations' reporting strategies

(Pedersen and Thomsen, 2003; Connelly et al., 2010). The existing empirical literature suggests different ownership variables that potentially explain the level of voluntary disclosure in the annual reports. Ownership concentration, board ownership, government ownership, family ownership, institutional ownership foreign ownership, and audit committee ownership are the main variables used in this study. Similarly, board characteristics are expected to have an impact on board monitoring effectiveness and so, consequently, on the disclosure practice. The board attributes examined in this study include: board size, board independence, board compensations, board meetings and attendance, board cross-directorship, and audit committee size.

In addition, the study tests for the effect of a number of firm characteristics factors; comprising firm size, audit firm size, leverage, profitability, liquidity, and industry type. The selection of variables is mainly based on the corporate disclosure literature and their applicability to developing countries, especially to GCC once.

4.4.1 Ownership Structure Factors

4.4.1.1 Ownership Concentration

Theoretically, the agency cost is higher in firms with a dispersed ownership structure. When there are many owners (residual claimants), the separation of ownership and control is greater. Hence, the information asymmetry and divergence between the interests of the managers and owners are greater too. In this case, the disclosure by the management is a vital means of enabling the owners to perform a monitoring role over their interests and prevent managerial opportunism (Jensen and Meckling, 1976; Fama and Jensen, 1983). Managers are likely to provide more information when the ownership is dispersed among many shareholders (Craswell and Taylor, 1992; Raffournier, 1995).

On the contrary, concentrated ownership, with fewer owners who, however, enjoy significant control and cash flow rights, helps to reduce the agency cost relative to widely-held firms (Shleifer and Vishny, 1997). When the control rights are concentrated in a small number of shareholders with major cash flow power, they can easily monitor the management, either directly or through their

representatives on the board, and impose their preferences on it compared to when these rights are shared by many shareholders (Shleifer and Vishny, 1997). The alignment between the interests of the large shareholders and managers is obvious because of the limited separation between the ownership and control, the hand selection of the directors and managers, and the intense monitoring of the managers; therefore, the need for high quality financial reporting and disclosure as a monitoring tool seems to be lower in firms with a concentrated ownership structure than in firms with a diffuse one (Armstrong, Guay and Weber, 2010). Concentrated owners rely on their significant, powerful rights in monitoring the management more than on disclosure and financial reporting.

In addition, proprietary cost theory supports a negative association between ownership concentration and disclosure from a different point of view. It is argued that low financial transparency is found in firms with concentrated ownership because large shareholders tend to secure private information from their competitors (Fan and Wong, 2002). Since large shareholders already have direct access to private information, they are less likely to promote high quality disclosure and transparency (Ajinkya, Bhojraj and Sengupta, 2005; Khlif, Ahmed and Souissi, 2017).

The empirical literature has documented a negative relationship between ownership concentration and voluntary disclosure (Khlif, Ahmed and Souissi, 2017). In their meta-analysis, Khlif et al. (2017) document this negative association and find it more present in companies operating in less developed markets compared to highly-developed ones, suggesting that concentrated owners in countries, where the equity markets are less well developed, are in an entrenched position to extract the needed information and expropriate the minority interests. They argue that one explanation for this result is that concentrated owners are the main source of capital in the less developed markets, which makes the use of voluntary disclosure to attract funds less relevant there. Firms in the European Union, whose shares are more closely held in term of their ownership structure, are found to disclose less corporate governance information (Bauwhede and Willekens, 2008). Hossain et al. (1994) find a significant negative relation between ownership concentration as measured by the top ten shareholders and the extent of voluntary disclosure. Darus et al. (2014) report a negative association

between ownership concentration and corporate social responsibility disclosure. Barako (2007) finds that shareholder concentration is negatively related to general, strategic, and financial disclosure in Kenya. In Saudi Arabia, an increase in block ownership significantly lowers the voluntary disclosure of corporate governance information (Al-Bassam et al., 2015). A similar association regarding block ownership and voluntary disclosure is found in South African corporations (Ntim et al., 2012). Chau & Gray (2002) provide evidence of a positive association between a wider ownership structure and voluntary disclosure in companies in Hong Kong and Singaporean.

Nevertheless, Haniffa & Cook (2002) report a positive relationship between the proportion of shares held by the top ten shareholders and voluntary disclosure in Malaysia. Using the same variable (ownership by the top ten shareholders), Ghazali & Weetman (2006) find no association with disclosure. Similarly, Depoers (2000) records an insignificant relationship between ownership concentration and voluntary disclosure in the French context. Eng & Mak (2003) also prove that blockholder ownership is unrelated to disclosure.

Based on agency theory and the results of previous studies, the current study is motivated to test for the negative association between ownership concentration and the level of voluntary disclosure in GCC listed companies using an overall hypothesis.

H1 There is negative association between ownership concentration and voluntary disclosure in the annual reports of GCC listed companies.

4.4.1.2 Board Ownership

Board ownership, the proportion of shares held by the board of directors, helps to bring into line the interests of the managers with those of the other shareholders. When managers own a high proportion of the firm, they are more likely to work toward maximizing the firm value and hence, minimizing the agency conflicts and costs. In contrast, when the board ownership is limited, managers have an incentive to serve their own interests rather than those of the firm, which results in a greater agency problem (Jensen and Meckling, 1976). Agency costs vary adversely with managerial ownership (Ang, Cole and Lin,

2000). In the instance of low board ownership, outside shareholders may need to increase their monitoring efforts on the managers' behaviors, which leads to an increase in the monitoring costs realized by the firm. Managers could deal with the resulting monitoring costs by willing to voluntarily disclose more information. Thus, voluntary disclosure is seen as a substitute for monitoring (Eng and Mak, 2003; Mohd Ghazali and Weetman, 2006). The lower the board ownership, the greater the need for monitoring, and more voluntary disclosure is expected as a way to reduce the costs associated with monitoring.

Following the same agency theory assumption, it is expected that voluntary disclosure decreases when managerial ownership increases. A higher proportion of insider ownership reduces the capacity for monitoring by outsiders, leading to increased opportunistic behaviors and decreased voluntary disclosure (Akhtaruddin and Haron, 2010; Khlif, Ahmed and Souissi, 2017). The empirical literature supports the theory by proving the negative relationship between managerial ownership and voluntary disclosure. Khlif et al. (2017) document a negative association between managerial ownership and voluntary disclosure. End and Mak (2003) find lower managerial ownership to be associated with greater voluntary disclosure. Similarly, Chau and Gray (2002) provide evidence of a negative association between insider ownership and voluntary disclosure.

According to agency theory and the previous literature, the current study tests for a negative association between board ownership and voluntary disclosure

H2 There is a negative association between board ownership and voluntary disclosure in the annual reports of GCC listed firms.

4.4.1.3 Government Ownership

Government ownership is a main feature of GCC companies. Government investment institutions and government-controlled bodies own a substantial portion of the GCC stock markets; therefore, the majority of listed companies are government- or family owned (Baydoun et al., 2013; Al-Janadi, Abdul Rahman and Alazzani, 2016). The governments of these countries tend to invest in their stock markets through government treasury funds. This could be a possible reason

underlying the high proportion of government control within listed firms (Al-Janadi, Abdul Rahman and Alazzani, 2016).

Theoretically, there is no consensus regarding the relationship between voluntary disclosure and ownership by government institutions (Khlif, Ahmed and Souissi, 2017). Eng and Mak (2003) argue that the agency costs are higher in firms with massive government ownership due to conflicting objectives between firm profit maximization goals and other government political goals, creating a need for more communication with other shareholders which means greater disclosure by the firm. They provide evidence supporting this argument in their study. Alternatively, it is also argued that the government is interested in enhancing a good reputation through promoting public wealth and enhancing transparency in financial reporting. Being accountable to the public, the government could exert some pressure on companies to disclose additional information (Mohd Ghazali and Weetman, 2006; Wang and Claiborne, 2008). Wang and Claiborne (2008) show that state-owned shares are positively related to overall disclosure and strategic information. In addition, Khlif et al. (2017), in their meta-analysis study, prove a positive association between government ownership and voluntary disclosure, suggesting that firms with a higher government stake legitimize themselves in the society by providing more environmental and social disclosure. Similarly, Al-Bassam et al. (2015) find that firms with higher government ownership disclose more corporate governance information, implying that formal support by the Saudi government for the corporate governance reform encourages firms with shares owned by the government to comply with the corporate code by increasing their disclosure. Ntim et al. (2012) also find a positive relation between government ownership and voluntary disclosure in South Africa. Naser et al. (2006) find moderate support for the idea that the government promotes corporate social disclosure in the Qatari stock market (Naser et al., 2006). Ghazali and Weetman (2006) find government ownership to be not significant in any category of disclosure.

On the other hand, government ownership is expected to have a negative effect on voluntary disclosure, for several reasons; first, firms with government shares might have little incentive to voluntarily disclose information since they have easy access to finance and rely on government funding rather than raising funds

externally, which makes them less interested in disclosing more in order to minimize the cost of capital (Mohd Ghazali and Weetman, 2006). Second, firms with government ownership operating in developing countries are expected to have strong political connection. In order to protect their political linkages and interests, they tend to disclose less information (Mohd Ghazali and Weetman, 2006). Firms could be politically influenced by the government through the appointment of the top management and board members (Choi, Sami and Zhou, 2010). Choi et al. (2010) conclude that, when the government ownership is high, political influence could play a major role in increasing the information asymmetry in China; however, this effect appears to be nominal in the period when new privatization reforms and corporate governance mechanisms are put in place. Consistent with the political influence argument, Al-Janadi et al. (2016) provide evidence that government ownership weakens the directors' monitoring role. They suggest that the intervention by the Saudi government in appointing the board of directors could jeopardize the board independence, resulting in poor monitoring and insufficient disclosure.

Government ownership generates two opposite directions regarding financial reporting and disclosure. Increased agency costs and promoting a good public reputation are linked to a higher level of voluntary disclosure, while cheaper sources of finance and political influence suggest little disclosure and transparency.

According to agency theory and due to the unique society in GCC countries where labor unions and pressure groups are absent, the study expects an active positive role for the government in seeking more transparency and disclosure as a way to show that it cares most about the public's benefit. Hence, the current study expects a positive association between government ownership and voluntary disclosure.

H3 There is a positive association between government ownership and voluntary disclosure in the annual reports of GCC listed firms.

4.4.1.4 Family Ownership

Like government ownership, family shareholders are common in the GCC stock markets (Al-Janadi, Abdul Rahman and Alazzani, 2016). Family ownership in the current study is represented by the shares owned by the founder of the firm or his descendants (Armstrong, Guay and Weber, 2010). It is a distinctive ownership structure, in that "founding-families represent a unique class of shareholders that hold relatively undiversified portfolios, are long-term investors (multiple generations), and often control the senior management position" (Anderson and Reeb, 2003, p. 620).

As a form of concentrated ownership in GCC family-controlled firms, family shareholders ease the agency conflict between the management and control. The controlling family fulfills the role of monitoring the managers (Ang, Cole and Lin, 2000). Due to their extensive knowledge of the firm's activities, their long investment horizons compared to other shareholders, and their presence within the top management and the board of directors, family shareholders have strong incentives to provide superior monitoring over their wealth, which includes the wealth of the other shareholders (Anderson and Reeb, 2003; Ali, Chen and Radhakrishnan, 2007). As a result, the degree of disclosure of information is expected to be low because of the limited demand for information from the other shareholders since effective monitoring is already being performed by the family owners. Others argue that, because of the family members' position within the management and the board of directors, firms may have weak corporate governance structure resulting in poor monitoring and disclosure. Haniffa and Cooke (2002) and Ghazali and Weetman (2006) find that firms with a higher proportion of family members on the board disclose less voluntary information in their annual reports. Chau and Gray (2002) provide evidence indicating that as a concentrated ownership, family shares are negatively and significantly associated with voluntary disclosure. Likewise, a higher percentage of shareholding by the founding family is found to reduce the extent of segment disclosure in Malaysia (Jalila and Devi, 2012)

Although family ownership reduces the typical agency conflict between the management and control, it creates more severe agency problem with

outside/minority shareholders (Shleifer and Vishny, 1997; Ali, Chen and Radhakrishnan, 2007). The founding family enjoy substantial control over the firm as a result of their massive equity holding, voting rights, and representation on the board of directors; giving them an opportunity to serve their interests at the cost of the other shareholders (Ali, Chen and Radhakrishnan, 2007). For example, they may try to hide the adverse effect of related party transactions or facilitate the appointment of family members to management positions (Ali, Chen and Radhakrishnan, 2007). In this scenario, the minority shareholders are likely to demand more information that will help them to safeguard their benefits in the firm. To reduce the agency problem between the controlling and non-controlling shareholders, firms with family ownership are willing to meet the great demand and make more and better information disclosure (Wang, 2006). Moreover, the willingness to provide more information in firm with family ownership is derived from the family's long-term presence in the firm and its intention to preserve the family name and reputation to pass to future generations (Wang, 2006). Wang (2006) documents an association between founding family ownership, higher earnings quality and greater earnings informativeness. Ali et al. (2007) find similar results, reporting that family controlled firms have better quality earnings, are more timely in reporting bad news, and also have a larger analyst following and more accurate analysts' forecasts. Cascino et al. (2010) also suggest that the financial reporting by the family firm is both more transparent and less manipulated by the management. He concludes that the positive effect of family ownership on the financial reporting quality is derived from the presence of the family itself rather than ownership concentration (Cascino et al., 2010). In the Saudi context, Al-Janadi et al. (2016) find no significant effect of family ownership on voluntary disclosure.

The vertical and horizontal agency problem provide opposite predictions regarding the effect of family ownership on voluntary disclosure in the literature. The argument of concentrated ownership supports the negative effect of family ownership on voluntary disclosure, and the argument of greater agency conflict between family and non-controlling shareholders supports the positive impact of family ownership. Thus, the difference in the severity and the type of agency

problems is believed to be the reason for the difference in disclosure practices between family and non-family firms (Ali, Chen and Radhakrishnan, 2007).

In GCC, due to the severity of the agency conflict between the controlling family and the other shareholders, and the unique nature of family owners who care most about their family name, reputation, and future generations, this study tests for a positive effect of family ownership in GCC countries where family relationship, reputation, and heritage are considered to be among the most important values in the society.

H4 There is a positive association between family ownership and voluntary disclosure in the annual reports of GCC listed firms.

4.4.1.5 Institutional Ownership

Institutional investors are a class of large shareholders with a relatively significant stake of ownership, which enables them effectively to monitor the management and consequently reduce the agency costs and information asymmetry (Donnelly and Mulcahy, 2008). Institutional investors differ from all of the other types of concentrated shareholders in terms of the level of sophistication and knowledge they retain. They are professionals with great incentives to acquire the timely disclosure of information and great voting power, that means that they are better-placed to evaluate the management's decisions and take corrective action when it is deemed necessary (Donnelly and Mulcahy, 2008). Moreover, due to their long-term investment horizon and large investments portfolio, institutional investors can gather and analyze information efficiently through their easy access to databases and analytical tools (Hope, 2012). Institutions are found to be more interested in stocks in firms with a greater level of disclosure (Healy, Hutton and Palepu, 1999). Ajinkya et al. (2005) find institutional ownership to be favorably associated with accurate and more frequent management forecasts. Khlif et al. (2017) document a significant positive relationship between institutional ownership and voluntary disclosure. This positive effect of institutional ownership is more present in low investor protection countries and low market development settings, implying that institutional ownership is an effective monitoring mechanism, forcing the management to meet their informational needs and provide better disclosure (Khlif, Ahmed and Souissi,

2017). This effect is pronounced in the Saudi settings where corporations with higher institutional ownership are found to disclose considerably more information (Al-Bassam et al., 2015). In Kenya and Bangladesh, Barako et al. (2006) and Rouf et al. (2011) find institutional ownership to be positively associated with voluntary disclosure. However, in Qatar and Malaysia, the positive impact of institutional investors is very small (Haniffa and Cooke, 2002; Naser et al., 2006).

In certain circumstances, institutional ownership might negatively affect disclosure. It is argued that, when the institutional ownership is highly concentrated and/or operates within a less-developed corporate governance system, they behave like insiders in obtaining private information to serve their interests at the expense of the minority shareholders rather than to contributing to information transparency (Choi, Sami and Zhou, 2010). Choi et al. (2010) suggest that, due to the breakdown in the corporate governance system in the emerging market of China, institutional investors have an incentive to use private information to their own advantage. Their finding contradicts that of Khlif et al. (2017), who documents that a positive effect on disclosure by the institutional shareholders is more present in the less developed markets, indicating the significant role of institutional investors in monitoring and promoting transparency in a setting that lacks a well-structured corporate governance system.

The primary argument regarding institutional ownership and its relation to disclosure is summarized by the possibility that their incentives as professional, sophisticated investors outweigh their incentives as concentrated shareholders, in addition to the important influence of the corporate environment in which the firms operate.

Although institutional ownership has been relatively low within the Saudi context and other GCC countries, the Saudi Capital Market Authority (CMA) is keen to attract sophisticated institutional investors as part of the broader efforts to raise the level of professionalism of the market participants and improve the level of transparency (Al-Bassam et al., 2015). Similarly, other GCC stock market authorities are aware of the importance of institutional investors for the future development and stability of the capital markets in general. Therefore, the current

study tests for a positive association between institutional ownership, as measured by the proportion of shares held by institutional investors, and the level of voluntary disclosure in GCC countries.

H5 There is a positive association between institutional ownership and voluntary disclosure in the annual reports of GCC listed firms.

4.4.1.6 Foreign Ownership

Foreign investors are usually assumed to have an information disadvantage compared to domestic ones (Choe, Kho and Stulz, 2005). Giving their geographical and language barriers and lack of knowledge of the local accounting standards and operating environment, foreign investors face higher information asymmetry relative to local ones (Huafang and Jianguo, 2007; Choi et al., 2013). If this is the case, foreign investors who happen to come from more developed and transparent regimes may place a greater demand and pressure for a higher level of disclosure by local firms (Choi et al., 2013). Accordingly, the management may increase the voluntary disclosure to fulfill the foreign shareholders' expectations regarding disclosure and transparency. Haniffa and Cooke (2002) prove a positive association between foreign ownership and voluntary disclosure in Malaysia. Barako et al. (2006) also find that, the higher the percentage of shares held by foreign shareholders, the higher the level of voluntary disclosure by Kenyan companies. Similar results are documented in China, suggesting that the presence of foreign ownership has a positive effect in monitoring the management and encouraging more disclosure (Wang and Claiborne, 2008). Khlif et al. (2017) emphasize the importance of investors' identity in the corporate governance literature through proving the positive and significant effect of foreign ownership on the level of voluntary disclosure based on 20 disclosure studies, which supports the agency theory and information asymmetry argument.

On the other hand, if we ignore investors' identity as foreign shareholders and focus on the size of their holdings, foreign ownership can have the opposite effects on the information environment. Foreign blockholders may be motivated to take advantage of their superior access and processing capability to pursue their personal interests. As controlling shareholders who have access to private information, they might further limit the firm disclosure to secure information for

their own benefit (Choi et al., 2013). That suggests a positive association between foreign ownership and information asymmetry. The more concentrated the foreign shareholdings, the less voluntary disclosure is expected by the firm. In the emerging market of China where less investor protection and less restricting disclosure requirements exist, Choi et al. (2013) and Choi et al. (2010) support the former argument by providing evidence that foreign investors seems to use their superior access to private information to serve their personal benefits rather than promote general market transparency.

However, unlike developed countries, foreign investors' holdings in the GCC are very low due to certain restrictions and limitations applied to non-Arab investors. Hence, according to agency theory, foreign investors are expected to behave as minority shareholders who are keen to monitor their wealth and demand a higher level of disclosure to protect their investments (Jalila and Devi, 2012). Foreign investments accounted for 14% of the value held in the Middle East and North Africa (MENA) region, of which only 26% was related to foreign investments in GCC countries (Amico, 2016). Despite the relaxation concerning the foreign investment limitation, such as the recent opening of the Saudi market, which is larger than all of the other GCC markets combined, to qualified institutional foreign inventors and the market upgrades of Saudi, the UAE, and Qatar, the inflow of foreign investments remains subject to certain restrictions, like the maximum 49% that foreign investors are allowed to acquire. The low foreign stake in the developing markets has an imprecise effect on the level of disclosure. In Malaysia, Jalila and Devi (2012) find that foreign ownership has no significant effect on disclosure. Nevertheless, Liang et al. (2012) show that foreign ownership is associated with the likelihood of holding conference call in Taiwan where the foreign investment is low. They suggest that the long-term investments horizon and the investment maturity may motivate the management to satisfy foreign institutional investors despite their small shareholding (Liang, Lin and Chin, 2012).

Consistent with agency theory, foreign ownership, as measured by the proportion of shares held by non-Arab investors, is expected to enhance the level of voluntary disclosure and transparency.

H6 There is a positive association between foreign ownership and voluntary disclosure in the annual reports of GCC listed firms.

4.4.1.7 Audit Committee Ownership

Agency theory suggests that board monitoring is reinforced by the existing of an effective and experienced audit committee (Akhtaruddin and Haron, 2010). The audit committee mitigates the agency costs through overseeing the board's monitoring function and ensuring adequate financial reporting and disclosure (Allegrini and Greco, 2013). When the audit committee members hold a stake in the firm, they become insiders who have interests in the firm. Therefore, they are expected to look after their wealth and eventually the wealth of the other shareholders through their position as committee members. Their role of monitoring reduces the need for shareholders monitoring and therefore the need for disclosure. The demand for information by the shareholders for the purpose of monitoring may be reduced when the audit committee members own shares in the firm. Audit committee stake ownership has been proven to have a positive impact on firm performance (Bolton, 2014). However, to the best of our knowledge, audit committee ownership has not been examined in terms of its relation to disclosure practices. Nevertheless, board members' ownership has been largely studied and found to have a beneficial impact on firm performance and a negative influence on the disclosure of information in accordance to agency theory (Bolton, 2014). Based on the same reasoning, audit committee ownership is expected to have a positive impact on firm performance, which reduces the need for shareholders monitoring and thus disclosure. The current study expects a negative effect of audit committee stake ownership on the level of voluntary disclosure in GCC listed firms.

H7 There is a negative association between audit committee ownership and voluntary disclosure in the annual reports of GCC listed firms.

4.4.2 Board of Director Attributes

4.4.2.1 Board Size

The role of the board of directors in monitoring and overseeing the management performance is widely recognized in the corporate governance

literature. It is argued that as the number of members on the board increases, it becomes more difficult for them to communicate and express their opinions to reach a consensus regarding important decisions (Lipton and Lorsch, 1992). These barriers may result in ineffective board performance and so, consequently, low firm performance. Accordingly, Yermack (1996) finds an inverse association between board size and firm value, measured by Tobin's Q, indicating that boards with a small number of directors are more cohesive and therefore more effective in evaluating and monitoring the management, which results in higher firm value (Yermack, 1996). The lack of communication and cohesion that usually characterizes large decision-making groups makes large boards less likely to be involved in strategic decisions including the disclosure policy (Goodstein, Gautam and Boeker, 1994).

Nonetheless, expanding the size of the board increases the level of diversity and expertise as well as the representation of independent directors, which is assumed to enhance the corporate governance environment and disclosure (Goodstein, Gautam and Boeker, 1994; Donnelly and Mulcahy, 2008). It is believed that, as the size of the board increases, the directors' ability to monitor the CEO rises until it reaches a threshold (11 members) where the relationship becomes negative (Zahra, Neubaum and Huse, 2000). A greater number of directors on the board with multiple perspectives motivates the management to provide more voluntary disclosure (Akhtaruddin et al., 2009). Akhtaruddin et al. (2009) find a positive association between board size and voluntary disclosure. A similar positive conclusion is drawn in South Africa by Ntim et al. (2012). Eventually, board size appears to have an unclear effect on the wellbeing of the corporate governance environment; accordingly, this study is motivated to include board size to capture any effect on voluntary disclosure.

H8 There is an association between board size and voluntary disclosure in the annual reports of GCC listed firms.

4.4.2.2 Board Independence

According to agency theory, shareholders are uninvolved in the management of their corporations, and instead delegate such responsibility to a number of board members to ensure a close monitoring of the major strategic decisions.

Directors own the right to hire, fire, and set the compensation rate of the top level decision managers, Therefore, it is expected that the higher the proportion of independent directors, who are outside professionals who do not hold a position and have no interests in the firm, The greater the effectiveness of the board in performing its role of representing the shareholders' interests and offering more information to the public (Fama and Jensen, 1983). The appointment of independent directors to the board can serve as a commitment to a transparent reporting environment (Armstrong, Guay and Weber, 2010). Independent directors have incentives effectively to monitor the management and reduce the information asymmetry because the value of their human capital mostly depends on the performance and transparency of the firm where they hold a membership on its board (Fama and Jensen, 1983). In monitoring the management, independent directors demand the disclosure of information and reduce the withholding of information in order to protect their reputation as shareholders' representatives. Board independence has been largely positively connected to voluntary disclosure in disclosure literature (Jaggi, 2000; Ajinkya, Bhojraj and Sengupta, 2005; Babío Arcay and Muiño Vázquez, 2005; Cheng and Courtenay, 2006; Huafang and Jianguo, 2007; Khaled and Khaled, 2007; Lim, Matolcsy and Chow, 2007; Akhtaruddin et al., 2009; Samaha et al., 2012), suggesting that the independent directors' role of monitoring may extend to the financial reporting process. However, the same reason that could motivate independent directors to promote more disclosure, which is their reputation, could in other cases encourage them to withhold firm's low performance indicators from being published (Ajinkya, Bhojraj and Sengupta, 2005). This, in addition to the substitute relationship suggested between independent directors and disclosure in monitoring, may explain the negative relation found between board independence and voluntary disclosure in some studies, such as, Eng and Mak (2003), Barako et al (2006), and Gul and Leung (2004). Despite the negative effect of board independence on voluntary disclosure found in these studies, on balance, the corporate governance literature promotes the positive impact of independent board members on firms' performance and reporting strategies. Thus, the current study includes board independence as independent variable and predicts a positive association with voluntary disclosure.

H9 There is a positive association between board independence and voluntary disclosure in the annual reports of GCC listed firms.

4.4.2.3 Board Compensation

From an agency theory perspective, it is preferable for the board members to be compensated in order to motivate them to attend meetings, read materials, engage in corporate activities, and take decisions that contribute toward the firm's interests (Payne, Benson and Finegold, 2009). Well-compensated members are expected to perform better in terms of their duty of monitoring (Perry, 2000). Perry (2000) finds an influential relationship between board compensation and board monitoring. He shows that, when directors receive compensation, the likelihood of CEO turnover following poor performance increases. In India, a positive and significant correlation is also determined between board remuneration and different measures of firm performance (Aggarwal and Ghosh, 2015). Since board compensation is statistically related to the board's monitoring function and firm performance, it is reasonable to predict more disclosure when the board effectiveness increases. More remuneration encourages a desirable level of information transparency that is needed for the board members to perform their task of monitoring effectively. This study includes board compensation, as measured by total cash compensation, as independent variable and predicts a positive relationship with voluntary disclosure.

H10 There is a positive association between Board compensations and voluntary disclosure in the annual reports of GCC listed firms.

4.4.2.4 Board Meeting and Board Attendance

Time is considered a key factor in determining the effectiveness of the board's functioning as a group (Lipton and Lorsch, 1992; Payne, Benson and Finegold, 2009). The more frequently the board members meet, the more time they have to discuss and evaluate the management behaviors, which consequently results in a more successful monitoring role. Board meetings are where the directors exercise their responsibility of reviewing the meeting materials, asking questions and seeking explanations of problems, understanding the audit and supervisory communications, and providing independent judgments (Lin, Yeh and Yang,

2014). Payne et al. (2009) provide evidence that boards that spend a large amount of time on board-related matters are more effective. However a positive but insignificant relationship between board meetings and firm financial performance is documented in Pakistani listed firms, suggesting that the effectiveness and the quality of board meetings is a more important element in affecting firm performance than the number of meetings held (Akram Naseem et al., 2017). In addition, higher board monitoring is linked to higher firm value, as measured by Tobin's Q (Brick and Chidambaran, 2010). As suggested by agency theory, effective monitoring activities promote disclosure and transparency hence, a positive relationship is predicted between the monitoring activities represented by board meetings and attendance (measured by the number of meetings per year, and percentage of the board members' attendance during the year, respectively) and the extent of voluntary disclosure.

H11 There is a positive association between the number of board meetings and voluntary disclosure in the annual reports of GCC listed firms.

H12 There is a positive association between board attendance and voluntary disclosure in the annual reports of GCC listed firms.

4.4.2.5 Average Board Cross-directorships

Empirical research has recognized the importance of directors' experience and knowledge in achieving board effectiveness (Payne, Benson and Finegold, 2009). When directors hold more than one membership of several corporate boards, their level of expertise increases. They will gain wider experience and knowledge related to monitoring the management and safeguarding the shareholders' interests, which will be reflected in the effectiveness of the whole board (Kosnik, 1987). Sitting on many boards may increase the quantity and quality of that information that directors obtain regarding the business environment. Having directors with valuable and timely information reduces the transaction cost and uncertainty, provides access to opportunities, and strengthens firms' competitive position (Payne, Benson and Finegold, 2009). Board members with other directorships are also more likely to perform better in order to preserve their reputation in the capital market for being experienced board members (Gul and Leung, 2004). In their study, Gul and Leung (2004) use other directorships as a

proxy for directors' experience. In addition, it is suggested that sitting on many boards helps to make the information more transparent since directors have greater access to information in more than one company, and that reduces the desire for confidentiality by companies (Haniffa and Cooke, 2002). However, there is also research suggesting that the busyness of the board can inversely impact its effectiveness in terms of monitoring the management (Ferris, Jagannathan and Pritchard, 2003). As a result firm performance suffers when the board is dominated by members with multiple directorships (Fich and Shivdasani, 2006). Fich and Shivdasani (2006) provide evidence that boards containing members who hold three or more directorships are associated with poor performance and weak corporate governance. Another study in the GCC shows that families in family-controlled firms appoint busy directors to their boards in order to maintain control over the minority shareholders (Eulaiwi et al., 2016), suggesting that busy directors are less effective in performing their main responsibility of monitoring. Accordingly, multiple directorships are expected to have an impact on the board effectiveness and corporate governance practice of the firm; therefore, the number of other directorships in listed companies is included as an independent variable that may impact on the level of voluntary disclosure in GCC listed firms.

H13 There is an association between the number of other directorships held by the board members and the level of voluntary disclosure in the annual reports of GCC listed firms.

4.4.2.6 Audit Committee Size

The audit committee is always viewed as a monitoring mechanism that oversees the preparation and communication of financial information and enassures the flow of such information to external parties (Forker, 1992; Babío Arcay and Muiño Vázquez, 2005). Prior empirical studies have identified a positive association between the presence of an audit committee and corporate disclosure (Babío Arcay and Muiño Vázquez, 2005; Barako, Hancock and Izan, 2006; Bader and Waleed, 2010). It is suggested by agency theory that an audit committee mitigates the agency costs by reducing the information asymmetry and enhancing investor confidence in the financial reporting (Samaha et al., 2012). The corporate Governance rules in GCC countries require companies to establish

an audit committee containing a minimum of three members; therefore, the current study aims to examine the effect of audit committee size, as measured by the number of members siting on the committee, on the level of voluntary disclosure. Although, there is no specific recommended size for an audit committee, it is evident that the available resources and expertise provided by the committee members largely impact on the effectiveness of the audit committee (Ahmed Haji, 2015). Hence, it is argued that, the larger the audit committee the more knowledge and expertise is available. However, larger groups may have communication difficulties that cause delays in the decision-making process and consequently threaten the effectiveness of the committee. Some studies show a positive relationship between audit committee size, audit quality and disclosure practices (Ahmed Haji, 2015; Osariemen et al., 2018).

H14 There is a positive association between audit committee size and voluntary disclosure in the annual reports of GCC listed firms.

4.4.3 Control Variables

Along with agency motivations, managers' disclosure decisions depend solely on a costs and benefits evaluation. A trade-off between the benefits of the disclosure (including the cost of capital reduction, forecast accuracy, and market liquidity) and the costs of disclosure (especially the proprietary costs, and costs of producing, certifying and circulating the information) may determine firms' disclosure policies (Farvaque, Refait-Alexandre and Saïdane, 2011). As each firm is different regarding the costs and benefits surrounding its disclosure decisions, it is expected that the level of voluntary disclosure may vary with firms' specific characteristics beside the corporate governance factors and the type and size of the shareholders of the firm (the main independent variables). Therefore, the current study tests some control variables based on the prior research on voluntary disclosure's determinants to clarify and explain the variation in the level of voluntary disclosure in the annual reports of GCC listed firms.

Firm size, firm size has been largely and significantly associated with the level of disclosure (Cooke, 1992; Meek, Roberts and Gray, 1995). There is a general agreement that larger firms have a higher level of disclosure. Several reasons have been advanced to explain this positive association. First, larger firms have a higher

need for external finance; therefore, potential conflicts of interest among the managers, creditors, and shareholders are expected (Inchausti, 1997). Larger firms tend to provide more disclosure to overcome this conflict and reduce the cost of capital. Second, larger firms are more likely to be in a position to afford the costs associated with collecting and disseminating information, since they already produce detailed information for internal managerial use (Firth, 1979). Third, larger firms' annual reports receive greater exposure to the public and government bodies, which puts them under pressure to disclose more information to avoid public criticism or government intervention in their business (Firth, 1979; McNally, Eng and Hasseldine, 1982; Cooke, 1989b; Raffournier, 1995). The higher political costs faced by larger firms lead to a greater level of disclosure (Urquiza, Navarro and Trombetta, 2010). In addition, larger firms face less proprietary disclosure costs compared to smaller ones. The fuller disclosure by smaller firms may put them at a competitive disadvantage compared to the other larger firms in their industry (Firth, 1979; Raffournier, 1995). Last but not least, larger firms tend to be more complex and have wider ownership structure, which resulted in higher agency costs (Jensen and Meckling, 1976; Leftwich, Watts and Zimmerman, 1981). Complexity requires sufficient and sophisticated information outputs to meet the managerial needs, and a larger number of shareholders means more diversity within the information disclosed to meet their heterogeneous needs. Accordingly, agency theory suggests that a higher level of disclosure is associated with larger firms. The current study tests for firm size, as measured by total assets, as a control variable and expects a positive relationship between firm size and the extent of voluntary disclosure.

Audit Firm, the size of the audit firm has been linked to the extent of voluntary disclosure in many studies (e.g. (McNally, Eng and Hasseldine, 1982; Craswell and Taylor, 1992; Hossain and Rahman, 1995; Depoers, 2000; Haniffa and Cooke, 2002; Barako, Hancock and Izan, 2006; Jalila and Devi, 2012). Auditing activities are a corporate governance mechanism that reduces the agency costs through mitigating the information asymmetry and management opportunistic behaviors (Jensen and Meckling, 1976). A high quality auditor can play a significant role in defining firms' disclosure and financial reporting policies (Armstrong, Guay and Weber, 2010), where a high quality auditor is typically

assumed to be a large audit firm (big-4) that puts its reputation at risk when conducting an audit (Armstrong, Guay and Weber, 2010). Because they are very eager to preserve their reputation as high quality auditors and an effective monitoring mechanism, the big-4 firms are likely to encourage their clients to disclose a significant amount of information (Hossain and Rahman, 1995). Raffournier (1995), Craswell and Tylor (1992), and Jalila and Devi (2012) find a positive association between auditor size and the extent of disclosure. Other studies fail to find any significant link between audit firm size and voluntary disclosure (e.g. (Hossain and Rahman, 1995; Depoers, 2000; Barako, Hancock and Izan, 2006; Soliman, 2013). Whether the audit firm is a big-4 or not is included in the current study as a control variable and expected to have a positive association with voluntary disclosure as predicted by agency theory.

Leverage, agency costs are higher for firms with more debt in their capital structure since the potential wealth transfer is greater from debt-holders to the managers and shareholders (Jensen and Meckling, 1976; Mitchell, Chia and Loh, 1995). Therefore, highly-levered firms are more motivated to provide more voluntary disclosure in order to reduce both the agency costs and the cost of debt financing (Watson, Shrives and Marston, 2002; Bauwhede and Willekens, 2008). Firms satisfy the needs of the current and expected debt-holders, through voluntarily disclosing financial information that helps them to assess firms' solvency and reduces the risk associated with uncertainty. The evidence on the relation between leverage and disclosure is mixed. While some studies find positive relationship (Hossain and Rahman, 1995; Mitchell, Chia and Loh, 1995; Barako, Hancock and Izan, 2006; Iatridis, 2008; Payne, Benson and Finegold, 2009), others find an insignificant one (Craswell and Taylor, 1992; Meek, Roberts and Gray, 1995; Depoers, 2000; Leventis and Weetman, 2004; Mathew, Elsie and Joseph, 2007; Bauwhede and Willekens, 2008). The current study proxies for leverage with the debt ratio (total liabilities to total assets) and expects a positive relationship with voluntary disclosure as reported by agency theory.

Profitability, profitable firms are more inclined voluntarily to disclose information for several possible reasons. According to agency theory, the managers of profitable firms are motivated to disclose more information in order to signal their performance and obtain personal advantages like the maintenance

of their positions, justifications for compensation packages, and the preservation of the value of their human capital (Inchausti, 1997; Barako, Hancock and Izan, 2006). Furthermore, in line with signaling theory, firms with high profitable ratios are motivated to extend their level of disclosure to signal their superior performance in order to distinguish themselves from the less profitable firms through extending their level of disclosure (Inchausti, 1997; Watson, Shrives and Marston, 2002; Leventis and Weetman, 2004). More profitable firms also face more political costs; hence they tend to disclose more detailed information to justify their financial performance and avoid regulatory intervention (Hossain and Hammami, 2009). Profitability is found to be positively associated with the level of disclosure in some studies (Watson, Shrives and Marston, 2002; Iatridis, 2008; Soliman, 2013); however, it offers no explanation in regard to disclosure in other studies (McNally, Eng and Hasseldine, 1982; Meek, Roberts and Gray, 1995; Leventis and Weetman, 2004; Barako, Hancock and Izan, 2006; Hossain and Hammami, 2009). Profitability is included in this study as a control variable and measured by return on assets ratio (ROA).

Liquidity, liquidity measures assess a firm's ability to meet its short-term obligations (Watson, Shrives and Marston, 2002). In agreement with signaling theory, firms with high liquidity have incentives to disclose more information to highlight their secure financial positions to current and potential investors. However, it has been suggested (Wallace, Naser and Mora, 1994) that firms characterized by low liquidity may need to disclose more information to explain the poor performance as part of their accountability to the annual report users. Barako et al. (2006) find no significant relationship between liquidity and the level of voluntary disclosure while Wallace et al. (1994) find a negative one. The current study includes liquidity, as measured by the current ratio (current assets to current liabilities), as a control variable and makes no prediction regarding the direction of the relationship since the results of the empirical literature are inconclusive.

Industry Type, it has been suggested that the specific industry influences firms' disclosure practices (Wallace, Naser and Mora, 1994). Different characteristics which may relate to accounting treatments, political sensitivity, competition, product differentiation, industry structure, country and cultural

differences, and historical reasons found in various industries may result in different levels of disclosure across different industries (Cooke, 1992; Mitchell, Chia and Loh, 1995; Leventis and Weetman, 2004). Therefore, it is expected that firms from the same industry may adopt additional disclosure practices to those required of firms in all industries. If the firm does not adopt the same disclosure strategies as others in the same industry, the lower level of disclosure compared to others could be interpreted as an indication that they are concealing bad news (Inchausti, 1997; Watson, Shrives and Marston, 2002). Cooke (1992) and Raffournier (1995) find that manufacturing companies disclose more information than non-manufacturing ones. Meek et al. (1995) provide evidence supporting industry influence on disclosure in that companies in the oil, chemical, and mining industries provide more non-financial information related to the environment. Cooke (1989) finds that trading companies disclose less information than companies in the manufacturing, services, and conglomerate industries. In addition, Watson et al. (2002) find that companies in the media and utilities industries are less likely to disclose their financial ratio than firms in other industries, which indicates that although utilities is considered to be a highly regulated industry in the UK, they are less likely to provide more information. This suggests that companies that are well-regulated feel that they are already providing a sufficient amount of information and need no further legitimization. Industry effect is also documented in Leventis and Weetman (2004). The current study classifies companies in the GCC markets into energy, manufacturing, and services and expects a variation in the level of voluntary disclosure that could be explained by industry types.

4.5 Data and Methods used in this Study

The focus in this study is on the level of voluntary disclosure in six GCC countries; namely, Saudi Arabia, Kuwait, the United Arab Emirates (UAE), Qatar, Oman, and Bahrain. The investigation covers, three years; 2014, 2015, and 2016. The majority of voluntary disclosure studies focus on the disclosure practice at one specific point of time; examples include Haniffa and Cooke (2002), End and Mak (2003), and Ghazali and Weetman (2006). A few studies examine the disclosure over period of time, like Barako et al. (2006), and Firth (1980). The current study is considered a longitudinal and cotemporary study, uses panel data from the most

recent years at the time when the study was conducted in order to capture any differences in the level of voluntary disclosure and its categories over time. The next section outlines in detail the sample selection and data collection, in addition to the research methods relevant to achieving the study objectives.

4.5.1 Data Collection

4.5.1.1 Sample Selection

The sample population in the current study is all non-financial firms listed on seven stock exchanges: the Saudi Stock Exchange (Tadawul), Kuwait Bourse, Abu Dhabi Securities Exchange (ADX), Dubai Financial Market (DFM), Qatar Stock Exchange, Muscat Securities Market, and Bahrain Bourse; comprising 144, 95, 31,26,27,16, and 17 non-financial listed firms, respectively. Like the majority of disclosure studies (Cooke, 1989b; Depoers, 2000; Haniffa and Cooke, 2002; Rouf and Al Harun, 2011), financial firms including banks, insurance companies, and financial services institutions are excluded from the study population since they are subject to a different set of laws and corporate regulations than that followed by non-financial firms; hence their annual reports will not be comparable to those of other companies. After eliminating companies that become listed during the period of the study between 2014 and 2016, companies with missing annual reports, and companies with missing data regarding their ownership structure, the final study sample consists of 220 listed firms with 660 collected annual reports, as shown in table 5.2. The industrial classification for firms is based on Bloomberg's classification, which includes the following sectors: nine energy, 47 materials, 47 industrial, 34 consumer discretionary, 25 consumer staples, five healthcare, 15 telecommunication, four utilities, 32 real estate, and one information technology. However, due to the small number of companies in certain industries, and to obtain more concentrated and observable results regarding the effect of industry type, the companies are categorised into four different industry groups, nine in energy, 94 in manufacturing, 32 in real estate, and 85 in services, as illustrated in table 4.3.

The study covers the most three recent years at the time when the research was conducted; 2014, 2015, and 2016. The reason underlying the choice of this period is the recent increased awareness of the role of transparency and good corporate governance structure in enhancing the capital market development in the GCC

countries in addition to the recent efforts by the capital market authorities to promote transparency as a means of attracting foreign investments and gaining a higher market classification in the international global indexes. Another reason is the fact that new corporate governance codes have been issued in some GCC countries reflecting the increasing amount of attention being paid to the role of corporate governance in GCC market development. In Oman, a new corporate governance code was issued in 2015 to replace that of 2002; in Qatar, in 2016, a new corporate governance code was issued to replace that of 2009; in 2016, a new corporate governance code was issued in the United Arab Emirates to repeal that of 2009; and, in Saudi Arabia, new governance rules were issued in 2017 to replace those of 2006. These new codes came into force after 2016, which will make a comparison between the levels of voluntary disclosure over this period more reasonable; yet, the new tendency toward improving the transparency and corporate governance regulations could, to some extent, explain the level of voluntary disclosure.

The six GCC member states were selected to be examined in this thesis; Saudi Arabia, Kuwait, the United Arab Emirates (UAE), Qatar, Oman, and Bahrain. The selection of these countries is because what they have in common concerning cultural economic, politics, and religious aspects. The social environment in the GCC is characterized by strong family connections and attentiveness to the importance of Islamic principles. Their economies are characterized by a high reliance on the oil industries; however, there is a new movement toward diversifying the source of income. Last but not least, in regard to the corporate sector, the ownership structure found in GCC markets is highly concentrated with a dominance of government holdings in addition to the restrictions on foreign investments in the capital markets. All these common features justify the combination and analysis of these countries in a single study.

4.5.1.2 Collection of the Data

There are two different sources of data employed in this study. The first one is companies' annual report. Companies in all GCC countries except Kuwait are required to submit their annual reports to either the capital market authority or the stock exchange in order to check if they meet all of the disclosure and corporate governance requirements imposed by the authorities. In Kuwait, however, companies

are required to publish their annual report via their websites. Therefore, annual reports have been collected from the capital market authority website in Saudi Arabia, the securities exchange websites in UAE, Qatar, Oman, and Bahrain, and from each company website in Kuwait. Annual reports are collected for the purpose of assessing the level of voluntary disclosure and to collect data related to the control variables. The annual reports used in this study include financial statements, notes to the financial statements, auditor reports, and reports by the boards of directors. The second source of data is Bloomberg. Data regarding the ownership structure, including the type and size of ownership, are collected from Bloomberg Terminal since such data are not disclosed in firms' annual reports in most of the GCC countries.

Table 4.2 Total Number of Final Investigated Sample

	2014	2015	2016	Total
Full Sample	559	559	559	1677
(-) Financial	(233)	(233)	(233)	(699)
(-) Missing report	(97)	(97)	(97)	(291)
(-) Missing ownership	(9)	(9)	(9)	(27)
Final sample	220	220	220	660

Table 4.3 Distribution of the Sample Across GCC Countries and Industry Sectors

Sector/Country	Saudi Arabia	Kuwait	UAE	Qatar	Oman	Bahrain	Total
Energy	4 (3.8%)	3 (8.1%)	2 (6.9%)	0	0	0	9 (3.9%)
Manufacturing	54 (51.4%)	10 (27%)	10 (34.5%)	10 (47.6%)	8 (53.3%)	2 (15.4%)	94 (42.4%)
Real Estate	9 (8.6%)	14 (37.8%)	5 (17.2%)	4 (19%)	0	0	32 (14%)
Services	38 (36.1%)	10 (27%)	12 (41.4%)	7 (33.3%)	7 (46.7%)	11 (84.6%)	85 (39.7%)
Total/Year	105 (100%)	37 (100%)	29 (100%)	21 (100%)	15 (100%)	13 (100%)	220 (100%)
Total for Three Years	315 (100%)	111 (100%)	87 (100%)	63 (100%)	45 (100%)	39 (100%)	660 (100%)

4.5.2 The Variables and Research Instrument

This section illustrates the variables used in this study and how they were measured. The following paragraph presents the research instrument (disclosure index) that is used to measure the extent of voluntary disclosure in GCC firms, and explains the method of weighing and scoring the index. The rest of the section provides definitions of the independents and control variables along with their measurements.

4.5.2.1 Measuring the Level of Voluntary Disclosure

Disclosure is the process by which information is disseminated to the stakeholders; it is the communication of financial and non-financial information to the public domain (Kavitha and Nandagopal, 2011).For the purpose of the current study, voluntary disclosure is defined as any information in excess of that required by the statutory laws, accounting standards, listing rules, or stock exchange regulations in all GCC countries. It is argued that information disclosure cannot be measured directly because it is an abstract concept and thus it is difficult to determine its intensity or quality (Cooke and Wallace, 1989). It is, therefore, suggested by Cooke and Wallace (1989) that, in order to justify any scale chosen to quantify disclosure, one should prove the validity and reliability of the measures by specifying the scoring procedures and how the numbers and weights are assigned to the empirical properties (disclosure items). The following paragraphs are designated to this purpose.

Based on the literature, the measurement of disclosure in the annual report involves two main approaches: disclosure proxies that do not directly examine the original disclosure vehicle (such as a disclosure survey, attributes of analysts' forecasts and the number of analysts following the company), and disclosure proxies based on examining the original disclosure vehicle (such as content analysis and the disclosure index) (Hassan and Marston, 2011).

The first approach has been criticized as it relies on users, perceptions drawn from questionnaires and interviews or from analysts following to determine the quality of the disclosure rather than examining the disclosure vehicle themselves. Thus, the objectivity of the investigated users is questionable, given that no one knows their motivation in providing the ratings (Hassan and Marston, 2011). In addition to the

unsuitability, this approach involves a certain context where analysts' ratings are absent as is the case in the GCC.

The second approach, which involves examining of the original disclosure vehicle such as annual report to determine the level of disclosure, is commonly used in disclosure studies. The methods employed within this approach include content analysis and disclosure indices (Kavitha and Nandagopal, 2011). Content analysis converts and codifies qualitative and quantitative information into different groups based on specific criteria to create patterns in the presentation and reporting of information (Kavitha and Nandagopal, 2011). It can be conceptual analysis, where the existence or frequency of key words or concepts within texts is determined or rational analysis, in which the relationships among the concepts in a text are examined (Hassan and Marston, 2011). This method suffers from some limitations; in addition to the labor intensity, time, and effect of the level of knowledge and linguistic ability of the coder, it can yield misleading results due to using words or key words in isolation of the meaning of the whole sentence or, if certain key words appear more than once in the annual report, the score will be higher regardless of the actual disclosure quality (Hassan and Marston, 2011; Kavitha and Nandagopal, 2011). Moreover, some automated content analysis software is limited to certain form of files or to English text applications only (Hassan and Marston, 2011).

Another research instrument that examines the targeted disclosure vehicle is the disclosure index. An index of disclosure is a list of selected items of information used to measure the extent of financial reporting in a particular disclosure vehicle by a particular entity (Hassan and Marston, 2011). It could be used to determine the level of compliance with certain rules and regulations or to assess the level of voluntary disclosure depending on the nature of the disclosure items and whether they are required by law or not (Marston and Shrives, 1991). The first use of such an index was by Cerf in 1961, and since then, many researchers have followed this method (Hassan and Marston, 2011). The persistence in using indices in disclosure studies over time indicates their usefulness as a research tool that has provided researchers with the expected answers (Marston and Shrives, 1991).

A review of the literature implies that the level of subjectivity varies depending on the type of disclosure index used. Some studies use disclosure indices published by

professional organizations, such as, the Association of Investment management and Research (AIMR) ratings, Standard and Poor's Transparency and Disclosure scores, and the Center for International Financial Analysis and Research (CIFAR) evaluations (Hassan and Marston, 2011; Kavitha and Nandagopal, 2011). The main disadvantage of such indices is that they are not available for all countries and may change from time to time (Kavitha and Nandagopal, 2011). Other researchers choose to construct their own indices to suit the purpose and context of their studies. Even though self-constructed indices are more likely to capture what is intended, they involve a subjective judgment on the part of the researcher, which reduces the reliability of the index (Healy and Palepu, 2001); also, Cooke and Wallace (1989) argue that this method may not be useful in large cross-national studies that involve different countries with distinctive economic, social and political systems since the index may become irrelevant to some of them. To overcome the subjectivity involved in constructing an index and to increase index reliability, some researchers adopt and tailor existing indices to meet their own needs (Marston and Shrives, 1991). Using an index that have been developed and tested in earlier studies has the advantage of increasing index reliability in addition to the ability to compare with previous research work (Hassan and Marston, 2011).

Many researchers adopt a previously developed disclosure index and made some modifications to it in order to make it fit with their own perceived context and environment. Marston and Shrives (1991, p.198) list some examples,

> "Belkaoui & Kahl (1978) adapted the work of Cerf (1961), Barrett (1976), Singhvi & Desai (1971) and Buzby (1975) to construct an index suitable for use in the Canadian context. Firer & Meth (1986) adapted the index of Firth (1979) to achieve an index relevant to South Africa."

For the purpose of measuring the extent of voluntary disclosure in GCC listed firms, this study adopts the disclosure index developed by Meek et al. (1995). Many studies have either totally or partially relied on the disclosure index developed by Meek et al. (1995) (Hossain and Rahman, 1995; Ferguson, Lam and Lee, 2002; Gul and Leung, 2004; Leventis and Weetman, 2004; Mohd Ghazali and Weetman, 2006; Huafang and Jianguo, 2007; Donnelly and Mulcahy, 2008; Wang and Claiborne, 2008; Al-Shammari and Al-Sultan, 2010; Qu, Leung and Cooper, 2013; Scaltrito, 2016). The choice of this particular index is first derived from its comprehensiveness.

It covers three categories of information; strategic and financial information which are highly relevant to investors' needs, and non-financial information which relates to a company's social accountability (Gray, Meek and Roberts, 1995). Second, using an index that has been tested in previous research increases its validity and reliability, which are essential concepts when we aim to measure an object that cannot be measured directly (Marston and Shrives, 1991).

Hence, it is crucial to assess the reliability and validity of the measurement, which is, in this study, the disclosure index. Reliability refers to the consistency of the results on repeated trials (Hassan and Marston, 2011). It concerns stability, reproducibility, and accuracy; stability is achieved when the same score is replicated by the same coder, reproducibility is achieved when different coders reach the same score, and accuracy is the extent to which the classification of the data matches specific criteria or norms (Kavitha and Nandagopal, 2011). In the current study, reliability is achieved by testing for stability. After measuring the voluntary disclosure score for the study sample, we randomly choose a number of companies and repeat the scoring procedures to obtain the same scores that were achieved in the first attempt. Validity on the other hand deals with the strength of the conclusion and whether the measuring instrument measures what it is intended to measure (Hassan and Marston, 2011). In other words, do the index scores have any meaning as a measure of disclosure (Marston and Shrives, 1991)? It has been argued that since there is no other popular method to measure disclosure than disclosure indices, the scores have been accepted as valid (Kavitha and Nandagopal, 2011). Furthermore, the adoption of an index that have been used in other disclosure studies is considered a source of validation (Kavitha and Nandagopal, 2011). The validity of the index in the current study is obtained from the index's evident ability to measure the level of voluntary disclosure for multinational corporations in the study of Meek et al. (1995).

4.5.2.2 Voluntary Disclosure Index

The first step toward developing a disclosure index is the selection of the items, which can be achieved either by reviewing the previous studies in conjunction with the disclosure recommendations and legal requirements, or by employing an existing index from the literature (Marston and Shrives, 1991). For the purpose of this study, a disclosure index that was developed by Meek et al. (1995) is adopted as mentioned

earlier. The adopted index consists of 85 items that were selected based on relevant research studies, comprehensive surveys, and national disclosure requirement (Meek, Roberts and Gray, 1995). With the aim of assessing the level of voluntary disclosure in GCC listed firms, we checked the 85 items against the respective rules and regulations applicable to all GCC countries, including, company laws, accounting standards, listing rules, stock exchange regulations, and corporate governance regulations. A voluntary disclosure item is one that is not required in all GCC countries during the period of the study. Defining voluntary disclosure in this way, even though it eliminates some items that are voluntary in some countries, establishes a common scale for all of the countries in the sample. After eliminating items that are required by law and items that are voluntary in some countries but mandatory in others, the final list consists of 71 items of information. Table 4.4 presents the final list of items. The number of items on the index is considered reasonable compared to prior voluntary disclosure studies; for examples, an index of 53 items was used to assess the level of voluntary disclosure in Malaysia (Mohd Ghazali and Weetman, 2006), a checklist of 47 voluntary items was used in Kenya (Barako, Hancock and Izan, 2006), an index of 30 items was used in China (Huafang and Jianguo, 2007), of 78 items in Malaysia (Hossain, Tan and Adams, 1994), and of 68 voluntary items in Bangladesh (Rouf and Al Harun, 2011).

The items on the index are categorized into three main groups: strategic, non-financial, and financial information. They are further classified into 11 subgroups; namely, general corporate information, corporate strategy, acquisitions and disposals, future prospects, information about directors, employee information, social policy and value added information, segmental information, financial review, foreign currency information, and stock price information, as shown in table 4.5. The reason for this classification is that the variables affecting voluntary disclosure may vary depending on the type of information since the decision relevance of the information varies by type (Meek, Roberts and Gray, 1995). For instance, strategic and financial information have strong decision relevance to investors while non-financial information is related more to other stakeholders like employees and society.

Table 4.4 Voluntary Disclosure Index

Strategic Information

General Corporate Information

1. Brief history of company
2. Organizational structure/chart

Corporate Strategy

3. Statement of strategy and objectives – general
4. Statement of strategy and objectives – financial
5. Statement of strategy and objectives – marketing
6. Statement of strategy and objectives – social
7. Impact of strategy on current results
8. Impact of strategy on future results

Acquisitions and Disposals

9. Reasons for the acquisitions
10. Effect of acquisition on current results
11. Effect of acquisition on future results
12. Reasons for the disposals
13. Effect of disposal on current results

Future Prospects

14. Qualitative forecast of sales
15. Quantitative forecast of sales
16. Qualitative forecast of profits
17. Quantitative forecast of profits
18. Qualitative forecast of cash flow
19. Quantitative forecast of cash flow
20. Assumptions underlying the forecasts

Nonfinancial Information

Information about Directors

21. Age of the directors
22. Picture of the directors
23. Educational qualification (academic and professional)
24. Commercial experience of the executive director
25. Commercial experience of the non-executive directors
26. Position or office held by executive directors

Employee Information

27. Geographical distribution of employees
28. Line-of-business distribution of employees
29. Categories of employees by gender
30. Number of employees for two or more years
31. Amount spent on training
32. Nature of training
33. Number of employees trained
34. Safety policy
35. Data on accidents
36. Cost of safety measures
37. Equal opportunity policy statement
38. Recruitment problems and relate policy

Social Policy and Value Added Information

39. Safety of products (general)
40. Environmental protection programs – quantitative

41. Environmental protection program - qualitative
42. Amount of charitable donation
43. Community programs (general)
44. Value added statement
45. Value added data

Financial Information

Segmental Information

46. Geographical profit – quantitative
47. Geographical capital expenditures – quantitative
48. Geographical production – quantitative
49. Line-of-business production – quantitative
50. Competitor analysis – qualitative
51. Competitor analysis – quantitative
52. Market share analysis – qualitative
53. Market share analysis – quantitative

Financial Review

54. Profitability ratios
55. Liquidity ratios
56. Gearing ratios
57. Advertising information – qualitative
58. Advertising expenditures – quantitative
59. Effects of inflation on future operations – qualitative
60. Effects of inflation on results – qualitative
61. Effects of inflation on results – quantitative

Foreign Currency Information

62. Effect of foreign currency fluctuation on future operations – qualitative
63. Effect of foreign currency fluctuation on current results – qualitative
64. Major exchange rates used in the accounts
65. Long-term debt by currency
66. Short-term debt by currency
67. Foreign currency exposure management description

Stock Price Information

68. Market capitalization at year end
69. Market capitalization trend
70. Size of shareholdings
71. Type of shareholder

Table 4.5 Number of Voluntary Disclosure Items by Category

Voluntary Disclosure Groups	Items Voluntary in All GCC	
Strategic Information	**No.**	**%**
1. General Corporate Information	2	3%
2. Corporate Strategy	6	8%
3. Acquisitions and Disposals	5	7%
4. Future Prospect Information	7	10%
Non-financial Information		
1. Information about Directors	6	8%
2. Employee Information	12	17%
3. Social Policy and Value Added Information	7	10%
Financial Information		
1. Segmental Information	8	11%
2. Financial Review Information	8	11%
3. Foreign Currency Information	6	8%
4. Stock Price Information	4	6%
Total	71	100%

The next step in measuring the level of voluntary disclosure is scoring the list of items. Previous disclosure studies have used different approaches to score the disclosure checklist. A few studies, such as Firth (1979, 1980) and McNally et al (1982), have used the weighted approach, in which disclosure items are scored based on their relative importance as ranked by a group of annual reports' users, while the majority of disclosure studies, such as Cooke (1989, 1992), Meek et al. (1995), and Raffournier (1995), have used the un-weighted approach, in which disclosure items are scored 1 if they are present in the annual report and scored 0 otherwise. Following the majority of disclosure studies, this study will adopt an un-weighted approach, where each item of disclosure is assumed to be equally important. Un-weighted scores are used in this study for several reasons. The first, is the subjectivity involved in rating the items, which leads to a variation in the level of importance assigned to each item among different users groups with different preferences and perceptions (Cooke and Wallace, 1989). Second, it is suggested that companies that are better at disclosing important items are also better at disclosing less important ones; hence, companies should be scored regardless of the level of item importance (Meek, Roberts and Gray, 1995). Third, identical results are found by Chow and Wong-Boren

(1987) when applying weighted and un-weighted disclosure indices (Chow and Wong-Boren, 1987).

In order to conduct the study, the sample annual reports were thoroughly examined and compared to the disclosure index. Each item in every company was scored 1 or 0 depending on its presence or absence in the annual report. Then, a total voluntary disclosure (TVD) score is calculated for each company in the form of the ratio of the actual score awarded to the company divided by the maximum potential score that is applicable to that company. Applicability in this context means that companies were not penalized for irrelevant items. If the item is absent from the annual report because it is inapplicable to the company's activities, the company disclosure score is not affected by this absence.

TVD = Actual score awarded / Potential applicable score ($\leq$ 71)

4.5.2.3 Measurement of the Independent and Control Variables

After identifying the voluntary disclosure score, we follow the literature in examining the association between voluntary disclosure and the number of firm characteristics and corporate governance mechanisms. This study is interested in assessing the relationship between the extent of voluntary disclosure in GCC non-financial firms through testing six ownership variables; specifically, government ownership, family ownership, institutional ownership, foreign ownership, board ownership, and audit committee ownership, and seven board attributes including board size, board independence, board meetings and attendance, board compensation, board cross directorship, and audit committee size. Besides the independent variables, a number of control variables are tested in order to identify any potential effect on the level of voluntary disclosure. The control variables include firm characteristic factors, like firm size, audit firm, leverage, profitability, liquidity, industry type. Table 4.6 summarizes the definitions and measurements of the dependent variable and the independent variables, and table 4.7 illustrates the definitions and measurements of the control variables.

Table 4.6 Definitions and Measurements of the Dependent and Independent Variables

Variables	Definition	Measurement
Dependent		
VDT	Total voluntary disclosure	The ratio of total score awarded to the maximum potential score
VDS	Strategic voluntary disclosure	The ratio of the total score of strategic information disclosed to the maximum potential score
VDNF	Non-financial voluntary disclosure	The ratio of the total score of non-financial information disclosed to the maximum potential score
VDF	Financial voluntary disclosure	The ratio of the total score of financial information disclosed to the maximum potential score
GOVOWN	Government ownership	The percentage of shares owned by the government to the total shares issued
FAMILOWN	Family ownership	The percentage of shares owned by family members to the total shares issued in family firms
INSTOWN[5]	Institutional ownership	The percentage of shares owned by institutional investors to the total shares issued
FOROWN[6]	Foreign ownership	The percentage of shares owned by foreign investors to the total shares issued
BOWN	Board ownership	The percentage of shares owned by all board members (executive and non-executive) to the total shares issued
AUDOWN[7]	Audit committee ownership	Percentage of shares held by the audit committee members to the total shares issued
BSIZE	Board size	Number of members on the board of directors
BIND	Board independence	The percentage of independent directors as classified by the firm to the total number of directors on the board
BCOMP	Board compensations	The natural logarithm of total cash compensation awarded to all board members during the year
BMEET	Board meetings	Number of board meetings during the year
BATTEND	Board attendance	Percentage of total board members' attendance during the year to the multiplication of board meetings and number of board members
DIRECTORSHIP	Cross-directorship	Average number of other directorships held by the board members
AUDSIZE	Audit committee size	Number of members on the audit committee

[5] All institutions that are not family, government, or foreign

[6] GCC institutions operating in GCC markets are not considered foreign, so they are excluded

[7] Shares held by members of the board sitting on the audit committee are excluded to avoid double counting

Table 4.7 Definitions and Measurement of the Control Variables

Variables	Definition	Measurement
FIRMSIZE	Firm size	Measured by the natural logarithm of total assets
AUDFIRM	Audit firm	Dummy variable when the audit firm is a "big four" (1) and (0) otherwise
ROA	Profitability	Return on assets= net income/total assets
LEVER	Leverage	Debt ratio= total debt/total assets
LIQUID	Liquidity	Current ratio= current assets/current liabilities
IND1	Industry type	Energy industry firm, dummy variable for energy firm (1) and (0) otherwise
IND2		Manufacturing industry firm, dummy variable for manufacturing (1) and (0) otherwise
IND3		Services industry firm, dummy variable for services (1) and (0) otherwise
IND4		Real estate industry firm, dummy variable for real estate (1) and (0) otherwise
2014	Years (2014,2015,and 2016)	Dummy variable coded (1) for the year 2014 and (0) otherwise
2015		Dummy variable coded (1) for the year 2015 and (0) otherwise
2016		Dummy variable coded (1) for the year 2016 and (0) otherwise

4.5.3 Statistical Analysis and Tests

Studies that aim to establish a relationship between disclosure and other firm characteristics and corporate governance factors mostly perform parametric tests, specifically multiple linear regression (Kavitha and Nandagopal, 2011). Yet, some studies combine both parametric and non-parametric tests to investigate the association between disclosure and a number of independent variables. Therefore, to test the hypotheses in this study both univariate and multivariate techniques are used following a number of disclosure studies (Cooke, 1989b; Craswell and Taylor, 1992; Hossain, Tan and Adams, 1994; Depoers, 2000; Barako, Hancock and Izan, 2006; Akhtaruddin et al., 2009).

4.5.3.1 Univariate Analysis

Bivariate analysis is used to examine the relation between each single independent variable and the dependent variable (Collis and Hussey, 2009). In the current study two types of univariate analysis are applied: descriptive analysis for the dependent variable and independent variables, which include the mean, median, minimum, maximum, and standard deviation, in addition to correlation analysis; namely, the Pearson and Spearman correlation coefficient. The descriptive statistics are employed to provide important figures regarding the dependent variable (voluntary disclosure) and its items and categories plus the independent and control variable. The correlation tests are applied to investigate the strength and the significance of the relationship between the extent of voluntary disclosure as a dependent variable and each of the independent and control variable. SPSS software (version 25) is used to carry out the univariate tests.

4.5.3.2 Multivariate Analysis

Multivariate analysis is applied to several variables simultaneously. It tests the linear relationship between a single (dependent variable) and a combined set of variables (Collis and Hussey, 2009). A multivariate Ordinary Least Squares (OLS) model has been used frequently in many previous disclosure studies to assess the influence of specific corporate characteristics on the level of disclosure (Lutfi, 1989; Hossain and Rahman, 1995; Eng and Mak, 2003; Alsaeed, 2006; Huafang and Jianguo, 2007). Therefore, an OLS regression model is used in this study to test the

simultaneous effect of six ownership variables (government ownership, family ownership, institutional ownership, foreign ownership, board ownership, and audit committee ownership), seven board attributes variables (board size, board independence, board meetings, board attendance, board compensation, cross-directorship, and audit committee size), and a number of control variables (firm size, profitability, leverage, liquidity, and industry type) on the extent of voluntary disclosure. The objective is to identify which of these variables could explain the variation in the level of voluntary disclosure found in GCC listed firms. SPSS software (version 25) is used to perform the multivariate tests.

4.6 Conclusion

The chapter discusses the research philosophy, approach, and empirical methods. Philosophically, the study is placed in the functionalist paradigm with an objective approach to society; hence, the deductive approach and quantitative methods are considered to be especially suitable for the current study.

This chapter goes on to outline the theoretical framework used to address the research questions that are related to the level of voluntary disclosure in GCC listed firms. It illustrates the connection between agency theory and ownership structure as a corporate governance mechanism and how agency theory provides a good fit for studying the relationship between ownership structure, board attributes and the extent of voluntary disclosure.

The chapter proceeds to develop 14 testable hypotheses related to ownership types and board attributes in addition to explain, the potential effects of a number of control variables that have been identified in earlier studies as having an impact on the extent of voluntary disclosure.

The chapter continues to explain the data collection procedures and justify the methods employed to measure the level of voluntary disclosure, beginning by developing and scoring the disclosure index and ending by calculating the voluntary disclosure score. It also provides measurements of the independent and control variables.

Finally, this chapter briefly describes the statistical tools (univariate and multivariate analysis) used to test the research hypotheses.

Chapter 5: Ownership Structure, Board attributes and Voluntary Disclosure in GCC Listed firms- Empirical Analysis

5.1 Introduction

This chapter aims to investigate the influence of ownership structure and board composition on the extent of voluntary disclosure provided by GCC listed firms. The chapter begins by presenting the descriptive statistics of the variables employed in the empirical analysis. The descriptive analysis includes a detailed analysis of the dependent variable, voluntary disclosure score, based on its information categories, six different countries, four industry groups, and three corresponding years. It also includes a comprehensive analysis of the independent and control variables across the overall sample. The chapter then outlines the result of the correlation matrix showing the Pearson correlation between all variables in the study. This helps not only to examine the relationship between voluntary disclosure and the explanatory variables, but also to identify any associations among the independent variables and any multicollinearity issues. The chapter then provides the results of a multivariate regression analysis that tests the hypotheses listed in the previous chapter. The multivariate analysis consists of four regression models to investigate the impact of ownership structure and board attributes on the level of total voluntary disclosure and its three components; strategic, non-financial, and financial voluntary disclosure. The multivariate analysis is followed up by a comparative analysis of big and small firms. This includes the independent sample t-tests, which compares the mean and mean rank values of the study's variables between large and small firms as well as undertaking a multivariate regression analysis of both of these different sets of samples. The comparison between large and small firms is motivated by the significant effect of firm size that is found in the majority of disclosure studies. Finally, the chapter ends with a summary of the empirical analysis.

5.2 Descriptive Statistics

5.2.1 Total Voluntary Disclosure (the Dependent Variable)

In order to measure the level of voluntary disclosure in GCC listed firms, a disclosure index is employed consisting of 71 Items classified into three main groups (strategic, non-financial, and financial information), with 20, 25, and 26 items in each group, respectively. The index is an adaptation of that created by Meek et al. (1995), which is considered a cornerstone index that is employed by a significant number of disclosure studies (Hossain and Rahman, 1995; Ferguson, Lam and Lee, 2002; Gul and Leung, 2004; Donnelly and Mulcahy, 2008; Al-Shammari and Al-Sultan, 2010; Qu, Leung and Cooper, 2013; Scaltrito, 2016). The multiple use of the index in the disclosure literature adds to its validity. To further support our discussion on index validity and reliability presented in chapter four, in this chapter an assessment of the index reliability is provided in tables 5.1 and 5.2 by examining the internal consistency between total voluntary disclosure scores and the different disclosure groups through conducting a Pearson correlation analysis of total voluntary disclosure and its categories (Abdel-Fattah, 2009; Alotaibi, 2014), in addition to a Cronbach's alpha test (Bonett and Wright, 2015). The results show that all three main categories are highly and significantly correlated at the 1% level with the total voluntary disclosure, which means that the total voluntary disclosure, and its groups have high internal consistency reliability. The correlation among the groups themselves is also significant. Similarly, table 5.1 illustrates that all 11 sub-groups are highly correlated with the total voluntary disclosure scores except for the future prospect (FP), which does not correlate significantly with voluntary disclosure. This may be caused by the tremendously low disclosure of future prospects documented in GCC firms at an average of 1 per cent. In addition, table 5.2 presents the result of the Cronbach's alpha test, which indicates the reliability of the subgroups. The high and significant correlation coefficient between total voluntary disclosure and its main and sub-groups indicates how well the disclosure instrument interprets the total voluntary scores. As a result, the validity and reliability of the voluntary disclosure index are confirmed which supports the validity and reliability of the statistical results presented in the remainder of this chapter.

Table 5.1 Correlation analysis of VDT score and its main groups

Pearson correlation	VDT	VDS	VDNF	VDF
VDT	1			
VDS	.465**	1		
VDNF	.887**	.286**	1	
VDF	.795**	.215**	.477**	1

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

Where: VDT is the level of total voluntary disclosure, VDS the strategic voluntary disclosure, VDNF the non-financial voluntary disclosure, and VDF the financial voluntary disclosure.

Table 5.2 Reliability test for the voluntary disclosure sub-groups

VDT sub-group	Pearson correlation	Cronbatch's alpha	Alpha if group deleted
GCI	.382**		0.509
CS	.401**		0.552
AD	.210*		0.594
FP	.138		0.610
ID	.633**		0.534
EI	.500**	0.60	0.597
SPV	.641**		0.545
SI	.384**		0.596
FR	.329**		0.596
FCI	.173**		0.610
SPI	.654**		0.501

**. Correlation is significant at the 1% level (2-tailed).
*. Correlation is significant at the 5% level (2-tailed).

Where: VDT is the level of total voluntary disclosure, GCI the general corporate information, CS the corporate strategy, AD the acquisitions and disposals, FP the future prospects, ID the information about the directors, EI the employee information, SPV the social policy and value added information, SI the segmental information, FR the financial review, FCI the foreign currency information, and SPI the stock price information.

The disclosure index is used to analyse 660 annual reports for the years 2014, 2015, and 2016 in four different industries and six GCC countries. The next section provides a descriptive analysis of voluntary disclosure and its categories.

Tables 5.3 and 5.4 contain descriptive statistics regarding the level of voluntary disclosure and its groups across the whole sample and for each country separately. The mean of total voluntary disclosure is 12 per cent across the study sample with a range from as low as 3 per cent up to a maximum of 36 per cent. The mean of the strategic and non-financial voluntary disclosure is 13 per cent with a minimum of zero per cent and a maximum of 29 per cent and 56 per cent, respectively. The level of

financial voluntary disclosure is slightly less than that of the other two groups with a mean of 12 per cent and ranging from zero per cent to a maximum of 39 per cent. The level of total voluntary disclosure is considered to be very low compared to that found in previous studies conducted in GCC countries or other developing environments; for example, the level of voluntary disclosure is found to be 41.85 per cent in UAE companies and 31.73 per cent in Saudi companies with an average of 36 per cent for the whole sample in a study that compares the level of voluntary disclosure between two GCC countries (Al-Janadi, Rahman and Omar, 2012). In other studies in Saudi Arabia, the voluntary disclosure score has a mean of 32.3 per cent (Al-Razeen and Karbhari, 2004) and 33 per cent (Alsaeed, 2006). The result of a third study shows a mean of 44.61 per cent for the voluntary disclosure of Saudi corporate governance code recommendations (Al-Bassam et al., 2015). Furthermore, in Qatar, the average voluntary disclosure is documented to be 37 per cent (Hossain and Hammami, 2009). In Kuwait, the mean of voluntary disclosure is found to be 19 per cent (Al-Shammari and Al-Sultan, 2010) and 12.90 per cent in another study (Alotaibi, 2014). The mean of voluntary disclosure in this study is also lower than that recognized in developing countries, such as 31 per cent in Egypt (Abdel-Fattah, 2009), 37 per cent in Greece (Leventis and Weetman, 2004), and 31 per cent in Malaysia (Mohd Ghazali and Weetman, 2006).

Table 5.3 Descriptive statistics for the voluntary disclosure across the GCC Firms

All Countries (N=660)	Minimum	Maximum	Mean	Median	Std.Deviation	Skewness	Kurtosis
Total voluntary disclosure	0.03	0.36	0.12	0.10	0.06	0.77	0.42
Strategic	0.00	0.29	0.13	0.13	0.05	0.47	0.07
Non-financial	0.00	0.56	0.13	0.12	0.10	0.75	0.45
Financial	0.00	0.39	0.12	0.12	0.07	0.95	0.52

Table 5.4 Descriptive statistics for the total voluntary disclosure by the GCC countries

Country	N	Minimum	Maximum	Mean	Median	Std.Deviation
Saudi Arabia (KSA)	315	0.03	0.35	0.12	0.11	0.06
Kuwait (KU)	111	0.03	0.24	0.08	0.08	0.04
United Arab Emirates (UAE)	87	0.10	0.36	0.20	0.20	0.05
Oman (OM)	45	0.06	0.20	0.13	0.14	0.04
Qatar (QA)	63	0.03	0.24	0.12	0.11	0.05
Bahrain (BH)	39	0.08	0.29	0.13	0.11	0.06

The mean of the voluntary disclosure by country is presented in Table 5.4. The highest mean voluntary disclosure is by UAE firms (0.20), followed by Oman and Bahrain (0.13), then Saudi Arabia and Qatar (0.12), and lastly Kuwait (0.08). Noticeably, the mean for voluntary disclosure in each country and the sequence of countries by level of voluntary disclosure are significantly different from the prior work in this area, such as Boshnak (2017). The only similarity is regarding Kuwait that has the lowest voluntary disclosure level on both studies.

The number and nature of the disclosure items, the type and size of the study sample, and the time when the study was conducted are essential factors that can explain the significant difference in the level of voluntary disclosure across studies. Samaha et al. (2015) show that the type and measure of disclosure, the proxies used to measure the explanatory variables, and the research settings affect the results in the disclosure literature.

The disclosure indices are a commonly used instrument comprising of a number of items that when scored, provide a measure of the level of disclosure. Consequently, when different indices are used, the comparability between the studies is impaired (Kavitha and Nandagopal, 2011). Also, the selection and scoring of the disclosure items considerably impact the level of disclosure measured. For instance, in the study of Al-Janadi et al. (2012), they used an index consisting of only 22 items that were scored based on a three level scale (2, 1, 0) instead of the two level scale (1, 0) commonly found in the literature. Similarly, the respective studies of Al-Razeen et al. (2004) and the study of Alsaeed (2006) use disclosure indices containing only 15 and 20 voluntary items, respectively. The study of Al-Bassam et al. (2015) focuses on measuring the level of voluntary compliance with the Saudi corporate governance code, compliance with which was intended to be mostly voluntary at that time; therefore, their disclosure index is solely derived from the corporate governance code provisions.

Moreover, the study sample has an important role in forming the study results. The sample in the study of Abdel-Fattah (2009) consists of 64 most active companies, listed in two Egyptian stock markets, according to their trading value. Likewise, the sample in the study of Boshnak (2017) consists of only the top 20 listed firms selected by the highest market weight compared to the sample of this study that includes all

listed companies, so comparing the level of voluntary disclosure is considered irrational between the two studies. Similarly, the time in which the study is conducted also affects the study results. For instant, the low level of voluntary disclosure in this study could be explained by the recent move toward better corporate governance and transparency witnessed in the GCC countries, which led some countries to issue new corporate governance codes that enhance the transparency and disclosure requirements. This new law made it mandatory to disclose items which were previously disclosed voluntarily, leaving corporations with a bigger challenge to increase their disclosure beyond what is obligatory by law. The results of this study indicate the low level of voluntary disclosure in the GCC countries and focus on identifying the factors that enhance the level of disclosure in excess of what is mandatory by law.

Table 5.5 presents the descriptive statistics for the total voluntary disclosure and its groups, country and year wise. Total voluntary disclosure by year suggests a trend toward more disclosure across countries. In 2014, the voluntary disclosure score in Saudi Arabia was 11 per cent, which increased to 12 per cent in 2016. In Kuwait, it increased from 8 per cent to 10 per cent, and in the UAE from 19 per cent to 21 per cent. Similarly in Bahrain, it rose from 13 per cent to 14 per cent. However, in Oman and Qatar, the voluntary disclosure score remains the same over the three years. The move toward more disclosure over time is also captured in the study of Boshnak (2017), which shows an increase in the voluntary disclosure between 2010 and 2013 for all GCC countries except Kuwait and Qatar. Although Qatar shows no improvement over the years in both studies, Kuwait’s voluntary disclosure score increased by 2 per cent between 2014 and 2016 in the current study.

Table 5.5 Descriptive statistics for voluntary disclosure by country and year

Voluntary Disclosure	KSA		KU		UAE		OM		QA		BH	
	Year	Mean %	Year	Mean %	Year	Mean %	Year	Mean %	Year	Mean %	Year	Mean %
Total voluntary disclosure	2014	11%	2014	8%	2014	19%	2014	13%	2014	12%	2014	13%
	2015	12%	2015	7%	2015	21%	2015	13%	2015	12%	2015	13%
	2016	12%	2016	10%	2016	21%	2016	13%	2016	12%	2016	14%
Strategic	2014	13%	2014	11%	2014	11%	2014	9%	2014	12%	2014	12%
	2015	14%	2015	11%	2015	15%	2015	10%	2015	12%	2015	13%
	2016	14%	2016	11%	2016	16%	2016	9%	2016	11%	2016	14%
Non-financial	2014	10%	2014	6%	2014	21%	2014	16%	2014	12%	2014	15%
	2015	12%	2015	5%	2015	21%	2015	15%	2015	13%	2015	15%
	2016	12%	2016	11%	2016	22%	2016	17%	2016	13%	2016	15%
Financial	2014	10%	2014	8%	2014	23%	2014	12%	2014	11%	2014	12%
	2015	11%	2015	7%	2015	23%	2015	13%	2015	12%	2015	12%
	2016	11%	2016	8%	2016	23%	2016	12%	2016	12%	2016	12%

Where: KSA is Saudi Arabia, KU Kuwait, UAE United Arab Emirates, OM Oman, QA Qatar, and BH Bahrain.

In addition, table 5.6 illustrates further how voluntary disclosure has increased over the three-year period through examining the frequency distribution of the total voluntary disclosure (VDT) score for the total sample and for each year individually. In 2014, 204 out of the 220 companies (representing 92.7%) disclosed 20 per cent or less of the voluntary items; notably, this number decreased to 190 out of the 220 companies (representing 86.3%) in 2016 since more companies have moved toward providing more voluntary disclosure. In 2016, 30 companies (representing 13.63%) engage in more than 20 per cent of voluntary disclosure compared to 25 companies (representing 11.36%) and 16 companies (representing 7.27%) in 2015 and 2014, respectively. Although the frequencies of the disclosure scores shows the low level of voluntary disclosure in the GCC countries since all sample companies voluntarily provide disclosure at less than 50 per cent, table 5.6 shows the increase in voluntary disclosure over these three years. That may indicate the recent attention paid to better corporate governance practices in the GCC stock markets.

Table 5.6 The frequency of voluntary disclosure score (VDT) by year

VDT	Pooled		2014		2015		2016	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
<0.04	29	4.4	10	4.5	11	5.0	8	3.6
0.05-0.10	222	33.6	83	37.7	75	34.1	64	29.1
0.11-0.20	338	51.2	111	50.5	109	49.5	118	53.6
0.21-0.30	66	10.0	15	6.8	23	10.5	28	12.7
0.31-0.40	5	0.8	1	0.5	2	0.9	2	0.9
>0.40	0	0.0	0	0.0	0	0.0	0	0.0
Total	**660**	**100**	**220**	**100**	**220**	**100**	**220**	**100**

5.2.1.1 The Extent and Trend of the Voluntary Disclosure Categories

Regarding the voluntary disclosure groups, the mean of each group also increases over the three years period, as shown in table 5.5. Strategic voluntary disclosure increased in 2016 by 1 per cent compared with 2014 in Saudi Arabia whereas, in the UAE, it increased by 5 per cent, and in Bahrain by 2 per cent. However, it remained the same in Kuwait and Oman and decreased by 1 per cent in Qatar. Non-financial voluntary disclosure significantly increased over the three years in all countries except for Bahrain, where it remained unchanged. Kuwait made the most improvement, since it increased by 5 per cent, while Saudi Arabia increased by 2 per cent, and the UAE, Oman, and Qatar by 1 per cent between 2014 and 2016. Finally, financial voluntary disclosure shows an increase only in Saudi Arabia and Qatar, indicating that the disclosure of financial information underwent a slight improvement compared to the other groups of disclosure. Financial information has been documented as being the least affected by market pressure for more disclosure compared to strategic and non-financial information, despite its high relevance to investors' needs (Gray, Meek and Roberts, 1995). This may be due to an unwillingness to disclose financial information that companies believe to be sensitive and has a high proprietary cost such as profit forecast, cash flow information, and the rate of return (McNally, Eng and Hasseldine, 1982).

Tables 5.7 and 5.8 shed more light on the voluntary disclosure sub-groups within the main three components; strategic, non-financial, and financial voluntary disclosure. The mean of voluntary disclosure varies widely across the groups, from as low as 1 per cent for future prospect information to a maximum of 55 per cent for general corporate information.

Table 5.7 Descriptive statistics for the voluntary disclosure sub-groups

Group of voluntary disclosure	Number of items	Minimum	Maximum	Mean	Std.Deviation
Strategic information					
General corporate information	2	0.00	1.00	0.55	0.17
Corporate strategy	6	0.00	1.00	0.35	0.29
Acquisitions and disposals	5	0.00	1.00	0.34	0.29
Future prospects	7	0.00	0.29	0.01	0.04
Non-financial information					
Information about directors	6	0.00	0.83	0.20	0.25
Employee information	12	0.00	0.50	0.07	0.10
Social policy and value added information	7	0.00	0.86	0.14	0.13
Financial information					
Segmental information	8	0.00	0.50	0.06	0.08
Financial review	8	0.00	0.38	0.03	0.09
Foreign currency information	6	0.00	0.50	0.24	0.11
Stock price information	4	0.00	1.00	0.24	0.34

It can be seen from table 5.8 that there is an increase in each category over the three years with a gradual variation in the increasing level among the categories. For example, while corporate strategy increased by 8 per cent, from 30 per cent in 2014 to 38 per cent in 2016, and information about directors moved from 18 per cent in 2014 to 23 per cent in 2016, employee information and financial review disclosure improved by only 1 per cent. However, the order of the categories is similar in each year. General corporate information is the highest in all years followed by corporate strategy, then, foreign currency information and stock price information at an equal level of disclosure, information about directors, social policy and value added information, segmental information, financial review, and finally future prospects. Yet, the acquisitions and disposals category, occupied second place in 2014 and third place in both 2015 and 2016. That might be attributed to the applicability of the items in this category to each company rather than to a change in the disclosure level. 2014 may have more acquisitions and disposals events than the other two years, which could explain the decrease in the disclosure mean of this group. The consistency of the order of voluntary disclosure categories over the years suggests a disclosure policy adopted by GCC firms that focuses on voluntarily disclosing one type of information and minimally disclosing or completely ignoring other information groups. This provides an opportunity for the stock market regulators in the GCC countries to motivate transparency and disclosure practice and required more

disclosure especially in the most neglected information categories like future prospects and financial review while continuing to encourage companies to keep up and even provide more information in the moderate disclosed categories such as general corporate and corporate strategy information.

Table 5.8 Voluntary disclosure sub-groups over the three years

Voluntary disclosure sub-groups	Mean %		
	2014	2015	2016
Strategic information			
General corporate information	52	57	57
Corporate strategy	30	37	38
Acquisitions and disposals	38	32	36
Future prospects	1	1	1
Non-financial information			
Information about directors	18	19	23
Employee information	7	8	8
Social policy and value added information	13	14	16
Financial information			
Segmental information	5	5	6
Financial review	3	3	4
Foreign currency information	23	24	24
Stock price information	23	24	24

To further understand the disclosure policy applied by GCC firms, it may be helpful to examine the trend of disclosure over the years in each category. For the highest means in the index, **General corporate and corporate strategy information,** the two groups combined consist of eight items that have a general nature aiming to give a broad picture of the company, its history, organizational structure, and strategy and objectives. The average of the general corporate information is 52 per cent in 2014, and 57 per cent in 2015 and 2016; while the average score for strategic information is 30 per cent in 2014, 37 per cent in 2015, and 38 per cent in 2016. Both groups range from a minimum of zero per cent to a maximum of 100 per cent. The mean is considered to be acceptable when compared to earlier studies, such as Al-Janadi et al. (2012), who use seven items of general and financial information and find a mean of 44.89 per cent for the overall sample (52.25% in the UAE, 39.56% in Saudi Arabia). Abdel-Fattah (2009) who uses seven items of general information in Egypt and finds an average of 41 per cent during the period between 2003 and 2006; and Alotaibi (2014) who uses ten general information items in Kuwait and finds a mean of 48 per cent over the years from 2007 to 2010;

however, Boshnak (2017) finds a higher average of 67 per cent in the GCC when he uses ten items of general information. The simple and general nature of the information in this category justifies the moderate level of disclosure for such information. While the general information is essential for stakeholders to first attract them to specific corporations initially, it is easy to obtain and has a low processing cost, which makes disclosing it favorable from the firm standpoint. In addition, this type of information is not sensitive since it gives a brief description of firms' corporate structures and their strategies without declaring any detailed information that might jeopardize their competitive position. The GCC country with the highest mean of voluntary disclosure level in general corporate information group is the UAE (77%), followed by Bahrain (58%), Qatar (57%), Oman (53%), Saudi Arabia (52%), and finally Kuwait (50%). In the corporate strategy group, the highest voluntary disclosure mean is found in UAE (47%), followed by Bahrain (41%), Saudi Arabia (38%), Qatar (36%), Kuwait (25%), and finally Oman (17%).

In the **acquisitions and disposals** group, which consists of five items, the voluntary disclosure score varies from a minimum of zero per cent to a maximum of 100 per cent with a mean of 38 per cent in 2014, 32 per cent in 2015, and 36 per cent in 2016. The decreasing tendency observed here is most likely due to the applicability of the item to the company under investigation. Because the disclosure of such information is linked to the occurrence of an event of acquisition or disposal, the voluntary score may vary across the years depending on the frequency of such events. Items within this category focus on the reasons for the acquisitions and disposals and their effects on the current and future results. The mean of this group is acceptable taking into account its ranking as the third highest group in the whole index. Managers may perceive such information as a sign of a positive future growth, which may motivate them to communicate the information with their shareholders in order to signal their effective and productive decisions. This theory is supported by the result of this study since the number of companies disclosing the "reasons for the acquisitions" item is 50% more than the number of companies disclosing the "reasons for the disposals" item suggesting that the management may view acquisitions as a positive indication of the company's current and future financial position. The highest voluntary disclosure mean in this group is found in Bahrain (58%), followed by Saudi Arabia (38%), the UAE (37%), Kuwait and Oman (33%), and finally Qatar (18%).

The lowest voluntary disclosure mean among all of sub-categories is 1 per cent for the **future prospects** group. Seven items in the group represent both the qualitative and quantitative forecasts of sales, profits, cash flow, and any assumptions underlying the forecasts. Although extremely low, the nominal mean of this group was predictable in the context of GCC as Middle Eastern countries where a secretive and conservative culture predominates (Abdel-Fattah, 2009). The avoidance of disclosing future forecasts by the management may be accredited to their level of conservatism in dealing with sensitive information that could benefit their competitors at the expense of their interests, or to their concerns about losing their credibility when forecast information turns to be inaccurate or significantly diverges from the actual results. The remarkably low disclosure of forecast information documented in the GCC markets necessitates intervention by corporate and accounting regulators to require more disclosure and ensure the minimum level of future prospects information that is deemed important in forming investor decisions. The Future prospect category is also found to have the lowest mean in previous studies, such as that by Boshnak (2017) who finds a mean of 7 per cent in GCC listed firms. Future information is also ranked the lowest in Egypt by Abdel-Fattah (2009) with an average of 14.58 per cent. The voluntary disclosure mean for this group is 2 per cent in Saudi Arabia, 1 per cent in Oman, and zero per cent in the UAE, Qatar, Kuwait, and Bahrain.

The voluntary disclosure score in the group of **information about directors** varies widely, between zero per cent to a maximum of 83 per cent with an average score of 20 per cent for the whole sample. The mean increased from 18 per cent in 2014 to 19 per cent in 2015, and then to 23 per cent in 2016. The increase between 2014 and 2016 implies that firms listed in the GCC markets have recently realized the importance of sharing their directors' information as a mean of assuring investors that their interests are being looked after by a qualified team of directors. However, the mean is still considered low, which leaves room for market regulators to promote the importance of such information to investors and other stakeholders considering that the board of directors is their main tool for managing their interests and investments. Items within this group concern information about the directors' age and photos, educational qualifications and commercial experience, as well as their positions in the case of executive directors. The mean is comparable to what was found by Abdel-Fattah (2009) in Egypt, which was a mean of 21 per cent in the corporate governance

disclosure group that consists of eight items. In Kuwait, Alotaibi (2014) finds a mean of 26 per cent for the board of directors and management group. The highest average voluntary disclosure for this group is in the UAE (49%), followed by Qatar (38%), Bahrain (36%), Oman (27%), Kuwait (16%), and finally Saudi Arabia (8%).

In the **employee information** group, the mean voluntary disclosure score is low at 7 per cent, with a minimum of zero per cent and a maximum of 50 per cent. The mean increases by only 1 per cent over the years from 2014 to 2016 as shown in table 5.8. This group contains 12 items about employees, such as their number, gender, geographical distribution, the nature and cost of their training, the safety policy, and any recruitment problems. The mean in this study is similar to that found by Alotaibi (2014) in Kuwait, who documents a 7.72 per cent as the average of the employee information group that consists of seven items. Boshnak (2017) also finds a low average for employee information, at 17 per cent, in GCC firms. The items in this category give stakeholders and investors a conception of the employees' level of qualifications and professionalism, as well as an idea of how eager the management is to empower its staff by offering a well-structured training plan and safety policy. Thus, GCC firms need to pay more attention to this group of information in order to build the shareholders' confidence in firms' employees. The highest level of voluntary disclosure in this category is in Saudi Arabia and Oman (11%), followed by the UAE and Bahrain (5%), and finally Kuwait and Qatar (3%).

The final category of non-financial information is **social policy and value added information**, which consists of seven items and has a mean score of 14 per cent that varies between zero per cent and a maximum of 86 per cent. The information in this group includes firms' policy toward the safety of products, environmental protection, community programs, and value added information. Compared to the other groups of information, the social policy and value added group shows a decent level of increase over the three years, rising from 13 per cent in 2014 to 16 per cent in 2016. This reveals the increasing awareness of such information over the years. Nonetheless, the mean in this study is lower than that documented by both Boshnak (2017) who uses seven items for the social policy and value added group in GCC firms and finds an average voluntary disclosure of 23 per cent, and Alotaibi (2014) in Kuwait who uses six social policy and value added items and finds a score of 18 per cent. In general, the mean voluntary disclosure for social policy and value added information

recognized in GCC countries' studies reflects the low awareness of such information in the process of promoting the transparency and disclosure practices recently observed in the GCC stock markets. The sophisticated nature of such information may explain why the GCC firms pay less attention to information regarding economic and social development since they are in the early stages of endorsing transparency and disclosure; therefore, they concentrate their efforts toward increasing the disclosure of a more basic type of information, especially corporate governance information, which is the main focus of the market regulators. On the other hand, the low disclosure in this group may be attributed to the difficulty of assessing if a particular item is applicable to the company such as "amount of charitable donation". It is hard to evaluate the absence of such items as indicating whether no donations have occurred or whether the management simply thinks that there is no benefit of such disclosure (Leventis, 2001). The highest voluntary disclosure mean is found in the UAE (27%), followed by Oman (15%), Saudi Arabia and Bahrain (14%), and finally Kuwait and Qatar (8%).

Segmental information, the first group in the financial category information, consists of eight items that concern information about the geographical distribution of profit, capital expenditure and production, in addition to information about competitor analysis and market share analysis. The average voluntary disclosure in this group is low at 6 per cent, with a very slight increase from 2014 (5%) to 2016 (6%). The maximum score found in this group is 50 per cent. This type of information, although highly relevant to risk and return assessment, is associated with a high competitive disadvantage cost (Leventis, 2001). Therefore, firms in the GCC seem to disclose less information that could harm their competitive position in the market. The highest voluntary disclosure mean for segmental information is in Saudi Arabia (7%), followed by Oman and Qatar (6%), UAE (5%), and finally Kuwait and Bahrain (3%).

The Financial review group also has a low mean at 3 per cent, with a range from zero to 38 per cent. The information in this group concerns financial ratios; namely, profitability, liquidity, and gearing, in addition to quantitative and qualitative information about advertising and inflation. Information about the financial ration is easy to obtain from the financial statements and has low cost in terms of both production costs and proprietary costs; however, the management in GCC firms may perceive that such information is available for investors and analysts to acquire

through the published financial statements, and so are unconcerned about its disclosure in the annual reports. Another reason for the low disclosure in this group may be that the management chooses not to disclose the ratios with the intention of avoiding any further interpretations or clarifications that usually accompany these ratios, especially in the cases of poor performance (Leventis, 2001). There is another information group where the effort of the market regulators to encourage or even require the disclosure of financial review information is important because this type of information and any further interpretations of it could remarkably impact investors' decisions. The highest average voluntary disclosure in this group is found in Saudi Arabia, Kuwait, and Qatar (5%), followed by the UAE and Oman (2%), Bahrain (1%).

The mean voluntary disclosure in the **foreign currency information** group, which consists six items, is considered to be high, at 24 per cent, compared to the other voluntary disclosure groups. The average ranges between zero and 50 per cent, with a slight increase from 2014 to 2016. The items in this group relate to the foreign currency fluctuation effect on current and future results, the major exchange rate used, and the long- and short-term debt by currency. The mean in this study is lower than that found in Boshnak (2017) who uses five foreign currency information items and finds a mean of 45 per cent in GCC firms, which appear to pursue a good level of voluntary disclosure of foreign currency information, possibly, due to their implementation of international financial standards in preparing the financial reports. Thus, the disclosure of voluntary information on foreign currency may be driven by the requirements of standard IAS 21 (the effects of changes in foreign exchange rate). Bahrain (29%) discloses the most in this group, followed by Oman and Qatar (26%), Saudi Arabia (24%), the UAE (23%), and finally Kuwait (21%).

The last group of financial category is **stock price information.** This group contains four items about market capitalization information and shareholders information. The voluntary disclosure in this group ranges from zero to 100 per cent with a mean of 24 per cent. The mean in this study is comparable to that found by Abdel-Fattah (2009) who uses six shareholder information items and finds a mean of 23 per cent for Egyptian firms. Compared to the other information groups, GCC firms moderately disclose information about their stock price combined with its trend during the past few years, in addition to information about the size and type of their

shareholders. The reason for this moderate level of disclosure in this group is because most companies disclose information related to their share price and its trend on the stock market website, which makes it easier for them to provide the information in the annual report as well; this is more noticeable in companies operating in the UAE and Oman. Similarly, GCC firms are required to disclose major shareholders who own 5% or more of the company shares in any venue but not necessarily in the annual report. Therefore, providing the same information with extended details of the shareholders' type in the annual reports is very straightforward. The highest mean in this group is found in the UAE (100%), followed by Oman (27%), Bahrain (25%), Qatar (14%), Saudi Arabia (12%), and finally Kuwait (4%).

In summary, GCC listed firms appear to disclose more information in groups such as: general corporate, corporate strategy, acquisitions and disposals, foreign currency, and stock price. In contrast, they disclose very minimal information in groups such as future prospects, segmental information, and financial review. These results could be referred to the low cost of preparing and disclosing this general information such as corporate strategy information in addition to the low competitive disadvantage cost associated with such information when disclose with minimum details. The increased disclosure also could be due to the benefits obtained from the disclosure; like the disclosure of information related to an acquisition event in order to signal management good performance. On the other hand, GCC firms may avoid the disclosure of future prospects or financial review information due to the secretive culture of the GCC societies in addition to the high sensitivity and competitive disadvantage associated with such information. Thus, GCC companies have a very good opportunity to enhance their transparency by providing more information in general and more financial and future information in particular.

Table 5.9 illustrates the descriptive statistics for total voluntary disclosure level by industry groups. The proprietary and political costs vary across industries (Meek, Roberts and Gray, 1995). Therefore, firms' disclosure policy is affected accordingly. The difference between industries in terms of the level of disclosure is minor as shown in table 5.9. The energy and services sectors make more voluntary disclosure than manufacturing and real estate. This may indicate that energy firms are politically sensitive (Mitchell, Chia and Loh, 1995) and so, provide more information in order to avoid any government interventions or penalties, while services, especially

telecommunication companies, in the GCC are followed more closely by the public; and thus provide more information as a means of meeting the public's demand (Al-Shammari and Al-Sultan, 2010).

Table 5.9 Descriptive statistics for voluntary disclosure groups by industry

All Countries (N=660)	Energy	Manufacturing	Real Estate	Services
Total voluntary disclosure	0.134	0.120	0.119	0.130
Strategic voluntary disclosure	0.131	0.124	0.122	0.130
Non-financial voluntary disclosure	0.133	0.122	0.122	0.130
Financial voluntary disclosure	0.136	0.115	0.113	0.129

On the other hand, manufacturing and real estate have a lower voluntary disclosure score, which suggests that the firms in these sectors may face more property costs, so they provide less information in order to preserve their competitive advantages (Meek, Roberts and Gray, 1995). Voluntary disclosure by groups of information also supports these theories. Energy and services disclose more or similar strategic and financial information whereas manufacturing and real estate disclose more strategic than financial information, taking into account that financial information serves competitors more than general strategic information does.

In summary, the results of the descriptive statistics indicate that the level of voluntary disclosure in the GCC listed firms is poor, with a mean of 12 per cent; however, a gradual improvement in the level of disclosure over the study period is noticeable both in terms of the total voluntary disclosure and its components. The low level of voluntary disclosure provided by GCC listed firms may be a reflection of a number of corporate governance and environmental factors such as the concentrated ownership with a domination of government and family holdings, the limited role played by institutional and foreign investors, the intervention of major shareholders in the nominating and appointing members to the board along with a number of factors characterized the GCC setting such as the secretive culture, the over-reliance on family and friend relations, and the presence of political connections. However, the level of voluntary disclosure show an improvement during the three years period which prove the recent awareness of the importance of corporate governance and transparency in the process of developing GCC stock markets. There is a tendency toward providing more strategic general information and less financial information, which may indicate that GCC firms balance the costs and benefits before disclosing

any information that might damage their competitive position. Future prospects and financial review information have the lower disclosure level, suggesting the importance of the capital market authorities' involvement in imposing and requiring further disclosure in these categories, considering their high relevance to investors' needs. In addition, among the GCC countries, the UAE has the highest voluntary disclosure mean followed by Oman, Bahrain, then Saudi Arabia and Qatar, and finally Kuwait. Furthermore, firms performing in the energy and services sectors disclose a higher level of information than firms in the manufacturing and real estate sectors. This result is reasonable taking into consideration the political sensitivity and competition factors existing in each industry.

The following section presents the descriptive statistics for the independent variables (Ownership structure, and Board attributes) and the control variables as a means of preparing for the univariate and multivariate analysis.

5.2.2 The Independent Variables

Table 5.10 contains descriptive statistics for the independent and control variables for the whole sample used in this study, while table 5.11 consists of descriptive statistics for the independent and control variables for each country of the Gulf Council. Of particular interest to this study are the descriptive statistics related to two groups of independent variables: ownership structure, and board of directors' attributes. In relation to ownership structure, Government ownership is also obvious in GCC firms, with an average of 12 percent. The range of government ownership starts from as low as zero per cent and rises up to as high as 84 per cent. The maximum percentage of government ownership is seen in the Saudi market while the highest mean is for firms in Bahrain (21%) followed by Oman (19%), Qatar (18%), the UAE (17%), Saudi Arabia (9%), and finally Kuwait (5%). Government ownership has been proven to be the most common ownership structure in the GCC markets having access to and control over the board of directors in listed companies (Al-Janadi, Abdul Rahman and Alazzani, 2016), due to the fact that the government funds in GCC, such as the Public Investment Fund in Saudi Arabia and Abu Dhabi Investment Council in the UAE, tend to invest in listed companies.

Family ownership is also present in the GCC capital market although is less frequent than government ownership because most family corporations are not yet

listed in the market. Family ownership in the current study is defined as the shares held by one person or by various members of one family in a firm that is entirely or majorly owned by that family. Family ownership has a mean of 3 per cent which varies from as low as zero per cent up to a maximum of 85 per cent in Saudi Arabia, 65 per cent in Kuwait, and 70 per cent in the UAE. Saudi Arabia has the highest mean for family ownership, at 5 per cent, followed by Kuwait and the UAE, at 2 per cent. However, family shares are not detected in Oman, Qatar, or Bahrain, possibly due to the limited number of companies in these markets besides the difficulty of assessing this type of ownership compared to the Saudi market where almost all family firms are named after the family name and the family members are excessively present on the board of directors whereas in Bahrain, Oman, and Qatar, family firms do not necessarily have the name of the controlling family.

For institutional share ownership, the average for the whole sample is high, at 27 per cent with a variation between zero and 96 per cent. The mean institutional ownership is similar to that found in GCC firms by Boshnak (2017). The highest mean is found in Kuwait (45%) followed by the UAE (32%), Oman (30%), Bahrain (26%), Qatar (23%), and finally Saudi Arabia (20%). The high level of institutional holding perceived in Kuwait, the UAE, and Oman is likely due to a large number of investment corporations whose main activity is to invest in the stock markets.

Foreign ownership has an average of 5 per cent, which is higher than previous studies in the GCC, such as Boshnak (2017), who finds an average of 3 per cent foreign ownership. The average varies from a minimum of zero per cent to a maximum of 48 per cent. The UAE is the country with the highest mean of foreign ownership at 13 per cent followed by Oman at 6 per cent, Saudi Arabia and Bahrain at 3 per cent, Kuwait at 2 per cent, and Qatar at 1 per cent. This gap regarding foreign shareholdings between the UAE, Oman and the other GCC countries may be attributed to foreign investment regulations and restrictions in addition to corporate governance and transparency quality in the stock markets, which determine how accessible and welcoming the market is to foreign ownership. Foreign investments in Bahrain are not restricted to a specific percentage, so foreign investors can own up to 100% of the company’s shares. In Qatar, Kuwait, and the UAE, foreign investors can own up to 49% of the total shares; in Oman, foreign ownership is limited to 49%, which may be increased up to 65%, subject to an approval by the Minister of

Commerce and Industry and to 100% for projects that contribute to national economy development upon the approval of the Development Council .In Saudi Arabia, the last country to allow direct foreign investment, direct ownership by qualified foreign investors of up to 49% has been recently allowed since June, 2015, after foreign investors were exclusively permitted to invest through mutual funds. Although foreign investments have no national limitations, Bahrain has the lowest percentage in this regard. The UAE and Oman, on the other hand, have the highest average of foreign investments even though such investments are subject to certain limitations. In the case of Bahrain, which is considered a financial hub in the region, the low percentage of foreign ownership may be endorsed by the fact that the sample of this study excludes financial corporations in which foreign investors mainly invest in the Bahraini Bourse since other sectors are too small to attract them. This suggests that laws and regulations are not the only factors affecting foreign investors to consider a market as a good investment opportunity. Corporate governance practices, transparency level, investors' protection programs, political and economic stability, and how welcoming the market is to foreign investors are all elements that play a major role in forming investors' decisions to invest in foreign markets.

This study also captures the ownership of the audit committee members since there is supporting evidence that audit committee members who own shares in the company tend to be more effective in monitoring the financial reporting practice. However, audit committee ownership has a very low average of 1 per cent with a minimum of zero per cent and a maximum of 18 per cent. Audit committee ownership is also low in each country and was difficult to detect in Kuwait, the UAE, and Oman either because of its absence or due to disclosure deficiencies. Board members' ownership has a mean of 7 per cent and a median of 2 per cent. The maximum board ownership is 66 per cent observed in the UAE. The UAE has the highest mean at 29 per cent, followed by Kuwait at 16 per cent, Oman at 12 per cent, Qatar at 7 per cent, and finally Saudi Arabia and Bahrain at 5 per cent.

Table 5.10 Descriptive statistics for the independent and control variables across the GCC firm

All Countries (N=660)	Minimum	Maximum	Mean	Median	Std.Deviation	Skewness	Kurtosis
Independent variables							
Ownership structure							
Government ownership	0.00	0.84	0.12	0.00	0.19	1.92	2.92
Family ownership	0.00	0.85	0.03	0.00	0.12	4.32	18.76
Institutional ownership	0.00	0.96	0.27	0.23	0.24	0.59	-0.49
Foreign ownership	0.00	0.48	0.05	0.01	0.09	2.72	7.13
Audit committee ownership	0.00	0.18	0.01	0.00	0.02	4.66	24.39
Board ownership	0.00	0.66	0.07	0.02	0.11	2.46	7.34
Board attributes							
Board size (number of member)	5.00	18.00	8.11	8.00	1.67	0.34	1.03
Board independence	0.00	1.00	0.50	0.44	0.25	0.16	-0.46
Board meetings (number of meeting)	0.00	17.00	5.96	6.00	2.28	1.56	3.90
Board attendance	0.54	1.00	0.89	0.91	0.08	-1.00	1.37
Board compensations (SQ)	0.00	3118.12	779.91	700.23	552.03	1.27	2.45
Average cross-directorship	0.00	2.78	0.48	0.37	0.49	1.24	1.95
Audit committee size	1.00	6.00	3.42	3.00	0.68	1.41	2.15
Control variables							
Audit firm (big4)	0.00	1.00	0.72	1.00	0.45	-0.97	-1.05
Firm size (Log of total assets)	7.26	11.03	8.87	8.77	0.66	0.56	0.34
Profitability (ROA)	-0.56	0.38	0.06	0.05	0.08	-0.86	9.08

	Minimum	Maximum	Mean	Median	Std.Deviation	Skewness	Kurtosis
Control variable							
Leverage	0.00	1.02	0.39	0.39	0.20	0.23	-0.61
Liquidity (Current ratio)	0.01	9.95	2.07	1.54	1.68	2.08	4.82
Industry type (Energy=1)	0.00	1.00	0.04	0.00	0.19	4.64	19.64
Industry type (Manufacturing=1)	0.00	1.00	0.43	0.00	0.49	0.29	-1.91
Industry type (Services=1)	0.00	1.00	0.38	0.00	0.48	0.48	-1.76
Industry type (Real estate=1)	0.00	1.00	0.15	0.00	0.35	1.96	1.86

Table 5.11 Descriptive statistics for the independent and control variables by country

Variables	Saudi Arabia (N=315)		Kuwait (N=111)		UAE (N=87)		Oman (N=45)		Qatar (N=63)		Bahrain (N=39)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Independent variables												
Ownership structure												
Government ownership	0.09	0.00	0.05	0.00	0.17	0.06	0.19	0.10	0.18	0.20	0.21	0.09
Family ownership	0.05	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Institutional ownership	0.20	0.09	0.45	0.44	0.32	0.27	0.30	0.36	0.23	0.13	0.26	0.23
Foreign ownership	0.03	0.00	0.02	0.00	0.13	0.08	0.06	0.01	0.01	0.00	0.03	0.00
Audit committee ownership	0.01	0.00	____	____	____	____	____	____	0.00	0.00	0.01	0.00
Board ownership	0.05	0.01	0.16	0.17	0.29	0.20	0.12	0.12	0.07	0.00	0.05	0.04
Board attributes												
Board size (number of member)	8.50	9.00	6.56	7.00	8.57	9.00	7.47	7.00	8.40	8.00	8.49	8.00
Board independence	0.50	0.42	0.19	0.20	0.73	0.80	0.68	0.71	0.20	0.10	0.46	0.42
Board meetings (number of meeting)	5.44	5.00	8.55	8.00	6.59	6.00	6.60	6.00	6.39	6.00	5.46	5.00
Board attendance	0.91	0.92	0.89	0.89	0.85	0.85	0.88	0.90	0.82	0.82	0.91	0.91
Board compensations (SQ)	772.70	745.61	490.93	489.38	882.39	773.85	542.00	573.80	1496.60	1528.05	659.04	684.16
Average cross-directorship	0.61	0.55	0.00	0.00	0.61	0.50	0.66	0.57	0.34	0.28	0.55	0.42
Audit committee size	3.49	3.00	3.11	3.00	3.31	3.00	3.44	3.00	3.23	3.00	3.56	3.00
Control variables												
Audit firm (big4)	0.62	1.00	0.71	1.00	0.85	1.00	0.78	1.00	0.95	1.00	0.77	1.00
Firm size (Log of total assets)	8.92	8.80	8.78	8.77	8.99	8.97	8.37	8.36	9.31	9.39	8.31	8.33
Profitability (ROA)	0.06	0.05	0.04	0.04	0.03	0.05	0.10	0.10	0.06	0.06	0.07	0.06
Leverage	0.40	0.41	0.41	0.41	0.44	0.42	0.36	0.30	0.38	0.37	0.18	0.12

	Saudi Arabia (N=315)		Kuwait (N=111)		UAE (N=87)		Oman (N=45)		Qatar (N=63)		Bahrain (N=39)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Liquidity (Current ratio)	2.15	1.59	1.71	1.26	2.02	1.50	2.23	1.69	2.05	1.75	2.50	1.77
Industry type (Energy=1)	0.04	0.00	0.08	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industry type (Manufacturing=1)	0.51	1.00	0.27	0.00	0.34	0.00	0.53	1.00	0.43	0.00	0.15	0.00
Industry type (Services=1)	0.36	0.00	0.27	0.00	0.38	0.00	0.47	0.00	0.33	0.00	0.85	1.00
Industry type (Real estate=1)	0.09	0.00	0.38	0.00	0.21	0.00	0.00	0.00	0.19	0.00	0.00	0.00

In relation to the second group of independent variables, board attributes, the board of directors has on average, 8.11 members, with a median composition of eight. The median of the members on the board varies between seven and nine among the six GCC countries, with Saudi Arabia and UAE having the highest median at nine and Kuwait and Oman having the lowest median at seven. The average frequency of the board meetings is 5.96 times during the year with a median of six meetings per year. On average, board meetings are attended by 89 per cent of the members. The board of directors in GCC firms during the period 2014 to 2016 comprises an average proportion of independent directors at 50 per cent. This average is lower than that in the study of Boshnak (2017), who finds an average of 63 per cent. This may be due to the nature of his sample that comprises the 20 highest market weight companies. Firms in the UAE have the highest mean board independence at 73 per cent, followed by Oman at 63 per cent, Saudi Arabia at 50 per cent, Bahrain at 46 per cent, Qatar at 20 per cent, and finally Kuwait at 19 per cent. This study also investigates the impact of board members' compensation on the effectiveness of their role of monitoring and on their efforts to reduce information asymmetry and best serve the shareholders' interests. The average compensation paid to the board members is 912,534 US dollars, ranging from a minimum of zero to a maximum of 9,722,644 US dollars. The highest average compensation is found in Qatari firms ($2,648,701), followed by UAE firms ($1,489,136), Saudi firms ($773,463), Bahraini firms ($507,950), Kuwaiti firms ($351,339), and finally Omani firms ($307,038). This study also examines the impact of holding multiple directorships on board effectiveness and ultimately on firms' financial reporting policies. The average additional directorships held by the board members of a single board is 0.48 with a median of 0.37 ranging from zero to a maximum of 25 directorships in a single board. The final variable within board attributes is audit committee size. Audit committees in the GCC comprise an average of 3.42 members with a median of three members in all GCC countries.

This study also constructs control variables to represent several firm characteristics that may determine the level of voluntary disclosure by firms. On average, 72 per cent of GCC firms are audited by one of the big 4 auditing firms. Firms in Qatar has the highest average of firms audited by a big 4 firm at 95 per cent followed by the UAE at 85 per cent, Oman at 78 per cent, Bahrain at 77 per cent, Kuwait at 71 per cent, and Saudi Arabia at 62 per cent. The average company size

based on total assets is $3 billion ranging from as low as $18 million up to as high as $107 billion. Firms in Saudi Arabia are the largest compared to the other countries; however, the highest mean is in the UAE and Qatar, probably due to the vast difference in the number of companies in Saudi Arabia and the other two stock exchanges, respectively. The highest mean total assets is in Qatar and the UAE, at $4 billion, followed by Saudi Arabia at $3 billion, Kuwait at $1 billion, Bahrain at $587 million, and finally Oman at $404 million. The mean ROA of the firms is 6 per cent. Oman has the most profitable firms with an average ROA of 10 per cent. The Leverage levels, are on average, 39 per cent, while the liquidity ranges from 0.01 to 9.95, with a mean of 2.07 and a median of 1.54. Boshnak (2017), who investigates disclosure in the GCC, reported an average profitability of 8 per cent, a leverage level of 40 per cent, and liquidity at 2.35, which is very close to the result of the current study. Firms in Bahrain are the least leveraged, at 18 per cent, and the most liquid is at 2.50. Industry descriptive is based on the industry classification explained in chapter 4. Four industry groups are identified; namely, energy, manufacturing, services, and real estate. The majority of firms in the GCC markets operate in the manufacturing or service sector, with a mean of 43 per cent and 38 per cent, respectively, followed by real estate firms with a mean of 15 per cent and finally energy at 4 per cent. Energy firms are more present in Kuwait and the UAE; while there are more manufacturing firms in Oman and Saudi Arabia. Services corporations dominate in Bahrain, at 85 per cent and real estate firms exist more in Kuwait and the UAE.

5.3 Correlation Analysis

Table 5.12 contains a correlation matrix, presenting two-way Pearson correlations between all of the variables included in this study. These correlations add meaning to this type of study since they identify the relationships between the level of voluntary disclosure and each explanatory variable and also highlight the associations among the independent variables. The correlations in column 1 show the level of association between each independent variable and the total voluntary disclosure. The double and single stars in the correlation table represent the degree of statistical significance at one per cent and five per cent, respectively. In relation to ownership variables, government ownership, family ownership, and foreign ownership are all positively correlated with total voluntary disclosure, as expected. This positive association reflects the high agency costs in firms with government and family ownership and the

need for more communication with the other shareholders, which is achieved in the form of greater disclosure by firms. The negative and significant correlation between audit committee ownership and total voluntary disclosure may reflect the reality that audit committee members who hold a stake in the firm tend to provide superior monitoring over the firm's financial reporting, which reduces the demand for disclosure by the shareholders. Disclosure and monitoring could be substitutes for each other based on agency theory, since disclosure is viewed as a means of reducing the monitoring costs. Because the monitoring is economically and effectively provided by a group of shareholders who perform a role in the firm, the need for disclosure decreases due to the belief by other stakeholders that their interests are being carefully protected. The results also show that board and institutional ownership are not correlated with the level of voluntary disclosure.

Table 5.12 Pearson correlation between total voluntary disclosure and the independent and control variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1VDT	1																		
2GOVOWN	.251**	1																	
3FAMILOWN	.078*	-.147**	1																
4INSTOWN	-.024	-.324**	-.178**	1															
5FOROWN	.280**	-.099	-.099	-.006	1														
6BOWN	.043	-.254**	-.147**	0.099	-.147	1													
7BSIZE	.284**	.175**	-.062	-.174**	.148**	-.120*	1												
8BIND	.148**	.053	-.040	-.089*	.193**	-.045	.006	1											
9BCOMPSQ	.239**	.193**	.073	-.076	-.080	-.003	.323**	-.120**	1										
10BMEET	.128**	.259**	-.039	-.015	.113	-.076	-.098*	.019	.015	1									
11BATTEND	-.110*	.028	.118**	-.077	-.126	-.110*	-.034	-.155**	.029	.008	1								
12AVGDIRECTOR	.288**	.085*	-.036	-.041	.003	-.089	.275**	.114**	.155**	-.056	.075	1							
13ACSIZE	.210**	.288**	-.137**	-.115**	.022	-.075	.333**	.143**	.039	.118**	.060	.178**	1						
14ACOWN	-.018	-.114*	-.040	-.097	-.085	.250**	-.026	-.018	-.172**	-.095	-.068	-.020	-.087	1					
15AUDFIRM	.230**	.103**	-.021	.223 **	.178**	-.074	.131**	-.040	.213**	.064	-.099*	.159**	.098*	-.112*	1				
16FIRMSIZE	.297**	.358**	-.078*	-.026	.077	-.150**	.345**	-.198**	.439**	.167**	.011	.150**	.254**	-.169**	.273**	1			
17Profitability	.020	.072	.059	-.047	-.208**	.013	.076	-.077	.293**	-.085*	.079	.087*	-.033	-.051	.118**	-.053	1		
18LEVER	.122**	-.038	.111**	.055	.235**	-.003	.013	-.014	.008	.047	-.030	.069	.022	.007	.098*	.347**	-.352**	**1**	
19LIQUId	-.057	.078*	-.018	-.061	-.069	-.078	.027	.024	-.025	-.127**	-.006	-.030	-.013	.064	-.056	-.183**	.209**	-.527**	1

Variables definitions

Dependent variable: VDT = total voluntary disclosure
Independent variables: BHNUMBER = number of blockholders; BHOWN = percentage of shares owned by blockholders; GOVOWN = percentage of shares owned by the government; FAMILOWN = percentage of shares owned by the family members; INSTOWN = percentage of shares owned by the institutions; FOROWN = percentage of shares owned by foreign investors; BOWN = percentage of shares owned by the board members; ACOWN = percentage of shares owned by the audit committee members; BSIZE = the number of members in the board of directors; BIND = percentage of independent directors on the board; BMEET = the number of meetings held by the board of directors during the year; BATTEND = percentage of board members' attendance during the year; BCOMPSQ = the square root of the amount of compensation paid to the board members during the year; AVGDIRECTOR = the average directorships held by the board members; ACSIZE = the number of audit committee members; AUDFIRM = a dummy variable indicating occasions when the audit is performed by one of the big 4 audit firm; FIRMSIZE = the natural logarithm of total assets; ROA = return on assets; LEVER = percentage of total debt to total assets; LIQUID = percentage of current assets to current liabilities.

In respect to board attributes, the results reveal that board size, board independence, and the frequency of board meetings are all positively and significantly associated with the total voluntary disclosure, suggesting that at least at the univariate level, larger, more independent, and more active boards are more effective in performing their role of representing the shareholders' interests and offer more information to the public. Nevertheless, it is unclear why the board's level of attending meetings is negatively associated with voluntary disclosure. This finding may be influenced by the concept of quality over quantity, suggesting that the attendance of the board members does not reflect their efforts and effectiveness in their supervision and monitoring role. They may attend while providing low performance and, on the other hand, not attend, yet successfully accomplish their duties. There is also a positive association between both board compensations and average cross-directorship with the level of voluntary disclosure suggesting that highly compensated and experienced directors are expected to perform better in achieving their duty of monitoring and enhancing transparency. Audit committee size is also positively correlated with total voluntary disclosure level as the level of knowledge and expertise increases with the number of committee members hence positively affecting the committee's supervisory role and firms' financial reporting practice.

Consistent with prior studies, a positive correlation between firm size, audit firm size, and leverage with voluntary disclosure is observed indicating that larger firms, firms audited by one of the big 4, and leveraged firms provide better voluntary disclosure. However, profitability and liquidity are not correlated with voluntary

disclosure. With regards to the correlations amongst the independent and control variables, board independence is negatively associated with institutional ownership and positively correlated with foreign ownership, implying that institutional ownership render board independence while foreign ownership promote it. Interestingly, board compensation is positively correlated with government ownership. In relation to firm size, firms with government ownership tend to be large firms, while firms with family ownership are smaller. The correlation table also shows a positive correlation between profitability and a number of variables; namely, board compensation, board members' other directorships, and audit firm size (big 4). A negative correlation is also identified between profitability and the number of board meetings, implying that board members meet more frequently when the profitability is low suggesting that the need for board meetings increase in the situation of low performance.

The result shows that all of the correlations between the independent variables and the dependent variable are less than 0.7, which indicates a low probability of a multicollinearity problem arising between the variables in this study.

5.4 Multivariate Regression Analysis

Unlike univariate analysis in which the relation between one single independent variable and one dependent variable is determined, multivariate analysis concerns to identifying the association between one dependent variable and more than one independent variable using regression models (Uyanık and Güler, 2013). Regression analysis is the most common multivariate technique used in disclosure studies (Cooke, 1998). It is performed in situations where cause-effect relations exist between a dependent variable and a group of independent variables. Thus, an explanation of the variation in the dependent variable is sought in the changes in the independent variables. The regression model assumes a normal distribution of the dependent and independent variables, linear relationships, no multiple ties between the independent variables, and an equal distribution or residuals (homoscedasticity) (Cooke, 1998; Uyanık and Güler, 2013). These assumptions should be satisfied in order to rely with confidence on the statistical analysis results.

According to the skewness and kurtosis values presented earlier in the descriptive statistics section, some of the variables are not normally distributed. Therefore, a

transformation using a natural logarithm and square root was applied firm size and board compensations, respectively in order to satisfy the normality assumptions for these variables. To test for linearity and homoscedasticity, the study also performs the analysis of residuals and the normal probability plot (P-P plot). To examine multicollinearity, the correlation values amongst the explanatory variables are checked for any significant high correlation. As shown in table 5.12, all of the correlation coefficients are below 0.80, which is considered a limit that should not be exceeded to suggest that independent variables are free of multicollinearity (Hossain and Rahman, 1995; Gujarati, 2003). To investigate further this lack of no multiple relations between the variables, the variance inflation factor (VIF) values are calculated and they all are below 10, generally believed to be the level of concern (Uyanık and Güler, 2013). Except for leverage, that recorded a VIF of 5.7, all of the other variables have values below 5. Based on these results, it can be concluded that there is no potential multicollinearity problem between the variables in the current study.

In this study, four regression models are developed. All have the same independent variables (ownership structure, and board attributes) and different dependent variables. The first model investigates the relationship between total voluntary disclosure score and the explanatory variables, while the other three models examine the associations between the voluntary disclosure groups; namely: Strategic, non-financial, and financial disclosure with the same independent variables in the first model. This modelling structure aims to capture the influence of ownership and board variables on the extent of voluntary disclosure in the GCC firms, and see if the impact of the independent variables changes according to the type of information disclosed (strategic, non-financial, and financial).

For each regression model, blockholders number and blockholders ownership are excluded from the analysis to avoid the problem of multicollinearity since blockholders include government, institution, family, and foreign shares. In all of the regressions, year dummies are used to control the use of the same sample firms over the three years (2014-2016). In all of the regressions, industry and country dummies are included to control for the effect of different industry sector and the six GCC countries. Each regression also includes control variables representing firm size,

profitability, leverage, liquidity, and whether the audit is performed by one of the big 4 audit firms.

5.4.1 Total Voluntary Disclosure and its Categories

Table 5.14 presents the results of the first main multivariate regression model, which illustrates the intensity and direction of the relation between the explanatory variables and total voluntary disclosure by GCC firms.

Table 5.14 OLS regression explaining the determinants of total voluntary disclosure score by 220 firms in the GCC in the period 2014-2016

Variables	Coefficient	T-Value	Sig	VIF
GOVOWN	.028	.550	.584	4.353
FAMILOWN	.186	2.856***	.006	2.535
INSTOWN	.026	.706	.482	2.401
FOROWN	.037	.324	.747	2.458
BOWN	.059	.754	.453	2.279
ACOWN	-.064	-.237	.814	1.933
BSIZE	-.012	-2.413**	.018	1.791
BIND	.041	1.056	.294	1.679
BMEET	-.006	-2.012**	.048	2.188
BATTEND	-.017	-.168	.853	1.678
BCOMPSQ	1.614E-5	.800	.426	3.568
AVGDIRECTOR	.029	2.167**	.033	1.731
ACSIZE	.022	2.682***	.009	2.156
AUDFIRM	-.009	-.539	.592	1.969
FIRMSIZE	.037	2.452**	.016	3.843
ROA	.020	.176	.861	3.653
LEVER	-.055	-.797	.861	5.728
LIQUID	-.006	-1.052	.296	2.136
Industry dummies		Included		
Year dummies		Included		
Country dummies		Included		
F Test		3.01***		
R^2		0.498		
Adjusted R^2		0.332		
N		660		

. *** Statistically significant at 1% level

. ** Statistically significant at 5% level

. * Statistically significant at 10% level

Variables definitions

Dependent variable: total voluntary disclosure
Independent variables: GOVOWN = percentage of shares owned by the government; FAMILOWN = percentage of shares owned by the family members; INSTOWN = percentage of shares owned by the institutions; FOROWN = percentage of shares owned by foreign investors; BOWN = percentage of shares owned by the board members; ACOWN = percentage of shares owned by the audit committee members; BSIZE = the number of members on the board of directors; BIND = percentage of independent directors on the board; BMEET = the number of meetings held by the board of directors during the year; BATTEND = percentage of board members' attendance during the year; BCOMPSQ = the square root for the amount of compensation paid to the board members during the year; AVGDIRECTOR = the average number of directorships held by the board members; ACSIZE = the number of audit committee members; AUDFIRM = a dummy variable indicating occasions when the audit is performed by one of the big 4 audit firms; FIRMSIZE = the natural logarithm of total assets; ROA = return on assets; LEVER = percentage of total debt to total assets; LIQUID = percentage of current assets to current liabilities.

Table 5.15 OLS regression explaining the determinants of the voluntary disclosure categories by 220 firms in the GCC in the period 2014-2016

Variables	Strategic		Non-financial		Financial	
	Coef	T-Value	Coef	T-Value	Coef	T-Value
GOVOWN	-.064	-1.539	-.138	1.577	-.024	-.509
FAMILOWN	.026	.492	.351	3.137***	.125	2.073**
INSTOWN	-.035	-1.147	.108	1.696*	-.017	-.499
FOROWN	-.105	-1.128	.056	.288	.103	.984
BOWN	-.126	-1.977**	.107	.800	.126	1.759*
ACOWN	.453	2.037**	.009	.019	-.435	-1.733*
BSIZE	-.011	-2.769***	-.014	-1.619	-.010	-2.270**
BIND	.077	2.456***	.069	1.044	-.011	-.297
BCOMPSQ	1.180	.714	3.709	1.067	-2.697	-.145
BMEET	-.004	-1.700*	-.009	-1.828*	-.004	-1.411
BATTEND	-.119	-1.599	.019	.124	.012	.140
AVGDIRECTOR	-.015	-1.327	.060	2.617***	.024	1.975**
ACSIZE	.016	2.346**	.014	.963	.033	4.350***
AUDFIRM	.005	.400	-.012	-.424	-.014	-.901
FIRMSIZE	.031	2.475***	.062	2.383**	.018	1.270
ROA	.172	1.805*	-.080	-.399	.017	.161
LEVER	.054	.959	-.110	-.930	-.070	-1.097
LIQUID	-.005	-1.00	-.011	-1.086	-.002	-.231
Industry dummies			Included			
Year dummies			Included			
Country dummies			Included			
F Test	2.99***		3.99***		2.31***	
R^2	0.49		0.56		0.43	
Adjusted R^2	0.33		0.42		0.25	
N	660		660		660	

. *** Statistically significant at 1% level

. ** Statistically significant at 5% level

. * Statistically significant at 10% level

Variables definitions

Dependent variable: total voluntary disclosure
Independent variables: GOVOWN = percentage of shares own by the government; FAMILOWN = percentage of shares own by the family members; INSTOWN = percentage of shares own by the institutions; FOROWN = percentage of shares own by foreign investors; BOWN = percentage of shares own by the board members; ACOWN = percentage of shares own by the audit committee members; BSIZE = the number of members on the board of directors; BIND = percentage of independent directors on the board; BMEET = the number of meetings held by the board of directors during the year; BATTEND = percentage of board members' attendance during the year; BCOMPSQ = the square root for the amount of compensation paid to the board members during the year; AVGDIRECTOR = the average number of directorships held by the board members; ACSIZE = the number of audit committee members; AUDFIRM = a dummy variable, indicating occasions when the audit is performed by one of the big 4 audit firms; FIRMSIZE = the natural logarithm of total assets;

ROA = return on assets; LEVER = percentage of total debt to total assets; LIQUID = percentage of current assets to current liabilities.

Table 5.15 contains the results of the other three multivariate regression models that illustrate the association between the voluntary disclosure groups, strategic, non-financial, and financial information, and a number of independent variables.

As indicated in table 5.14, the first model is significant overall ($F = 3.01$, $p<0.00$), the R-squared is about 50% and the adjusted R^2 is 33%. This implies that the proposed main model in this study explains over 30% of the variation in the level of total voluntary disclosure for the period 2014 to 2016. The adjusted R Squared in this study is comparable to Meek et al. (1995) and Leventis and Weetman (2004)'s 35%, and higher than the 20% found by Eng and Mak (2003), the 16% found by Scaltrito (2016), and the 28.6% found by Hossain et al. (1994). However, it is lower than the 46% found by Haniffa and Cooke (2002). Table 5.15 shows the explanatory power of the other three models. The non-financial voluntary disclosure model has the highest adjusted R-square, at 42%.

As shown in tables 5.14 and 5.15 in relation to the six ownership structure aspects, family ownership is the only ownership type that has a significant and positive relationship with total voluntary disclosure at the 1% level. The statistics also show a significant association between family ownership and the two groups of information, non-financial and financial, at the 1% and 5% significance level, respectively. Institutional ownership is not associated with the overall voluntary disclosure score; yet it is found to be related to non-financial information disclosure at the 10% level. Board members' ownership is not significantly associated with the total voluntary disclosure. However, interestingly, members have the opposite effect on strategic (negative) and financial (positive) voluntary disclosure and this possibly resulting in the zero net effect. Similarly, audit committee ownership is positively related to the level of strategic disclosure and negatively related with the level of financial disclosure. This may be the possible reason of non-significant association of audit committee ownership with the overall voluntary disclosure.

In regard to board attributes, the results show a negative and significant relationship between board size and the level of total voluntary disclosure at the 1% level. This negative association also exists regarding strategic and financial

information disclosure, at the 1% and 5% level, respectively. This suggests that, the fewer the members sitting on the board, the better they are at performing their role of monitoring and promoting transparency. In contrast to expectations, the number of board meetings during the year has a negative and significant association with the level of total voluntary disclosure. Strategic and non-financial information are also negatively associated with the frequency of board meetings. The results also indicate that the average number of other directorships held by the board members is positively and significantly associated with the level of total voluntary disclosure and also non-financial and financial information disclosure. This result supports the argument that views the multiple directorships held by the member as a sign of expertise and knowledge. Audit committee size is positively and significantly related to the total voluntary disclosure and to strategic and financial information, suggesting that more members on the audit committee is associated with more diligence and effectiveness and hence better voluntary disclosure. The difference between board size and audit committee size concerning the direction of the relationship with the level of voluntary disclosure is surprising since the logic underlying this association is similar. This study shows that, while bigger boards affect disclosure negatively, bigger audit committees affect it positively. The results of this study also indicate that board independence although positively related to total voluntary disclosure, is not statistically significant except for strategic information disclosure. Firms provide more strategic information when the boards contain more independent members. Regarding board compensations and board members attendance, they are not statistically significant.

The variation in the level of voluntary disclosure depending on the type of information is explained by a number of variables as indicated in table 5.15. Board ownership, audit committee ownership, board size, and audit committee size are the determinants of strategic and financial information disclosure. Board meetings and firm size significantly explain the variation in the level of disclosure of strategic and non-financial information, while, family ownership and the average number of directorships held by the board members determine the level of non-financial and financial information. Strategic and financial information has the most in common regarding the ownership and board attributes' variable affecting their level. Non-financial information, while having the highest adjusted R-square at 42%, is explained

by the lower number of variables; namely, family ownership, board meetings, average directorships, and firm size.

In terms of the control variables, only firm size measured by total assets is highly significant at the 1% level, with total and strategic voluntary disclosure, at the 5% level with the non-financial voluntary disclosure; however, firm size proves not to be significantly related to the level of financial information disclosure group. This indicates that larger firms engage in more voluntary disclosure in general than smaller ones, and provide more strategic and non-financial information but not financial information. This result is consistent with the majority of disclosure studies that have suggested a strong positive relationship between firm size and the extent of voluntary disclosure provided by the firm (Barako, Hancock and Izan, 2006; Mohd Ghazali and Weetman, 2006; Hossain and Taylor, 2007; Huafang and Jianguo, 2007; Soliman, 2013). The reason underlying the significant effect of firm size on strategic and non-financial information but not financial information disclosure may be due to the high proprietary costs associated with financial information. Large firms are more politically sensitive and have the ability and resources to produce and provide more strategic and non-financial information as a mean of satisfying the public demand; however, they become more conservative about disclosing financial information that could damage their competitive position. Regarding the other control variables, only profitability is positively, at the 10% significance level, associated with the level of strategic voluntary disclosure. Nevertheless, profitability is found to be unrelated to the total voluntary disclosure score. The effect of firm leverage and liquidity is not statistically significant with regard to the level of total voluntary disclosure and its groups. The study also finds that being audited by one of the big 4 audit firms has no impact on the level of voluntary disclosure provided by firms.

5.4.2 Discussion of the Statistical Results

5.4.2.1 Ownership Structure Variables

Six variables related to ownership structure are investigated in the current study to determine the impact of ownership type on the extent of voluntary disclosure in GCC listed firms.

Government Ownership appears to be statistically insignificant both in the case of overall voluntary disclosure as well as in relation to various components of voluntary disclosure. . The findings may be suggestive of the secretive nature of such ownership (Al-Janadi, Abdul Rahman and Omar, 2012) and highlight the fact that transparency by way of more voluntary disclosure may not be the overarching goal of such owners. This result is consistent with Ghazali and Weetman (2006) who find government ownership is not significant in any category of disclosure, indicating that the disclosure level is not influenced by government ownership. Some studies have reported a positive impact of government ownership on other financial reporting issues and corporate performance in the GCC context (Zeitun, 2014; Abdallah & Ismail, 2017). Government ownership is found to be a significant determinant of corporate performance and also to have a positive and significant effect on firms' performance in the GCC (Zeitun, 2014). Another study illustrates the great importance of corporate governance for GCC governments by providing evidence of a positive association between corporate governance and firm performance in firms with high government share holdings (Abdallah and Ismail, 2017). However, the result of this study does not support the significance of the relationship between government ownership and voluntary disclosure. Therefore, hypothesis H3, which states that there is a significant positive association between government ownership and voluntary disclosure in the annual reports of GCC listed firms, is not supported.

Family Ownership is positively and significantly, at the 1% level, associated with the level of voluntary disclosure in GCC listed firms as illustrated in table 5.14. Thus, hypothesis H4 is supported. The result of this study makes an important contribution that shows the significant role played by family ownership in promoting voluntary disclosure in GCC firms. In the unique structure of ownership in the GCC markets, where the family members hold a significant share in the companies that they have established, the study proves that family members are highly motivated to preserve their family business and reputation through their willingness to reduce the conflicts and information asymmetry with the minority shareholders by increasing the level of disclosure and voluntarily providing information in excess of the requirements. In GCC societies, that value family and personal relations over regulations, family firms tend to legitimize themselves by voluntarily providing more information to demonstrate that they value minority interests and their family name reputation. They

have the ability to impact on the disclosure practice in their firms through their significant representation on the board and management (Al-Ghamdi and Rhodes, 2015). This dominance enables them to make this positive impact on the corporate governance and disclosure practices as found in the current study. The result in the current study is consistent with evidence documented in prior studies. Wang (2006) recognizes a positive association between founding family ownership and earnings' informativeness, while Cascino et al. (2010) show that family firms have greater transparency, and this is mainly due to intentions to alleviate agency conflicts between family owners and minority shareholders.

In terms of voluntary disclosure components as shown in table 5.15, family ownership is positively and significantly associated with non-financial and financial information at the 1% level and 5% level, respectively. This indicates that family owners promote the disclosure of non-financial information and financial information. Family firms are usually small in size and hence with limited resources. The insignificant association in relation to strategic information suggests that these firms tend not to disclose such information due to the threat of competitors copying such information which may be the only source of their competitive advantage over them. The positive impact of family ownership on the level of overall voluntary disclosure is a good news for the regulators and they should encourage such ownership patterns for the sake of more transparency in the market.

Institutional Ownership has a positive association with total voluntary disclosure as shown in table 5.14; however, this impact not statistically significant, which leads to the rejection of hypothesis H5 that predicted a significant positive influence of institutional shares. The limited ability of institutional ownership to explain the variation in the level of overall voluntary disclosure is consistent with some prior studies such as those by Haniffa and Cooke (2002) and Ghazali and Weetman (2006) in Malaysia and Naser et al. (2006) in Qatar respectively. The lack of significance of the relationship between the institutional investors and the overall voluntary disclosure level is primarily attributed to the presence of a premature institutional investors' community in the GCC market. Institutional investors are mainly local investors with a low level of engagement and interaction regarding corporations' strategic and governance issues (Amico, 2016). They generally tend not to perform their ownership duties through voting and if they do, the voting results are not

disclosed, contrary to the global trend. In addition, institutional investors' holdings are dominated by government and family enterprises whereas globally, investment funds are the main source of institutional capital (Amico, 2016). That explains the insignificant role played by institutional investors in the GCC stock exchanges. This suggests a need to pay more attention to the essential role that institutional investors can perform in the process of developing the GCC stock market and promoting transparency. Market regulators should prepare and train institutional shareholders to actively execute their role as a monitoring mechanism that helps to develop corporate governance and financial reporting practices within the GCC stock exchanges.

In terms of voluntary disclosure components in table 5.15, institutional shares have a weak positive association with non-financial information at the 10% level. There are two competing arguments regarding institutional ownership in the literature. While some argue that such investors are sophisticated and have a strong desire to acquire more disclosure in order to take timely decisions especially in less developed settings (Khlif, Ahmed and Souissi, 2017), others believe that in such environments, institutional investors may act like insiders in gaining private information to serve their interests at the expense of those of the minority shareholders (Choi, Sami and Zhou, 2010). The reduced positive impact of institutional investors on the disclosure of non-financial information may indicate the level of awareness of the recent attention directed toward the disclosure of non-financial information in the corporate governance practice globally such as social responsibility and environmental disclosure. Furthermore, the positive influence of institutional investors on the disclosure of non-financial information may reflect the desire of these institutions to introduce themselves as promoters of social values either by investing in firms that appreciate these values or by demanding more disclosure reveal these values from the firms in which they invest. The result of this study illustrates that institutional investors may behave like sophisticated, educated investors when it comes to the disclosure of non-financial information, like information about the directors and employees and social responsibility information to reflect the recent focus on such information in the corporate governance practice internationally.

Foreign Ownership has no significant impact on the overall level of voluntary disclosure as well as in terms of its various components as shown in tables 5.14 and 5.15. Therefore, hypothesis H6 in this study is not supported. The positive yet

insignificant association between foreign ownership and voluntary disclosure in GCC firms is unsurprising. Foreign investors who come from more developed and transparent market environment exert greater pressure over the management to provide the information they need for their investment decisions (Choi et al., 2013). However, in the context of the GCC market where the foreign investments are minimal, foreign ownership fails to significantly explain the variation in the level of voluntary disclosure. This finding regarding a lack of statistical significance in this study is consistent with the study by Zeitun (2014) who examines the relationship between foreign ownership and firm performance in the GCC and concludes that, due to the small foreign shareholdings, foreign ownership fails to make any significant impact on corporate performance. A similar insignificant effect of foreign ownership is also found in Malaysia (Jalila and Devi, 2012). The impact of foreign ownership on the level of voluntary disclosure is not observable in the current study mainly due to their weak participation in the GCC stock markets. The lack of foreign investors' participation is attributed to a number of non-friendly investment characteristics; namely, the foreign ownership regulatory restrictions, the low degree of market development, the presence of information asymmetry between investors and businesses, the weak transparency mechanisms, and the weak investor protection environment (Jamaani and Roca, 2015). These characteristics would discourage foreign investors from engaging and participating in the GCC stock exchanges. The GCC stock market authorities should work more on market development and information efficiency in order to attract more foreign investments, the value of which can be explicitly seen as a mechanism for monitoring the management and demanding greater information disclosure.

Board Ownership, as measured by the percentage of shares held by the board members, does not have significant impact on the overall voluntary disclosure as indicated in table 5.14. Nevertheless, table 5.15 shows a negative effect of board ownership on strategic information disclosure, and a positive impact on financial information disclosure.

In respect to voluntary information groups, the result of a negative impact of board ownership on the strategic information disclosure follows the prediction of agency theory adopted in this study. Theoretically, board members who hold stake in the firm are insiders who are responsible for protecting the stakeholders' interests through

closely monitoring the managers. Hence, monitoring by the other shareholders is less needed in this situation and consequently less voluntary disclosure is expected. In other words, voluntary disclosure is seen as a substitute for monitoring (Eng and Mak, 2003). However, the influence of board ownership turns to be positive in relation to financial information.

The inconsistent influence of board members' ownership regarding the two groups of information, strategic and financial, may be attributed to the nature of the role of the board of directors. Considering the view that the key role of board members is to draw the firm's strategy (Lim, Matolcsy and Chow, 2007), strategic information would be mostly a product of the board whereas financial information is usually supplied by the top management. Since strategic information is acknowledged by the board members, the need for disclosing this information becomes less important. In contrast, financial information is not determined by board members, which raises the need for demanding such information for monitoring purposes resulting in the voluntary disclosure level to increase. This explains the different results in relation to strategic and financial information disclosure.

Audit Committee Ownership also appears to be statistically non-significant as indicated in table 5.14. Audit committee members are expected to execute efficient monitoring over the preparation and communication of financial information. The insignificant association is surprising however this may be due to the fact that the strategic and financial information components are significantly associated in the opposite directions and possibly cancelling the impact on the overall disclosure level.

In terms of voluntary disclosure components, table 5.15 indicates a significant positive association between audit committee ownership and the disclosure of strategic information and a negative association with the disclosure of financial information. Similar to the board ownership, the key role of information in relation to audit committee members' responsibility may explain the opposite association regarding the two types of information. Due to the high materiality of financial information to the audit committee duties, financial information is more realized by audit committee members than strategic information. In the case of strategic information, the applicability to the audit committee responsibilities is low, so the need for disclosing strategic related information becomes important as a mean to

allow shareholders to monitor their interests in the firm. Therefore, ownership of audit committee tends to promote the disclosure of more strategic information and less financial one.

5.4.2.2 Boards Characteristics

Board Size is found to be negatively and significantly at the 1% level associated with the overall voluntary disclosure in the annual reports of GCC listed firms as shown in table 5.14. This negative association exists in two components of the voluntary disclosure indicated in table 5.15. For strategic information, the relationship is significant at the 1% level, and for financial information at the 5% level. The result in this study is consistent with the lack of communication notion (Lipton and Lorsch, 1992), which suggests that big boards are less effective in evaluating and monitoring the management due to communication deficiencies and poor coordination to reach a consensus on strategic decisions like disclosure policy (Yermack, 1996). The benefit of a higher monitoring capacity found in big boards may be offset by the cost of poor communication typically associated with large groups. Therefore, the study suggests that smaller boards in GCC firms are more cohesive and effective in monitoring the management's behaviour and hence better at promoting voluntary disclosure by the management. Hence, Hypothesis H8 is supported.

Board Independence is not significant in relation to total voluntary disclosure as indicated in table 5.14. Despite the positive association between the level of total voluntary disclosure and independent directors found in this study, hypothesis H9 is not supported due to a lack of statistical significance. Board independence on the GCC stock exchanges is questionable, which may explain its lack of significance in impacting the level of disclosure. Even though board composition and independence are governed by effective corporate rules and regulation in the MENA region, the major shareholders could damage the independence of the board by significantly intervening in the process of selecting board members (Piesse, Strange and Toonsi, 2012). For example, it is argued that family and government owners in GCC listed firms use their controlling rights to appoint board members (Al-Janadi, Abdul Rahman and Omar, 2012; Eulaiwi et al., 2016). This implies that the intervention exercised by major shareholders in the process of selecting board members undermines board independence and therefore reduces the effectiveness of its duty of

monitoring. In order to maintain board independence and its important role as a corporate governance mechanism, the GCC market authorities should enhance the role of the nomination committee in selecting independent members and ensuring an appropriate representation of the minority shareholders on the board.

Regarding voluntary disclosure components, a statistical significance power is only present in the strategic information group at the 1% level. More independent directors on the board significantly increases the disclosure of strategic information. This result is consistent with that of Lim et al. (2007) who finds that independent boards provide more voluntary strategic and forward-looking information. Compared to insider directors, independent directors who do not hold shares in the firms and have limited involvement in the firm daily operations, have incentives to acquire more voluntary information, especially that which represent key elements in the corporate strategic decisions made by the board (Lim, Matolcsy and Chow, 2007). Furthermore, this result supports the agency theory which suggests that independent directors are capable of limiting the managerial opportunistic behaviours and reducing the information asymmetry (Fama and Jensen, 1983), which maintains their reputation as experts in decision control (Cheng and Courtenay, 2006).

Board Compensation is insignificantly related to the total voluntary disclosure as shown in table 5.14. Table 5.15 also shows insignificant association between board compensation and the three groups of information. The result of the current study may indicate that the decision to disclose information beyond requirements is not influenced by whether or not the members of the board are well compensated. The reason underlying the lack of significance could also be the remuneration policy implied in GGC firms. In most cases, the board members' monetary compensation is not linked to firm performance or profit. Members are guaranteed a previously specified amount of compensation regardless of firm annual performance, which may affect their motivations regarding effective monitoring. Therefore, hypothesis H10 in the current study is not supported. This may imply that the structure of the compensation, rather than its amount, is more effective in motivating the board members to perform their responsibilities effectively.

Board Meetings in the current study are negatively and significantly associated with the overall voluntary disclosure score, as shown in table 5.14. This result is

opposite to the hypothesis in this study which predicts higher meetings are associated with increased voluntary disclosure. It is argued that more time the board members spend on discussing and evaluating the management behaviours, the more effective the board is in monitoring and demanding transparency for the shareholders (Payne, Benson and Finegold, 2009). However, the result of the current study shows more board meetings are associated with less voluntary disclosure. This negative and significant association may be explained by the view that board meetings' frequency may be linked to poor voluntary disclosure. One possible explanation of this may be is that board members may be meeting more to discuss the difficulties faced by the firm in this regard. It is documented that board meetings tend to increase following a decline in share price, suggesting that the firm value is adversely related to board meetings (Vafeas, 1999).

This negative association also appears in the components of the voluntary disclosure as illustrated in table 5.15, albeit less significantly. Strategic and non-financial information are associated negatively with the number of board meetings at the 10% level; yet financial information seems to be insignificantly influenced by the frequency of board meetings. The presence of this negative relation in voluntary disclosure groups again may be a sign of lack of due diligence or on the other hand higher number of meetings may be taking place to discuss the issues surrounding low level of disclosure.

Board Attendance does not appear to have a significant relationship with the level of voluntary disclosure or its components as indicated in tables 5.14 and 5.15, respectively. This result contradicts agency theory that views directors' attendance behaviour as a proxy for evaluating the effectiveness of the supervisory function of the board (Lin, Yeh and Yang, 2014). Director absence means less time spent on monitoring the managers and hence a less effective board in terms of exercising its duty to protect investors' interests and improve the level of disclosure. However, in the GCC context, time lost as a result of members' absence can be compensated through informal social gathering. Directors usually have close social ties which allow them to discuss firm matters outside the corporate setting. This may explain the insignificant negative impact of board absence on the effectiveness of the board.

Average Board Directorship is positive and significant at the 5% level in relation to the total level of voluntary disclosure as illustrated in table 5.14. This positive association supports the prediction of hypothesis H13; that boards with multiple directorships have wider experience and knowledge regarding monitoring the management and looking after the shareholders' interests, which are consequently reflected in better board effectiveness and higher voluntary disclosure. In addition, board members with multiple directorships are more likely to perform better in order to preserve their capital reputation (Gul and Leung, 2004). The results support Ferris et al. (2003) who find no evidence that multiple directorships damage directors' professional responsibilities or undermine their ability to monitor the management (Ferris, Jagannathan and Pritchard, 2003). The current study proves that the advantages of holding more than one directorship outweigh the busyness shortcomings.

In relation to voluntary disclosure groups in table 5.15, non-financial information and financial components are also positively influenced by the additional directorships held by the board members. Board members holding multiple directorships are more likely to be exposed to a wider range of financial reports, which strengthen their ability to promote disclosing more information.

Audit Committee Size is positively and significantly at the 1% level associated with the overall voluntary disclosure, thereby supporting hypothesis H14 in the current study. Specifically, table 5.15 shows that bigger audit committees are also associated with the higher voluntary disclosure of strategic and financial information. This result is similar to that found in prior studies (Ahmed Haji, 2015; Osariemen et al., 2018) suggesting that bigger audit committees have a higher level of knowledge and expertise that enables their members to effectively monitor the financial reporting and ensure the flow of reliable information to outside parties. Both audit committee size and board size in this study are significantly related to the voluntary disclosure level, but in opposite directions. While bigger boards are associated with less voluntary disclosure, bigger audit committees encourage more disclosure. The audit committee size results lean more toward the close monitoring role performed by this committee and hence bigger and better resourced committee appear to be enhancing disclosure. While the board size results support the poor communication notion usually associated with big decision-making groups. This difference found in GCC

firms can be explained based on the number of members. According to the descriptive statistics of the current study, the minimum size of the board found within the sample is 5 and the maximum is 18 members, whereas, the audit committee has a maximum of six members for the whole sample. This may imply that due to the small number of audit committee members compared to that in the board of directors, the members of the audit committee find it easier to communicate and hence the advantage of having multiple professionals becomes clear from the outcome of the audit committees and the level of disclosure for firms with a large audit committee. On the other hand, regarding the board of directors, the difficulty of communicating between the members seems to outweigh the advantage of having several experts on the boards.

5.5 Univariate Analysis

5.5.1 Independent T-test

Table 5.16 contains univariate statistics from the independent t-test, showing the significant differences in the mean values of the study variables for firms that are larger in size compared to those that are smaller. The sample is split into large and small sub-samples using the median of the firm size measured by total assets. Because firm size has been identified as having a positive association with disclosure in the literature, larger firms are expected to provide better voluntary disclosure and to employ better corporate governance mechanisms.

As expected, the statistics from the table show that on average larger firms provide more voluntary disclosure compared to smaller ones. The mean total voluntary disclosure as well as the mean of its three main components is significantly higher in larger firms than firms that are small in size. This finding highlights the fact that large firms are better resourced and therefore face less costs associated with voluntary disclosure, both in terms of production and proprietary costs (Watson, Shrives and Marston, 2002). Another explanation of the variation in the level of voluntary disclosure between large and small firms is that the agency costs tend to be higher in larger firms since the proportion of outside shareholders is expected to be more than that in smaller firms (Jensen and Meckling, 1976). Whereas in small firms, managers are mostly shareholders (Afrifa and Tauringana, 2015). Thus, providing greater disclosure is a tool used by larger firms in order to mitigate the agency costs.

Table 5.16 Independent t-test

Variable	Mean		T Value (sig)	Mean Rank		Z Value (sig)
	Big	Small		Big	Small	
VDT	0.139	0.109	6.339**	368.30	292.47	5.121**
VDS	0.134	0.118	4.006*	358.28	302.55	3.989**
VDNF	0.149	0.102	6.124**	369.54	291.22	5.324**
VDF	0.132	0.110	3.810**	352.39	308.47	3.014**
GOVOWN	0.155	0.079	5.142**	370.85	285.63	6.202**
FAMILOWN	0.025	0.036	-1.206*	325.41	334.63	-1.342
INSTOWN	0.254	0.290	-1.955**	319.04	341.06	-1.489
FOROWN	0.054	0.043	0.947	161.38	151.79	0.892
BOWN	0.045	0.093	-4.351**	159.67	209.87	-4.527**
ACOWN	0.005	0.010	-2.083**	143.87	190.27	-4.521**
BSIZE	8.53	7.68	6.676	375.07	283.37	6.353**
BIND	0.471	0.529	-2.733	268.29	304.21	-2.607**
BMEET	6.18	5.76	2.293*	301.65	270.62	2.286*
BATTEND	0.895	0.892	0.453	269.47	262.91	0.493
BCOMPSQ	964.49	594.19	9.098**	393.45	261.14	8.958**
AVGDIRECTOR	0.535	0.436	2.596	353.74	304.96	3.329**
ACSIZE	3.53	3.31	3.748**	302.28	268.26	2.957**
AUDFIRM (big4)	0.80	0.64	4.614**	356.70	304.14	4.544**
FIRMSIZE	9.380	8.367	30.734**	495.00	165.00	22.232**
Profitability (ROA)	0.056	0.061	-0.750*	312.37	348.74	2.454*
LEVER	0.448	0.336	7.235	381.97	278.72	6.957**
LIQUId	1.786	2.372	-4.520**	298.43	359.67	-4.135**

. ** Significant at the 1% level (2-tailed)

. * Significant at the 5% level (2-tailed)

In relation to the ownership structure variables, the government shareholdings are significantly higher in large firms than that in small ones. The tendency of the GCC governments' funds to hold a larger stake in big firms is understandable since they seek to achieve great returns on their investments in addition to some political and economic controlling goals. Family, institutional, board, and audit committee ownership on the other hand, is significantly higher in smaller firms than larger ones. The result also shows that for foreign ownership although higher in larger firms as expected, the difference is not statistically significant.

The study also reveals that the boards of firms that are larger in size meet more frequently, pay higher compensation to the board members, and have a bigger audit committee compared to firms that are smaller. The means of board size and additional directorships held by the board members are also higher in larger firms, but not statistically significant. Regarding board independence, the difference is not significant between large and small firms, yet the result indicates that smaller firms are more independent than larger ones.

For the control variables, the average audit performed by one of the big 4 audit firms is significantly higher in larger firms compared to smaller ones. This indicates that the 4 big audit firms tend to audit big firms more than small ones. For the financial variable, the mean of profitability and liquidity is significantly higher in smaller firms compare to those that larger in size. In addition, larger firms are more leveraged; however, the difference is not statistically significant.

5.5.2 Regression Analysis for Big and Small Firms

Given the ownership structure and board of directors attributes differences between big and small firms as illustrated in the descriptive statistics in table 5.16, the regression analysis is needed to recognize whether these factors affect the voluntary disclosure differently in big and in small ones. Table 5.17 and 5.18 show the regression results related to big and small firms. Since firm size is largely documented to have a positive impact on the level of voluntary disclosure, the regression of big and small firms provides further insight to the differences of the determinants of voluntary disclosure between firms that are big in size compared to those that are small. Firm size is measured as the total assets.

Big and small firms are slightly different in terms of total voluntary disclosure determinants as illustrated in table 5.17 and 5.18. Board size negatively impacts the total voluntary disclosure in both big and small firms. This emphasises the communication difficulties associated with large groups discussed earlier in this chapter, indicating that smaller boards in GCC firms have more coherence and effectiveness in performing their role of monitoring and promoting transparency. Firm size is also significant in both big and small firms suggesting that bigger firms provide more total voluntary disclosure. This result highlights that bigger firms are better resourced and experiencing higher agency costs according to the agency theory.

However, family ownership, board ownership, audit committee ownership, board independence, board meetings, board compensation, and other directorships influence the total voluntary disclosure differently in big and small firms. Family ownership results in more disclosure in big firms and less disclosure in small firms. This result may be contributed to the level of agency theory problem. The agency problem between family ownership and minority shareholders is more evident in bigger firms than in small ones due to the large number of shareholders in big firms. Board ownership results in an increase in total voluntary disclosure in big firms only and audit committee ownership negatively affects the disclosure in small firms only. Board independence and board meetings are negatively associated to the level of total voluntary disclosure in big firms only. Board compensation and profitability positively impact the total voluntary disclosure of small firms and other directorship impacted negatively on that.

Regarding the determinants of voluntary disclosure components, the results are different in big and small firms. In relation to strategic information, board ownership and board size in small firms are negatively related to the disclosure of strategic information. The results also indicate a positive impact of profitability on the disclosure of strategic information in small firms. On the other hand, strategic information in big firms are not associated with any of the ownership structure and board attributes variables. Only firms that are audited by one of the big audit firms are documented to provide more strategic information in firms that are large in size.

The disclosure of non-financial information is significantly different in big and small firms in terms of its determinants. Family ownership tends to impact the non-financial disclosure positively in big firms, and negatively in small firms. Audit committee ownership has a positive impact on non-financial disclosure in big firms and an adverse one in small firms. Board independence and board meetings seem to not have an impact on the disclosure of non-financial information in small firms while resulting in less non-financial disclosure in big firms. Foreign ownership, board size, and other directorship held by board members are all negatively impacting the disclosure of non-financial information in small firms while having no impact in big firms. Board compensation is positively related to the disclosure of non-financial information in small firms.

Financial disclosure determinants are also different in big and small firms. Government ownership and institutional ownership is negatively impacting the disclosure of financial information in big firms while not affecting this information in small firms. Family ownership promotes more financial disclosure in small firms and has no impact on financial information in big firms. Board ownership positively impacts the financial information disclosure in both big and small firms while audit committee ownership negatively influences the disclosure of financial information only in small firms. Board size, board independence and board meetings impact the disclosure of financial information negatively only in big firms while board attendance results in less disclosure in small firms only.

Table 5.17 Regression analysis for big firms

Variables	Total voluntary disclosure		Strategic		Non-financial		Financial	
	Coef	T-Value	Coef	T-Value	Coef	T-Value	Coef	T-Value
GOVOWN	-.082	-.964	-.104	-1.267	.009	.060	-.152	-2.175**
FAMILOWN	.231	2.848***	.105	1.341	.493	3.550***	.058	.880
INSTOWN	-.001	-.009	-.013	-.205	.129	1.177	-.114	-2.180**
FOROWN	-.276	-.803	.015	.046	-.622	-1.057	-.099	-.351
BOWN	.371	2.239**	.067	.417	.390	1.376	.533	3.932***
ACOWN	1.601	1.274	1.594	1.317	3.778	1.732*	-.359	-.349
BSIZE	-.018	-2.2772***	-.009	-1.510	-.015	-1.341	-.026	-4.854***
BIND	-.118	-1.875*	.024	.387	-.206	-1.911*	-.119	-2.299**
BMEET	-.011	-2.522**	-.006	-1.380	-.018	-2.383**	-.008	-2.147**
BATTEND	-.070	-.415	-.040	-.249	-.326	-1.131	.159	1.156
BCOMPSQ	3.985E-6	.142	3.352E-5	1.237	-2.745E-5	-.569	1.527E-5	.663
AVGDIRECTOR	.012	.535	-.023	-1.022	.033	.847	.013	.665
ACSIZE	-.004	-.286	-.005	-.411	-.018	-.848	.011	1.065
AUDFIRM (big4)	.042	1.635	.045	1.827*	.057	1.309	.026	1.260
FIRMSIZE	.063	1.848*	.051	1.537	.095	1.620	.039	.173
Profitability (ROA)	-.297	-1.081	-.433	-1.637	-.178	-.377	-.342	-1.520
LEVER	-.204	-1.671	-.177	-1.509	-.224	-1.071	-.202	-2.023
LIQUId	.002	.202	-.007	-.782	.014	.926	-.005	-.681
Industry dummies	Included							
Year dummies	Included							
Country dummies	Included							
F Test	3.46***		1.31		3.54***		4.69***	
R2	0.73		0.50		0.73		0.78	
Adjusted R2	0.52		0.12		0.53		0.62	

. *** Statistically significant at 1% level

. ** Statistically significant at 5% level

. * Statistically significant at 10% level

Variables definitions

Dependent variable: total voluntary disclosure
Independent variables: GOVOWN = percentage of shares own by the government; FAMILOWN = percentage of shares own by the family members; INSTOWN = percentage of shares own by the institutions; FOROWN = percentage of shares own by foreign investors; BOWN = percentage of shares own by the board members; ACOWN = percentage of shares own by the audit committee members; BSIZE = the number of members on the board of directors; BIND = percentage of independent directors on the board; BMEET = the number of meetings held by the board of directors during the year; BATTEND = percentage of board members' attendance during the year; BCOMPSQ = the square root for the amount of compensation paid to the board members during the year; AVGDIRECTOR = the average number of directorships held by the board members; ACSIZE = the number of audit committee members; AUDFIRM = a dummy variable, indicating occasions when the audit is performed by one of the big 4 audit firms; FIRMSIZE = the natural logarithm of total assets; ROA = return on assets; LEVER = percentage of total debt to total assets; LIQUID = percentage of current assets to current liabilities.

Table 5.18 Regression analysis for small firms

Variables	Total voluntary disclosure		Strategic		Non-financial		Financial	
	Coef	T-Value	Coef	T-Value	Coef	T-Value	Coef	T-Value
GOVOWN	-.036	-.408	-.044	-.388	-.101	-.600	.015	.261
FAMILOWN	-1.628	-2.223**	-.961	-1.028	-4.891	-3.522***	1.047	2.180**
INSTOWN	-.044	-1.242	-.032	-.709	-.091	-1.371	-.005	-.199
FOROWN	-.194	-1.605	.038	.248	-.482	-2.106**	-.088	-1.106
BOWN	-.081	-.943	-.211	-1.935*	-.199	-1.227	.124	2.206**
ACOWN	-.703	-2.361**	.506	1.331	-1.377	-2.438**	-.790	-4.046***
BSIZE	-.012	-2.400**	-.013	-2.019**	-.027	-2.741**	.002	.589
BIND	.049	1.106	.079	1.388	.080	.947	.002	.056
BMEET	-.002	-.512	-.005	-1.333	-.004	-.628	.003	1.297
BATTEND	-.011	-.109	-.065	-.520	.283	1.535	-.252	-3.944***
BCOMPSQ	.000	-3.418***	3.366E-5	.574	.000	-3.271***	.000	-4.976***
AVGDIRECTOR	-.042	-2.270**	-.040	-1.700	-.068	-1.949**	-.017	-1.425
ACSIZE	.012	.892	.020	1.199	.009	.351	.011	1.234
AUDFIRM (big4)	-.012	-.710	-.015	-.671	-.018	-.571	-.006	-.518
FIRMSIZE	.167	3.464***	-.018	-.285	.439	4.809***	.018	.569
Profitability (ROA)	.166	1.753*	.413	3.417***	.087	.483	.069	1.106
LEVER	-.052	-.804	.095	1.142	-.062	-.502	-.148	-3.472***
LIQUId	-.009	-1.173	-.007	-.654	-.014	-.947	-.006	-1.157
Industry dummies	Included							
Year dummies	Included							
Country dummies	Included							
F Test	3.17***		4.06***		3.98***		8.38***	
R2	0.80		0.84		0.83		0.91	
Adjusted R2	0.54		0.63		0.63		0.81	

. *** Statistically significant at 1% level

. ** Statistically significant at 5% level

. * Statistically significant at 10% level

Variables definitions

Dependent variable: total voluntary disclosure
Independent variables: GOVOWN = percentage of shares own by the government; FAMILOWN = percentage of shares own by the family members; INSTOWN = percentage of shares own by the institutions; FOROWN = percentage of shares own by foreign investors; BOWN = percentage of shares own by the board members; ACOWN = percentage of shares own by the audit committee members; BSIZE = the number of members on the board of directors; BIND = percentage of independent directors on the board; BMEET = the number of meetings held by the board of directors during the year; BATTEND = percentage of board members' attendance during the year; BCOMPSQ = the square root for the amount of compensation paid to the board members during the year; AVGDIRECTOR = the average number of directorships held by the board members; ACSIZE = the number of audit committee members; AUDFIRM = a dummy variable, indicating occasions when the audit is performed by one of the big 4 audit firms; FIRMSIZE = the natural logarithm of total assets; ROA = return on assets; LEVER = percentage of total debt to total assets; LIQUID = percentage of current assets to current liabilities.

In summary, the determinants of voluntary disclosure in big and small firms vary. Regarding ownership structure, family ownership is likely to have a positive impact on voluntary disclosure of big firms while in small firms it has a negative impact on total voluntary disclosure and its component of non-financial information , no impact on the component of strategic information, and a positive impact on the financial component. In small firms, Family ownership seems to only promotes the disclosure of financial information. Board ownership is increasing the voluntary disclosure of financial information in both big and small firms, and it results in less strategic information in small firms. This finding illustrates the importance of the type of information to the board of directors' responsibility, which results in demanding less strategic information, since such information is the product of the board, and more financial information, since they need it to form their decisions. Audit committee ownership results in more non-financial information in big firms and less financial information in small firms. Because financial information is usually known to audit committee members, the need for demanding this information and disclosing it is likely to be less important.

In terms of board attributes, the negative impact of board size is evident in both big and small firms, indicating that smaller boards have a positive impact on transparency and disclosure of firms in the GCC. Board meetings and board independence are negatively affecting total, non-financial, and financial disclosure in big firms only while having no impact on small firms' disclosure practice. This highlights the argument that increased number of board meetings during the year could be a sign for difficulties facing the firms. Moreover, the impact of board independence only became significant in the regression analysis of big and small firms, negatively impacting the disclosure of big firms. This result may indicate the intervention of big shareholders in the nomination and appointing of independent board members in the GCC firms, which results in impairing board independence. Big shareholders are likely to invest in big firms, which may explain the negative significant effect of board independence in big firms only. Furthermore, the evident of the negative association between voluntary disclosure and board independence in big firms only may be an indication of the inadequate knowledge of the firm and its business by independent members compared to insider board members (Anderson and

Reeb, 2004). It is expected that understanding all aspect of the firm is easier in small firms than bigger ones, which may explain why the negative impact of board independence is only found in big firms. Multiple directorships impact disclosure negatively in small firm only while having no impact in big firms. The insufficient resources found in small firms may explain the negative impact of multiple directorships on the disclosure of small firms. Board members in small firms need to participate in preparing board material for decision-making compared to board in big firms where resources are available and information is prepared for board members to enable them to take their strategic decision. Therefore, sitting on multiple boards may affect the effectiveness of board members in small firms where resources are limited and they need to exercise more efforts.

To sum up, the results show that a reduction in board size and an increase in family and board ownership improve the disclosure in big firms. Also, a reduction in board size, a decrease in family and audit committee ownership, and a diminution of number of directorship held by board members improve the voluntary disclosure in small firm.

In conclusion, all explanations suggested in the above discussion of the differences in the determinants of voluntary disclosure between big and small firms is a preliminary effort due to the limited literature comparing voluntary disclosure practice between big and small firms. Therefore, further research and examination is needed to either assert or negate the explanations of the results provided in the previous section.

5.6 Summary

This chapter investigates the impact of a number of ownership structure aspects and board attributes on the level of voluntary disclosure in the annual reports of GCC listed firms. It starts by presenting the descriptive statistics related to the dependent variable, voluntary disclosure, followed by the descriptive statistics for the independent variables for the pooled sample and for each country individually. This analysis reveals that the average level of total voluntary disclosure is low at 12 per cent with the highest mean found in UAE firms, at 20 per cent, followed by firms in

Oman and Bahrain at 13 per cent, then Saudi Arabia and Qatar at 12 per cent, and finally firms in Kuwait at 8 per cent. The results show a trend of increasing voluntary disclosure over the three years period from 2014 to 2016. The chapter then presents the results of the univariate analysis; particularly, it features the correlations among the different variables used in this study. In relation to ownership type, a number of variables show significant and positive correlations with the level of voluntary disclosure, government, family, and foreign ownership. This suggests that concentrated ownership in addition to government, family, and foreign ownership promote greater voluntary disclosure and transparency. In respect to board attribute variables, the results reveal that board size, board independence, and frequency of board meetings are all positively and significantly associated to total voluntary disclosure, suggesting that at least at the univariate level, larger, more independent, and more active boards are more effective in performing their role of representing the shareholders' interests and offer more information. There is also a positive association between both board compensation and the average number of cross-directorships with the level of voluntary disclosure, suggesting that highly compensated and experienced directors are expected to perform better and ensure a level of transparency for the shareholders.

Following the correlation analysis, the chapter presents the results of the multivariate regression analysis. In summary, the empirical finding reported in the total voluntary disclosure model finds that the key factors that promote the disclosure of more voluntary information in GCC firms are having family ownership, small boards, fewer board meetings, more multiple directorships held by the board members, big audit committees, and bigger firms. Other factors seem to have an effect on only a particular type of information. For example, the shares owned by the audit committee members and proportion of independent directors on the board in addition to firm profitability; all of these appear positively to affect the level of strategic information disclosure. The impact of institutional ownership is only notable in promoting non-financial information disclosure, and shares owned by the board members encourage the disclosure of financial information specifically.

Finally, the chapter continues with the univariate analysis by outlining the difference in the means for the study variables between firms that are larger in size compared to those that are smaller using total assets as a proxy for firm size. The

statistics show that, on average, larger firms provide more voluntary disclosure compared to smaller ones; the mean total voluntary disclosure as well as the mean of its three main groups is significantly higher in larger firms than in smaller ones. This finding supports the idea that large firms can afford the costs associated with the production and preparation of information and also the costs of such information being used by their competitors. This followed by a regression analysis of big and small firms in relation to voluntary disclosure and its three group of information. The results of the regressions indicate a difference in the determinant of voluntary disclosure between big and small firms.

Chapter 6: Conclusions

Corporate governance has attracted a significant attention during the last two decades, particularly after a number of failures and collapses of well-known corporations, resulting in either new or amended corporate structures, codes and guidelines. Most of the regulatory bodies worldwide have shifted their attention toward strengthening the corporate governance environment and increasing the level of transparency in order to prevent and detect any inappropriate behaviour in a timely manner. Therefore, financial reporting and disclosure are considered an important corporate governance mechanism that enables the stakeholders to evaluate the firm's financial position and management performance. The annual report published by the firm is the main source of regular, reliable, and comparable information (Botosan, 1997; Al-Razeen and Karbhari, 2004), which is used by outside stakeholders to monitor the management actions and detect any unacceptable behaviour that might potentially lead to a major corporate breakdown. The more information available, the better the evaluation and monitoring process is, therefore releasing financial and non-financial information by the firm voluntarily beyond that required by the laws and regulations is viewed as a way to increase transparency and enhance the corporate governance environment (Scaltrito, 2016).

This study seeks to examine voluntary disclosure and its determinants. Firstly, it aims to measure the level of voluntary disclosure provided by listed firms in six GCC countries; Saudi Arabia, Kuwait, Bahrain, Oman, the UAE, and Qatar. Specifically, the study sample consists of 220 non-financial listed firms with 660 collected annual reports relating to a three-year period; 2014, 2015, and 2016. Secondly, this study investigates the impact of selected ownership types and board of directors' characteristics on the level of voluntary disclosure by GCC firms. It seeks to identify the type of shareholders and board's attributes that enhance transparency and increase the level of voluntary disclosure. In order to answer the research questions of the study outlined in chapter one and achieve the study objectives mentioned above, a deductive approach and quantitative methods were considered suitable.

To achieve the first objective, a disclosure index consisting of 71 voluntary items was employed. The index was adapted based on that developed by Meek et al. (1995). The index is divided into three main groups: strategic, non-financial, and financial

information, and further categorized into 11 sub-groups; namely, general corporate information, corporate strategy, acquisitions and disposals, future prospects, information about directors, employee information, social policy and value added information, segmental information, financial review, foreign currency information, and stock price information. The reason for such a classification is to enhance our understanding of the assessment of the level of voluntary disclosure by looking at each group of information individually.

The second objective is achieved by utilizing a correlation matrix and a multivariate regression analysis in order to detect the possible relations between ownership structure, board attribute, and the level of voluntary disclosure. First, the correlation matrix is applied to examine the strength and significance of the relations between the extent of voluntary disclosure as a dependent variable and each of the independent and control variables. Then, in order to detect any significant relations between voluntary disclosure and any of the independent variables, four regression models are developed. All have the same independent variable (ownership structure, and board attributes) and four different dependent variables (total voluntary disclosure, strategic voluntary disclosure, financial voluntary disclosure, and non-financial voluntary disclosure). This modelling is employed to capture the impact of a number of characteristics on the level of voluntary disclosure and whether this impact differ based on the type of information disclosed.

The results of the descriptive analysis show that the level of voluntary disclosure provided by GCC listed firms is low at 12 per cent, ranging from as low as 3 per cent up to a maximum of 36 per cent. The level of voluntary disclosure by the UAE firms is the highest at 20 per cent while Kuwaiti firms provide the lowest voluntary disclosure at 8 per cent. In term of voluntary disclosure groups, GCC firms tend to disclose more strategic and non-financial information than financial information. The highest mean is found in general corporate and corporate strategy information, which belong to strategic information group, at 55 and 35 per cent, respectively, and the lowest mean disclosure is found in future prospect information and financial review information and, subgroups of strategic and financial information, at 1 and 3 per cent level, respectively. This results regarding voluntary disclosure groups indicate the need for increasing the disclosure level related to the financial aspect of the firm such

as segmental information, future forecasts information, and information on financial ratios.

In regards to industry type, the statistics reveal that the energy and services sectors provide more disclosure than do the manufacturing and real estate ones. Although the difference in the disclosure level between these industries is minor, it may indicate that the political pressure on some industries, such as the energy sector motivate companies to disclose more information as a means of avoiding government intervention or penalties. It may also indicate the proprietary costs in other industries such as the manufacturing sector which leads to a lower disclosure level by such companies in order to preserve their competitive positions.

The result of the regression analysis shows that the voluntary disclosure by GCC firs is determined by a number of corporate governance mechanisms. In regards to the ownership structure types, the findings show that ownership structure have an impact on the voluntary disclosure and its groups of information. Specifically, family ownership is found to have a positive influence on the total voluntary disclosure and particularly on non-financial and financial information. The results also indicate that Institutional ownership is positively influencing the disclosure of non-financial information. Both the presence of ownership by board members and audit committee members exert a significant impact on voluntary disclosure groups. While board ownership increase the disclosure of financial information and decrease the disclosure of strategic information, audit committee ownership influence the financial information disclosure negatively and the strategic information positively.

The analysis of the impact of board attributes on the level of voluntary disclosure shows significant associations. Board size is proven to have a negative impact on the total voluntary disclosure in GCC firms, more specifically on strategic and financial disclosure. Board independence exerts no influence on the total voluntary disclosure; however; from the findings it results in an increase of strategic information disclosure. This study also finds evidence of a negative association between board meeting and the total voluntary disclosure, particularly to the disclosure of strategic and non-financial information, highlighting the idea that more meeting during the year is a sign of board members attempts to deal with problems or difficulties encountering the firm. Moreover, the study finds evidence that the board members' expertise and

knowledge (measured in terms of multiple holding of board seats in other listed companies) has a positive impact on the level of voluntary disclosure, especially the disclosure of financial and non-financial information. The study also documents a positive association between audit committee size and the level of voluntary disclosure, more specifically on the strategic and financial information disclosure.

The analysis of the comparison between big firms and small firms in terms of their voluntary disclosure show differences in the determinants of the voluntary disclosure between them. Board size is negatively affecting the level of voluntary disclosure in both big and small firms. Family ownership promotes the disclosure of voluntary information in big firms while having a negative impact on total voluntary disclosure and non-financial disclosure in small firms. The results also indicate that an increase of board ownership in big firms result in more voluntary disclosure and an increase of audit committee ownership in small firms results in less voluntary disclosure.

Implications of the Study Findings

The focus of this thesis is on investigating the level of voluntary disclosure and its determinants in GCC listed firms. The results of this study have important implications for the regulators, enforcement bodies, and investors within the GCC stock exchanges. The low level of voluntary disclosure documented in the current study leaves market regulators with large scope for further improvements. The study has determined a number of ownership structure types and board characteristics that promote transparency and enhance the level of voluntary disclosure. These findings can assist market regulators in their efforts to increase transparency within the GCC capital markets by implementing corporate governance mechanisms, which have been proven to influence the voluntary information disclosure positively.

This study shows that the most important ownership type with regard to influencing voluntary disclosure in GCC listed firms is family ownership. Family ownership evidently enhances the level of total voluntary disclosure of both, non-financial and financial information. This result suggests that the regulators in GCC stock markets should focus on encouraging unlisted family firms to go public and make their shares available for trading in the GCC capital markets because such firms have been proven to provide more disclosure voluntarily, possibly in order to ease the

agency problem between family owners and minority shareholders, and to reserve their family name's reputation form one generation to the next.

The study also shows that institutional shareholders are positively related to the level of non-financial voluntary disclosure, such as information about the directors and employees and social responsibility information; however, they have a non-significant impact on the total voluntary disclosure or the other two groups of information. The lack of significance between institutional investors and the overall voluntary disclosure is primarily attributed to the immature community of institutional investors who are mainly local investors (predominantly government and family enterprises) with a minimal level of engagement and interactions with firms' related issues. This situation is an opportunity for market regulators to improve and diversify the institutional investors community to include foreign and local institutions, which are mostly investment funds with a high level of sophistication and knowledge that enable them to perform their essential role as a monitoring mechanism in the process of developing the GCC stock markets and promoting transparency.

The findings of this study provide an assessment of the disclosure practice in the GCC stock markets that might prove beneficial to potential investors, especially foreign investors, to help them to form their investment decisions regarding GCC related investment opportunities. The low level of voluntary disclosure documented in GCC listed firms may explain the minimal participation of foreign institutions even after the relaxation of the restrictions applied to foreign investors. Increasing the transparency within the GCC stock markets should make the corporate governance environment seem more attractive and less risky to foreign investors. Foreign investment participation is considered an important element in the process of developing the stock market. Foreign investors who come from more developed and transparent market environments are expected to transfer their knowledge and expertise, which will contributes to the development of both the emerging and developing markets.

The most important variables, in relation to the board of directors' factors that influence the level of voluntary disclosure are board size, board meetings, and cross directorships. Smaller boards that meet less frequently and contain members with

multiple directorships disclose more voluntary information. This implies that the market regulators should keep the number of directors on the board small to ensure more cohesive and effective decision-making and monitoring process. They should also consider not restricting the number of other memberships held by the board members to a minimum number since multiple directorships have proven to increase the knowledge and expertise of the members, which is then reflected in the functioning of the board. Finally, the frequency of the board meetings may not be an indication of board effectiveness and close monitoring but may, rather reflect the difficulties facing the firm that require an increased number of meetings to be held during the year.

The findings also suggest an insignificant relation between board independence and the level of voluntary disclosure except in the case of strategic information, which is significantly and positively related to the percentage of independent members on the board. The insignificant relation with board independence may imply that the process of selecting the board members is not transparent, indicating that the major shareholders exercise their power to select board members who represent their interests. This results in board members who are legally classified as independent yet have personal relations with the major shareholders who selected them. In order to maintain board independence and its role in strengthening board function, the GCC markets regulators and authorities should clearly set rules for selecting board members and ensure the presence of an independent nominating committee to oversee the selection process and confirm a fair representation of minority shareholders on the board.

Moreover, the results of this study shows a weak and insignificant association between board compensation and the level of voluntary disclosure, which may indicate that the decision to disclose information beyond the requirements is not influenced by whether or not the members of the board are well-compensated, or may be attributed to the compensation policy employed in most GCC firms whereby the compensation is not linked to the performance or profit achieved but is, rather, a specific amount that is previously determined, regardless of the financial results. Therefore, the market regulators and remuneration committees in the GCC should restructure their compensation in order to make it more effective in terms of motivating the board members and promoting good corporate governance. The results

of this thesis imply that the structure of the compensation matters more than the amount in terms of motivating the board members and ensuring their effective performance.

The analysis of big and small firms in relation to their voluntary disclosure practice has important implications for policy makers and market regulators. Given that the determinants of voluntary disclosure differ in big and small firms, market authorities may benefit from the results in this study in their efforts to increase market transparency and disclosure level.

In general, the results of the thesis have important implications for the market regulators and current and potential investors because it identifies the corporate governance factors that promote transparency and increase the level of voluntary disclosure. Therefore, the results will aid the market regulators to make changes and modifications to the current rules and regulations based on the study findings in order to increase the voluntary disclosure and market transparency. Investors may also benefit from the study findings by seeking to invest in firms that possess the corporate governance characteristics that have been proven in this study to have a positive impact on the level of voluntary disclosure.

Limitation of the Study

Even though the study has important findings and implications as illustrated in the previous section, there are a number of limitations that need to be addressed before these findings can be generalized. First, the study sample consists of 220 non-financial firms from seven stock exchanges. Therefore, generalizing the findings to financial firms, such as banks and insurance companies, or non-listed firms may not be applicable.

The study uses four regression models containing a number of ownership and board variables that have been chosen based on the previous literature or theoretical assumptions. However, the study fails to explore any environmental and contextual factors such as social and cultural norms, economic visions, and political connections, that may further explain the disclosure practice in the GCC setting. The study provides a description of these contextual aspects of GCC countries in chapter three as the key motivations for conducting the study in this context yet, due to

measurement difficulties, time limitations, and data unavailability, such aspects are not included in the analysis.

Regarding the theoretical framework of the study, the study has focused on agency theory to explain the relations between corporate governance factors and the level of voluntary disclosure. The selection of agency theory is based on the nature of the study variables. The study views the disclosure of information as a tool that the management may use to reduce the agency costs related to monitoring by providing more information voluntarily in order to enable the stakeholders to perform their role of monitoring and supervising over the management. However, the adoption of additional theories such as legitimacy theory (Williams, 1999), signalling theory (Akerlof, 1970), and political cost theory (Ness and Mirza, 1991), may extend our understanding of voluntary disclosure and provide a deeper base for exploring disclosure's determinants.

A further limitation is the study's reliance on annual reports (financial statements and board of directors or corporate governance reports) as the main source of financial and non-financial information. Even though annual reports are considered the most reliable source of information in †he GCC (Al-Razeen and Karbhari, 2004), there are other avenues relevant to the context of the GCC that may be used by the firm to disclose voluntary information, such as the companies' websites.

The study uses a disclosure index that was created by Meek et al. (1995) after modifying it to fit the disclosure requirements of the six GCC states. The index consists of 71 items, which are voluntary in all GCC firms. This number of items is reasonable compared to the disclosure literature; however, some firms may not be credited for disclosing voluntary information because such information is not included in the index. This may imply that the index used to measure the voluntary disclosure level does not fully capture all of the voluntary information provided by the firms; nevertheless, it contains a realistic number of items that cover 11 groups of information, aiming to cover as many of the voluntary items in the GCC context as possible.

While these limitations are recognized, they do not weaken the significant contributions to the knowledge of voluntary disclosure and the factors influencing it in the context of GCC firms. These limitations can be viewed as opportunities for

future researches and extending our understanding of the voluntary disclosure practice and its determinants.

Suggestions for Future Research

The limitations of the current study open up new avenues for further research. First, examining the level of voluntary disclosure in relation to contextual factors such as social, cultural, economic, and political variables may reveal new relations and determinants that add to the generalizing scope of the results to include other developing countries that are characterized by similar factors.

It would also be interesting to study the voluntary disclosure by non-listed firms and firms in the financial sector to understand their motivations in providing more disclosure, taking into consideration that the users of these firms differ from those of non-financial listed ones in terms of both their expectations and their need for the information.

The current study documents a significant positive impact of family ownership on the level of voluntary disclosure, which calls for further research on the disclosure policy of family firms that could usefully explore whether this increased voluntary disclosure is solely determined by the family ownership or by other factors, such as the presence of family members on the board.

The existing literature on voluntary disclosure almost entirely relies on agency theory in explaining disclosure practices. The use of other theoretical framework may lead to new findings and interpretations.

A further question raised by this study is to what extent is the presence of other directorships held by the board members beneficial regarding the voluntary disclosure in particular and corporate governance practice in general? The findings of the study also raise the question of the optimum number of members of the board to achieve a balance between the level of knowledge and expertise and the effectiveness of the communication and decision-making. In addition, the findings regarding board meetings require more in depth investigation into whether the increased number of meetings reflects board effectiveness in performing its role of monitoring or are instead a sign of poor performance and business difficulties that need more attention from the board. All of the previous questions suggest the need for qualitative research.

The current study documents a variation in the disclosure of three types of information, strategic, non-financial, and financial information and their association to corporate governance mechanisms. Further research on the disclosure of these types of information is an opportunity to expand our understanding of the motivations of the disclosure in each information group.

The investigation of the disclosure determinants in big and small firms addressed in the current study may need further examination in order to validate the conclusions and explanations that can be drawn from this study.

Finally, future research might consider examining other variables in relation to the level of voluntary disclosure, such as the level of mandatory disclosure, the presence of a member of the royal family in the board, and the presence of family members on the board.

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