



# Corporate Governance Disclosure Practices and Performance of Islamic Banks in GCC Countries

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## Abstract

This paper investigates the impact of the level of corporate governance disclosure on bank performance by constructing a corporate governance disclosure index (CGDI) for 27 Islamic banks operating in five Arab Gulf countries. Using content analysis on the banks' annual reports for 3 years (2011-2013), the composite index construction uses information on six important corporate governance mechanisms, namely board structure, risk management, transparency and disclosure, audit committee, Sharia supervisory board and investment account holders. The results demonstrate that Islamic banks adhere to 54% of the attributes addressed in the CGDI. The most frequently reported and disclosed elements are Sharia supervisory board followed by board structure and risk management. The findings related to countries revealed that only two countries, the United Arab Emirates and Bahrain, possess a higher level of CGDI. Our regression results provide evidence that Islamic banks with higher levels of corporate governance disclosure report high operating performance measured by return on assets and return on equity. Finally, as of the effect of internal and external factors, we identified four variables that were associated with bank performance, namely size, equity, risk and concentration.

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*Keywords:* Governance mechanisms, Corporate Governance Disclosure Index, Bank performance, Islamic banks, GCC countries

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## 1. Introduction

A series of high profile corporate failures and a succession of financial crises over the past 20 years have raised several questions and focused attention on corporate governance issues, especially for financial institutions. In the banking system, corporate governance plays a special role due to the uniqueness of these organizations. According to Levine (2004), financial institutions have their particularities such as higher opaqueness, heavy regulation and intervention by the government, which require a distinct analysis of corporate governance issues. In addition, corporate governance has a higher level of importance and assumes a crucial role since banks mobilize public savings, depend on public trust and have more diverse stakeholders (Darmadi, 2011). The poor governance of banks has resulted in the failure of banks during crises, as well as financial scandals. Kirkpatrick (2009) concludes that the current global financial crisis can be attributed to failures and weaknesses in corporate governance arrangements in financial services companies. Some academic studies also emphasize that flaws in bank governance played a key role in the performance of banks (Diamond and Rajan, 2009; Bebchuck and Spamann, 2010; Beltratti and Stulz, 2012).

Islamic banks have had a similar experience of collapse as conventional banks and have been also exposed to corporate governance failures. According to Grais and Pellegrini (2006), the failures have occurred due to the board of directors' collusion with the top management, audit failures, the lack of consideration for minority shareholders' interest and the excessive risk-taking by management. With regards to these failures and since Islamic banks are exposed to additional risks (relating to Mudaraba investment account, risk of sharia incompliance) compared to conventional banks, an important challenge for an Islamic bank is to improve the quality of its corporate governance. Iqbal and Mirakhor (2004) stated that corporate governance from an Islamic perspective can be described as a system that has a critical goal which is to preserve stakeholder's rights that might be exposed to any type of risk as a result of organization's actions.

To increasing stakeholders' confidence in the Islamic financial system, Islamic banks need to have a better Sharia compliance structure, which ensure and offer Sharia-compliant operations and services. Sharia compliance in Islamic banks refers to the activities and operations of Islamic banks that need to be free from any elements of sinful activities, Sharia of risk, exploitation as well as having real a economic purpose to finance socially productive sectors in the economy (Mohamed, 2007). In addition, according to Abu-Tapanjeh (2009), accountability is entitled to produce a true and fair disclosure and transparency. Hence, true disclosure of financial acts, and accurate and adequate information should be freely available to the users. Therefore, Islamic banks are deemed to have a reliable governance model with an extremely high level of accountability in order to protect and safeguard the rights and interest of their stakeholders (shareholders, investment account holders, management, creditors, employees). In consequence, Islamic banks are expected to disclose the characteristics of their corporate governance to their stakeholders, enabling them to assess how the bank is governed and how their investments is managed in sharia-compliant and prudential manners (Darmadi, 2011). Such disclosure can enhance monitoring and internal control and improve firm performance. Many empirical studies have been conducted, highlighting the issue of disclosure on firm performance (e.g. Patel, 2002; Hossain, 2008; Srairi and Ben Douissa, 2014).

Accordingly, this study attempts to examine this issue by looking at how the amount of information related to corporate governance practices and disclosed by Islamic banks affects their performance. Two questions are worth asking: How is corporate governance measured and what is the relationship between corporate governance disclosure and performance? Instead of considering a single measure of governance, we conducted in depth assessments of corporate governance practices and proposed a set of corporate governance categories based on corporate governance principles of the Organization of Economic Cooperation and Development (OECD), guidelines and standards issued by the accounting and auditing organizations of Islamic financial institutions (AAOIFI) and the Islamic financial services boards (IFSB) as well as relevant literature.

Then, we developed a composite corporate governance disclosure index (CGDI), which consists of 63 attributes classified under six major governance categories, namely board structure, risk management, transparency and disclosure, audit committee, Sharia supervisory board and investment account holders. Bhagat et al (2008) suggest that constructing a corporate governance index is beneficial as it combines the various elements of a firm's governance system into one number, which will be used to judge the quality of governance. Since Islamic banks operate under vastly different regulatory regimes and political and economic conditions across the globe, the sample banks were selected from countries, which share common geo-political and socio-economic objectives (Gulf Cooperation Council: GCC). Our CGDI is constructed for 27 commercial Islamic banks in five GCC countries (Bahrain, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates) using information from the annual reports of the banks for 3 years and for the period 2011-2013.

The association between corporate governance and firm performance has been extensively studied for the developed markets in the finance literature (e.g., Gompers et al. 2003; Brown and Caylor, 2006; Bhagat and Bolton, 2008; Adams and Mehran, 2012). The empirical studies for this issue generate inconclusive results. Some studies (Lee et al., 1992; Gompers et al., 2003) have shown that good governance practices have led the significant increase in firm performance, higher productivity and lower risk of systematic financial failure for countries. However, other studies find a negative connection between corporate governance and firm performance (Hutchinson, 2002). Regarding Islamic banks, empirical assessment of corporate governance disclosure practices and its impact on bank performance is generally sparse. Therefore, the second objective of this paper is to assess the relationship between the level of corporate governance disclosure of Islamic banks proxied by composite disclosure index and three measures of bank performance: return on assets, return on equity and Tobin's Q. For this purpose, we apply an econometric model and we regress measures of performance on CGDI. Bank-specific, macroeconomic and financial industry indicators are also expected to have an impact with performance and are included in our model.

This study contributes to the existing literature in several ways. To our knowledge, it is the first study for the GCC countries that examines the relationship between performance and corporate governance disclosure practices using publicly available information extracted from the annual reports of Islamic banks and for a period of three years. This technique leads to objective results rather than collecting details

using a survey method, which can be subjective in nature. Second, we developed a comprehensive measure of CGDI specifically for Islamic banks. This index comprises a large set of corporate governance dimensions that will greatly enhance the literature on corporate governance in Islamic financial institutions. Finally, in our regression model, in addition of CGDI we examine a variety of variables by introducing internal and external factors that may be important in explaining the performance of Islamic banks.

The rest of the paper is structured as follows. Section 2 provides a review of literature related to the main corporate governance components considered for preparing the CGDI model. Section 3 presents the methodology used in the construction of this index and describes data and variables employed in the study. Section 4 assesses the quality of corporate governance of Islamic banks in GCC countries and discusses the empirical results concerning the relationship between corporate governance and Islamic bank performance. Section 5 is a summary and conclusion of the study.

## **2. Review of the Literature: Components of the Corporate Governance Index**

Corporate governance refers to the way an organization is directed, administrated and controlled. According to Blair (1995), corporate governance refers to the whole set of legal, cultural and institutional arrangements that determine what public corporations can do, who controls them, how that control is exercised, and how the risks and return from the activities they undertake are allocated. In addition, the corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs (OECD, 2004). Corporate governance covers and swivel around a wide range of arrangements and aspects. Scholars classify them into internal and external mechanisms. Given the large number of aspects that are covered by corporate governance, we only focus in this paper on internal practices of banks. An overview of the banking literature reveals that the main internal governance characteristics reported in most of the studies related to conventional and Islamic banks are: board of directors, risk management, transparency and disclosure, audit committee, Sharia supervisory board and investment account holders.

### **2.1. Board of Directors**

The board of directors is considered as one of the most important dimensions of effective corporate governance since it becomes a key mechanism to mitigate conflicts between shareholders and managers (Klein, 1998) and to avoid any conflicts of interest between the bank and the regulator (De Andres and Vallelado, 2008). In addition, the board of directors has the power to hire, terminate and compensate top management (Johnson et al, 1996). The characteristics of the board, concerning board size, autonomy, structure and effectiveness, have been widely analyzed in both theoretical and empirical research. Several studies have revealed that larger board facilitates effective monitoring and provides banks with greater heterogeneous expertise, knowledge and skills (Chahine and Safieddine, 2011; Klein, 2002). Therefore, larger boards are associated with higher performance (Cooper, 2008; Aebi et al, 2012). However, the positive effect of larger boards may be offset by problems of communication, coordination and poorer decision-making processes (De Andres and Vallelado, 2008; John and Senbet, 1998). Regarding the board composition, particularly the proportion of independent members, several studies find a strong connection between the presence of outsiders and bank value (e.g. Black et al, 2006; Ferrero-Ferrero et al 2012; Beiner et al (2006). Boards with a larger proportion of independent directors lead to better monitoring, as well as wider perspectives and expertise (Pearce and Zahra, 1992). However, according to De Andres and Vallelado(2008), an excessive proportion of non-executive directors could damage the advisory role of boards since it might prevent bank executives from joining the board. Yermack (1996) and Klein (1998) suggest that a high percentage of independent directors leads to poor performance. The board independence characteristics can also be analyzed by the separation of the roles of board chair and CEO (chief executive officer). Jensen (1993) claims that allowing a CEO to hold a board chair position harms board independence, compromises the strength of the boards' governance, generates supervisory dysfunction and increases the likelihood of earnings manipulation. In addition, this situation raises agency

problems and decreases firm value. Rechner and Dalton (1991) report that firms with a CEO duality structure consistently outperform firms with a CEO non-duality structure. The issue of the internal functioning of the board and particularly the frequency of board meetings has also been highlighted in corporate governance studies. According to De Andres and Vallelado (2008), the more frequent the meetings, the closer the control over managers, the more relevant the advisory role, factors that lead to a positive impact on performance. The number of internal committees in the board has also been analyzed in the literature. The board of directors can establish board committees (nominating committee, remuneration committee, audit committee, risk monitoring committee, and so on) to support its function and to conduct independent monitoring of the firm. Klein (1998) suggests that because of the need for expert-provided information about the firm's activities, a number of committees are created to assist board in the decision making process.

## 2.2. Risk Management

For effective risk management at the bank level, the board of directors has to establish a risk management division that is independent from the other units of the bank (Chapra and Ahmed, 2002). This committee with independent members has as mission to identify, measure, monitor and control the various types of risks (market risks, credit risks, liquidity risks, operational risks, legal risks, compliance risks, reputation risks) undertaken by the Islamic bank (Darmdi, 201; Dedu and Chitan, 2013). The existence of a risk management committee (RMC) is expected to improve risk management and to increase bank value. However, this result is not confirmed in the literature. Aebi et al (2012) found a negative influence of RMC and ROE.

## 2.3. Transparency and Disclosure

Pillar 3 of Basle 2 encourages greater disclosure by banks to strengthen market discipline and accordingly to promote good governance. In addition, in Islamic economy, accountability is expected to produce a true and fair disclosure and transparency (Abu-Tapanjeh, 2006). The disclosure of corporate governance practices, board remunerations, ownership structure, risk management policies, accounting standard followed by banks and the disclosure of corporate social responsibility reduce information asymmetry and facilitate monitoring of management by the stakeholders (Klein et al 2005). Several studies find that detailed information disclosure reduces capital cost and has a positive impact on firm performance (Byun et al 2008; Cheung et al 2007). Another important point involved in disclosure for Islamic bank is to provide the users with adequate information about Zakat (in terms of Zakat base, beneficiaries, and so on), which is the third pillar of Islam. Islamic banks are required to pay Zakat to comply with their regulatory environment and in some times on behalf of their shareholders (Vinnicombe, 2010).

## 2.4. Audit Committee

The audit committee (AC) is one of the most important governance mechanisms that is responsible to ensure that a bank produces relevant, adequate and credible information which is released in a timely manner to shareholders, creditors, investors and other stakeholders (Sarkar et al. 2012). The AC has many responsibilities. It supports the position of the internal audit function and submits management's irregularities and other relevant managerial and financial issues to the board of directors (Pathan et al. 2007). It is also responsible for enhancing and maintaining the internal auditors' independence in order to enable them to carry out their duties. In addition, according to Sarkar et al. (2012) the AC ensures that the external auditors receive all the necessary information that are required to carry out the auditor process independently and effectively and that the functioning of the external auditors is not subject to the pulls and pressures of the inside management. To play these roles, independence, size and financial expertise are very important critical issues for this committee. In most countries, the regulations require the AC to have a minimum of two-thirds of its members as independent directors. Banks that have larger ACs are committed to seeing that a quality accounting process is in place. In consequence, a larger AC could lead

to a higher level of transparency, thus providing strong monitoring (Anderson et al. 2004). It is also mandatory that the committee members, or at least one of them, should have the financial or accounting expertise in order to understand the technical and control issues related to internal and external audit. In the literature, the relation between audit-related governance factors and firm performance is mixed. Klein (2002) finds a negative association between earnings management and audit-committee independence. Frankel et al. (2002) also reveal the same findings. However, the study of Brown and Claytor (2004) indicates that independent audit committees are positively related to dividend yield, but not to operating performance or firm valuation.

## 2.5. Shariah Supervisory Board (SSB)

Each Islamic financial institution must institute a supervisory board called the Sharia supervisory board (SSB), which acts as an additional layer of governance. The first role of SSB is to ensure that banks operate in accordance with Sharia law. In addition, according to Hassan and Mollah (2012), SSB acts as an independent control mechanism in restraining the board of directors or other governance agents from engaging in excessive risk taking. Further, the SSB as an internal governance mechanism would encourage management to be transparent, including in corporate governance disclosures. Farook et al (2011) in investigating the determinants of corporate social responsibility disclosures of Islamic banks find that the characteristics of the SSB influence the level of social disclosure. Like the external auditors, the SSB acts as independent reporters on the operations of the bank. It is not subject to instructions and influences by management, the board of directors, or shareholders (Nienhaus, 2007). To improve the function of this board, the AAOIFI (2010) has published a set of governance standards related to the composition and role of the SSB (1). For instance, each board must be composed of at least three members. The board must produce an annual report, which must be published with the bank's financial statements (Vinnicombe, 2010). However, the absence of mandatory implementation of such standards across the industry, the roles and responsibilities of the SSB vary from a bank to another. Since, the role of SSB is limited to reviewing the bank's contracts before their implementation (*ex ante*), the AAOIFI proposed for banks to install a type of internal audit function known as the internal Sharia review (ISR). This structure verifies the implementation of the contract (*ex post*) and the SSB will tend to depend on the findings of ISR to issue their report to the shareholders.

## 2.6. Investment account holders (IAHs)

To mobilize funds from customers, Islamic banks call for contracts based on equity participation, profit sharing (*Mudharabah*), and profit-and-loss-sharing (*Musharakah*), which create IAHs (Safieddine, 2009). An investment account is an instrument of neither pure debt nor pure equity. Greuning and Iqbal (2007) state that IAHs are like quasi-equity holders, but without participation in the governance of the Islamic bank. These accounts can be restricted or unrestricted and unilateral or bilateral. The relationship between the Islamic bank and IAHs involves a number of governance issues. IAHs have no right to intervene in the management of the funds. They are not granted the monitoring and control rights that shareholders enjoy and their cash flow rights are separated from the rights to control the investments. As a result, IAHs do not have any direct recourse to the bank to protect their rights. In the absence of a right to manage, the only choice possible to IAHs is the right to withdraw their funds when there is dissatisfaction in the bank's performance (Sulaiman et al. 2011). However, in the case of unrestricted IAHs, some countries (such as Qatar and Malaysia), the banking supervisor takes the view that Islamic banks should not allow these accounts to suffer a loss of their capital or a major fall in their returns (Al-Sadah, 2007). According to Abdel Karim and Archer (2006), in order to mitigate the effects of this practice, some Islamic banks introduced the profit equalization reserve (PER)-(2) or Investment risk reserve (IRR)-(3). Al-Sadah (2007) argued that the introduction of an IRR may give rise to moral hazard problems (akin to deposit insurance schemes), since the existence of these reserves in Islamic banks is likely to encourage management to engage in excessive risk-taking.

### 3. Methodology and Data

#### 3.1. Construction of Corporate Governance Index

Various CGDI have been developed in the finance literature, particularly in developed countries. A few works have been done on emerging markets and the majority of them concern non-financial firms. For example, using a sample of 95 listed companies in the UAE, Hassan (2012) developed a CGDI, which consists of 42 attributes related to ownership structure, board structure, external auditing and transparency. Recently, in the GCC countries, Al-Malkawi et al. (2014) constructed a CGDI based on 30 items under three governance categories: disclosure, board effectiveness and shareholders rights. In the context of Islamic banks, very limited studies exist in the literature (for example, Sulaiman et al. 2011; Hassan and Mollah, 2012). To fill this gap, a comprehensive CGDI is constructed to measure governance quality with a variety of different governance practices being followed by financial institutions in GCC countries. The scoring of the index for each bank is conducted through a content analysis based on the information which can be extracted from the annual reports of the bank or from their website. Increasing corporate governance disclosures in annual reports may be interpreted as a way by which banks try to secure the level of confidence and trust of their stakeholders (Sulaiman et al. 2011). The dimensions and items considered for preparing the index are carefully developed from a number of studies and international benchmarks (4). Based on these standards, we construct a composite governance index which comprises 63 items broken into six components as follows: board structure, risk management, transparency and disclosure, audit committee, Shari'a supervisory board and investment account holders (see appendix 1). Similarly to several studies (e.g., Darmadi, 2011; Al-Malkawi et al. 2014), in scoring items, the CGDI was developed by using the dichotomous, which the score of 1 if the bank discloses the item and 0 if it is not, without any penalty for each undisclosed item. All items are equally weighted. We choose to construct an unweighted index since this approach has an advantage of treating every attribute under a sub-index symmetrically without having to make any subjective judgments on the relative importance of each attribute (Sarkar et al 2012).

The scores will be calculated for each bank and for each dimension of corporate governance as follows:

$$CGDI_j = \frac{\sum_{i=1}^{n_j} X_{ij} \times 100}{n_j}$$

Where  $CGDI_j$  represents corporate governance for the bank  $j$ ,  $X_{ij} = 1$ , if the bank discloses  $i$ th item and 0 if  $i$ th item is not disclosed,  $n_j$  is the number of items expected to be disclosed by the bank. Theoretically, the CGDI could range from 0 to 100%. A bank that reports all 63 items will score 100%. We construct the CGDI for each country in two steps. In the first step, we calculate a sub index for each of the six corporate governance components and then we average the values of the six sub-indices to arrive at CGDI for each bank. The higher the index, the more transparent the bank is in disseminating information on its corporate governance practices in the annual report. In the second step, the scores computed for each bank in the respective country are summed up and then averages are calculated to find the overall CGDI for the whole country.

#### 3.2. Variables and Econometric model

In the banking literature, it appears that there are no agreed proxies for bank performance measures. A great number of company performance measures have been used in prior studies. In this study, we use three alternative measures of bank performance in line with corporate governance research. Our first measure of bank performance is the bank market-to book value ratio (Q), which we calculate as the book value of total assets minus the book value of common equity plus the market value of common equity divided by the book value of total assets as the usual proxy for Tobin's Q. Following several studies (Rehman and Mangla, 2010; Aebi et al. 2012; Dedu and Chitan, 2013), we use two other measures of bank performance to test the robustness of the analysis, the return on assets (ROA) and return on equity (ROE). We calculate ROA as the net income divided by average total assets and ROE as the banks' net income divided by the book value of equity. Our primary focus in this study is the impact of the quality of corporate governance on bank performance. However, we need to control for other variables that could

potentially affect the performance of Islamic banks. In the existing literature, bank performance is usually expressed as a function of internal and external determinants. According to Sufian and Habibullah (2010), Internal determinants are factors that are mainly influenced by a bank's management decision and policy objective and external determinants reflect the economic and legal environments where banks operate. To avoid the omitted variable bias, we control in this study internal and external variables, which in the previous literature were found to affect the performance of banks.

**Table 1: Variables' description**

Variables	Definition and measure
<b>Dependent variables</b>	
- Tobin's Q	Book value of total assets minus book value of common equity plus the market value of common equity divided by book value of total assets.
- Return on assets	ROA: Net income divided by average total assets.
- Return on equity	ROE: Net income divided by book value of equity
<b>Independent variable</b>	
<u>Corporate Governance Disclosure Index</u>	CGDI: This index is calculated through a content analysis based on six components (63 items) extracted from the annual reports of the bank.
<u>Bank-specific variables</u>	
- Size	Natural logarithm of total assets.
- Bank equity	Equity to total assets.
- Bank risk	Net loans to total assets.
<u>Financial and Economic indicators</u>	
- Banking sector development	Credit to private sector/GDP
- Bank concentration	Assets of 3 largest banks to total assets of all banks in the country.
- Level of economic development	Annual real GDP growth
- Inflation	Growth of the consumer price index

As internal determinants, we consider three characteristics of banks related to bank size, bank equity and bank risk. Bank size is proxied by the logarithm of total bank assets in million of US dollars. Size might be an important determinant of bank performance if there are increasing returns to scale in banking. Bank equity is calculated as the book value of equity divided by total assets. According to the banking literature, this variable may influence bank performance positively. Bank risk is measured by the ratio of net loans to total assets. Theory suggests that increased exposure to credit risk is normally associated with decreased profitability. However, if borrowers are able to repay debt and interests, we can say that the higher this ratio, the higher the performance of banks (Srairi, 2009).

Regarding external determinants, we choose two vectors of variables related to financial industry and macroeconomic environment. As financial industry variables, we examine the impact of banking sector development and the bank concentration. The first variable is proxied by credit to private sector divided by GDP. This ratio is expected to impact performance positively. Bank concentration is represented by the fraction of bank assets held by the three largest banks in the country. We expect that a highly concentrated market may have a negative impact on bank performance. We control also for the level of economic development. Two macroeconomic indicators are used: GDP per capita and inflation (measured by the growth of the consumer price index). The first indicator is expected to have a positive impact on bank's performance. However the association between inflation and performance is ambiguous in the banking literature.

To estimate the impact of corporate governance on Islamic bank performance, we used multiple regression analysis and we estimated the following linear model:

$$\text{Performance}_{it} = f(\text{CGDI}_{it}, \text{Bank level control}_{it}, \text{Country level control}_{it}) + \varepsilon \quad (1)$$

Where  $i$  subscripts the bank,  $t$  denotes the time dimension, performance as an dependent variable is measured by Tobin's Q, ROA and ROE, CGDI represents the corporate governance disclosure index for each bank, bank level control is a vector representing bank size, bank equity and bank risk, country level control includes banking sector development, bank concentration, two macroeconomic indicators (GDP per capita and inflation) and  $\varepsilon$  is the random error term.

In estimating the above equation, we use the OLS technique. In presence of panel data, we have attempted to apply fixed effect or random effect models, but neither of those was appropriate with our data for several reasons. First, our main variable, CGDI, used in this equation does not vary much over time for each time. Second, our model contains many variables like banking sector development, bank concentration and macroeconomic indicators, which are the same for all banks in a country for a specific year. Then, according to Baltagi (2005), applying fixed-effect estimation would lead to massive loss of the degrees of freedom.

### 3.3. Sources of Data

Our sample comprises 27 commercial Islamic banks operating in five GCC countries with 6 banks in Bahrain, 8 banks in Kuwait, 3 banks in Qatar, 3 banks in Saudi Arabia, and 7 banks in the United Arab Emirates. The period covered by the study is 2011–2013. We only sampled banks with a minimum of three consecutive annual reports which are available on their website. The financial and accounting information of Islamic banks are collected from the Bankscope database of Van Dijk's bureau. The annual stock prices of banks are obtained from the financial market in each country. The sources of macroeconomic data and the structure of banking industry for the GCC countries are the annual reports of the central banks of the respective countries and the International Financial Statistics (IFS).

Since Gulf countries have different currencies, all the annual financial values are converted in US dollar using the appropriate average exchange rates for each year. Also, to ensure comparability of data across countries, all values are deflated to the year 2011 using each country's consumer price index (CPI).

## 4. Empirical results

### 4.1. Descriptive statistics of corporate governance index and its components

Table 2 presents the summary statistics of total corporate governance index (CGDI) and its 6 dimensions. These figures are based on the averages of three years 2011, 2012 and 2013. The overall mean value of CGDI is 54% and it ranges from 43% to 61%. It means that the Islamic banks in the sample comply with 54% of the internal mechanisms of corporate governance studied in this paper. The range of overall CGDI is 18%, which shows that there are wide variations in terms of governance quality among Islamic banks in GCC countries. This is also confirmed with the higher CGDI standard deviation of 11%. However, the average rating of CGDI shows that the majority of Islamic banks adhere to factors considered as ideal for ensuring a better corporate governance aspect. Further, it can be observed from table 2 that the mean and median are similar suggesting that the distribution of CGDI is symmetric.

**Table 2: Summary statistics of corporate governance index (CGDI)**

Dimension of corporate governance	Mean	Median	Minimum	Maximum	Standard deviation
Board structure	64%	57%	51%	77%	14%
Risk management	56%	59%	49%	61%	9%
Transparency and disclosure	51%	44%	35%	58%	12%
Audit committee	46%	39%	24%	51%	17%
Sharia supervisory board	71%	72%	62%	80%	16%
Investment account holders	37%	35%	18%	42%	11%
Overall CGDI	54%	56%	43%	61%	57.5%

Concerning the sub-index of categories of corporate governance, table 2 shows that all dimensions of the index, except the AC index (46%) and IAHs index (37%), have contributed to the improvement of the CGDI. The low score of AC index can be explained by the fact that none of the GCC countries requires Islamic banks to establish audit, compensation or nomination committee, although some of them do encourage this (Safieddine, 2009). In addition, the disclosure practice of the GCC Islamic banks on the dimension related to IAHs is relatively insufficient. None of the sample banks discloses information relating to the risks and rights of IAHs and to investment and asset allocation. Further, the methods and bases used in allocating and distributing the profit between shareholders and IAHs are missed in the

majority of Islamic bank's annual report. It is noted that Islamic banks do not allow IAHs to be members of the board or to participate in managerial decisions (Safieddine, 2009).

In consequence, according to Grais and Pellegrini (2006), IAHs are unable to monitor their investments, communicate their needs, or express their concerns. Table 2 also shows that the SSB index has the highest mean disclosure among all categories (71%) while the IAHs index has the lowest mean of all the dimensions (37%). The high score in the SSB component provides assurance that Islamic banks in GCC countries are conducted in accordance with Sharia law. The result is expected due to the fact that the majority of Islamic banks have developed appropriate mechanisms and procedures that allow the SSB to exercise its role in ensuring compliance of the banks' products and compliance with Sharia. Other dimensions showing relatively high scores are board structure (BOD) and risk management with the mean value of indices equal to 64% and 56% respectively. The dimensional index of BOD occupied the second rank among six dimensions included in the CGDI. The majority of items related to this dimension (size of board, frequency of board meeting, number of outside directors, and so on) are disclosed by GCC banks. It means that a high number of Islamic banks in this region comply with the basic requirements of governance and therefore allow the board to exercise its fiduciary duties effectively (Safieddine, 2009). Concerning the transparency and disclosure index, the results reveal that most Islamic banks in the sample maintain a website and disclose information on management and financial performance. However, a limited number of them report information regarding board remuneration, ownership structure, compliance of profits/losses with Sharia principles and details relating to the banks Zakat obligations.

**Table 3: Statistics of corporate governance disclosure index by dimension and country**

Dimension of corporate governance	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Average CGDI
Board structure	66%	59%	63%	62%	70%	64%
Risk management	59%	55%	56%	53%	57%	56%
Transparency and disclosure	56%	43%	52%	46%	58%	51%
Audit committee	49%	44%	45%	45%	47%	46%
Sharia supervisory board	74%	67%	70%	69%	75%	71%
Investment account holders	37%	34%	40%	36%	38%	37%
Overall index	56.8%	50.4%	54.3%	51.8%	57.5%	54
Overall rank	2	5	3	4	1	-

Table 3 reports the overall mean value of CGDI for each country and further shows the scores of each country on the six dimensions of corporate governance. As can be seen from this table, UAE and Bahrain show the highest CGDI, scoring 57.4% and 56.8% respectively. This means that these two countries disclose approximately 57% of 63 items, which formed the index of corporate governance. On the other hand, Saudi Arabia and Kuwait appear to have the lowest CGDI, scoring 51.8% and 50.3% respectively. Given the average overall CGDI of 54%, it can be seen that there are only three countries, UAE, Bahrain and Qatar, possessing above-average CGDI. However, it is noted that all countries in the sample have an average CGDI superior to 50%. Looking at the different dimensions, table 2 also shows that UAE and Bahrain have the highest score on all components, except IAHs index where Qatar occupied the first rank. We can also observe that all five GCC countries have to give more attention to, and to improve the quality of, three dimensions namely, IAHs (37%), AC (46%) and transparency and disclosure (51%) which present a low score of CGI.

#### 4.2. Corporate governance and Islamic bank performance

**Table 4: Corporate governance disclosure index- bank performance: OLS regressions**

Explanatory variables	ROA		ROE		Tobin's Q	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	2.462 (2.28)**	3.053 (2.56)**	0.942 (0.43)	1.854 (0.97)	0.136 (0.84)	0.723 (1.12)
Corporate Governance index (CGDI)	0.027 (2.01)**		0.271 (2.63)**		0.572 (0.04)	
Board of structure index		0.047 (2.38)**		0.763 (0.85)		0.021 (0.08)
Risk management Index		0.009 (3.72)*		0.054 (2.81)**		0.062 (1.02)

Explanatory variables	ROA		ROE		Tobin's Q	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Transparency and disclosure index		0.012 (0.78)		0.066 (0.97)		0.421 (0.05)
Audit committee Index		-0.115 (-1.48)		0.229 (0.91)		0.127 (1.41)
Sharia supervisory board index		0.716 (2.28)**		0.076 (2.51)**		0.286 (0.25)
Investment account holders index		0.045 (0.95)		0.592 (0.65)		0.009 (0.82)
<u>Bank characteristics</u>	0.146	0.093	0.186	0.407	0.006	0.063
Bank Size	(2.19)**	(1.78)***	(1.83)*	(1.63)***	(0.92)	(0.54)
Equity	0.073 (1.79)***	0.186 (2.13)**	0.098 (2.95)**	0.309 (1.82)***	0.086 (2.23)**	0.028 (2.25)**
Risk	0.012 (1.75)***	0.084 (1.85)***	0.067 (2.56)**	1.339 (2.42)**	0.0162 (1.42)	0.194 (1.49)
<u>Financial industry and Macroeconomics. measures</u>	0.016	0.174	0.182	0.122	0.006	0.026
Banking sector development	(1.35)	(0.49)	(1.62)	(0.43)	(0.34)	(0.07)
Banking Concentration	0.265 (2.06)**	0.007 (1.75)***	0.106 (1.72)***	0.872 (1.55)	0.071 (1.80)***	0.192 (2.46)**
GDP growth	0.005 (0.95)	0.008 (1.13)	0.137 (0.97)	0.661 (0.12)	0.410 (0.06)	0.041 (0.82)
Inflation	0.071 (1.20)	0.041 (0.92)	0.953 (0.97)	0.597 (0.96)	0.098 (0.72)	0.006 (1.01)
Adjusted R2	0.346	0.372	0.399	0.108	0.249	0.221
F-statistic	5.282*	4.863*	2.430*	4.096*	3.621*	2.432*
Observations	81	81	81	81	81	81

Once the corporate governance disclosure index is calculated for each Islamic bank using six dimensions of internal governance characteristics, the next step in the analysis is to assess the association between the performance of banks and corporate governance. Table 4 provides OLS regression results for each performance measure (ROA, ROE, Tobin's Q) on corporate governance index, its components and control variables. Model 1 investigates the relationships between financial performance measures and CGDI, as well as control variables. For this model, the R<sup>2</sup> is 0.321 and it appears highly significant (F-value= 7.278, p-value = 0.002). Consistent with our expectation, we find that CGDI is significant and positively related with bank performance measured by ROA and ROE. Then, we can conclude that good performance is associated with better operating performance. The result is consistent with the conclusions of several studies (e.g., Chang et al 2014; Core et al., 2005; Klapper and Love, 2004; Gompers et al., 2003).

However, we do not find any consistent significant relation between the measure of internal corporate governance and stock market based measure of performance (Tobin's Q). Bhagat and Bolton (2008, p.264) argue that, "if investors anticipate the corporate governance effect on performance, long term stock returns will not be significantly correlated with governance even if a significant correlation between performance and governance indeed exists". To the extent governance impacts performance, measures of performance may be impacted for the next several years. Following the methodology of Bhagat and Bolton (2008), we use financial performance data in the year following the governance measurement, which also reduces the endogeneity problem. Then, we examine the effect of corporate governance from year n on Tobin's Q in n+1 year. The finding (for brevity purposes, we do not report the findings in the paper, but are available upon request) also indicates that there is no significant relationship between CGDI and subsequent market performance (Tobin's Q). In conclusion, as argued by Hutchinson and Gul (2004), accounting based performance measures, which reflect the results of management actions are preferable to market based measures when investigating the relationship between corporate governance and bank performance.

Model 2 analyze the relationship of bank performance measures with the six sub-indices of corporate governance and all control variables. The results reported in table 4 indicate that only three components of corporate governance have positive and significant impact on operating performance. The boards of

directors, risk management and Sharia supervisory board have significant influence on ROA and ROE. In terms of the board structure, it seems that the characteristics of the board concerning size, autonomy, structure and effectiveness have an impact on Islamic bank performance. This result is consistent with the study of Hassan and Mollah (2012), which found that board size and independence are the key driving forces for the Islamic banking profitability. The disclosure of different risks and the implementation of risk management committee also contribute to enhancing the performance of banks. Regarding the SSB index, as expected, the function and composition of the Sharia board played an important role in the profit making mechanism for Islamic banks.

In table 4, we control also for various factors that are expected to have an impact on the performance of Islamic banks. Consistent with our expectation, bank size has a positive and statistical impact on ROA and ROE. Generally, the larger size of the bank, the higher the profitability (Smirlock, 1985). However, for banks that become extremely large, the effect of size could be negative due to bureaucratic problems and poor expenses management. Referring to the impact of capitalization, it is observed from table 4 that this variable exhibits a positive relationship with all measures of bank performance. The result is consistent with previous research (for example, Sufian and Ha-Bibullah, 2010; Ben Naceur and Omrane, 2011; Pasiouras and Kosmidou, 2007) providing support to the argument that well capitalized banks face lower costs of going bankrupt, thus lowers their funding cost, or that they have lower needs for external funding resulting in higher profitability. The coefficient of net loans to total assets is positive and statistically significant at the 5% level in the ROA and ROE regression models. This finding conforms with previous studies (such as, Bachir and Hassan, 2003; Srairi, 2009) and indicates that more loans in banks lead to higher profitability. The variables related to macroeconomic conditions and to development of the banking sector seem to have no impact in all regression models. Finally, the relationship between concentration indicator and all measures of performance is positive and significant. This positive effect is mostly related to the efficiency of more bank lending due to cost advantages as bank reap economies of scale in the production of banking services (Srairi, 2009).

#### 4.3. Robustness analysis

**Table 5: Corporate governance disclosure index - bank performance: GMM regressions**

Explanatory variables	ROA		ROE		Tobin's Q	
	Model 1	Model2	Model 1	Model2	Model 1	Model2
Intercept	4.521 (3.40)*	2.542 (2.31)**	1.664 (2.77)**	0.229 (2.94)**	0.836 (1.15)	1.95 (1.96)***
ROAt-1	0.053 (0.75)	0.264 (0.49)				
ROEt-1			0.442 (1.09)	0.183 (0.05)		
Qt-1					0.066 (0.59)	0.320 (1.22)
Corporate Governance index (CGDI)	0.129 (2.56)**		0.119 (2.42)**		0.039 (1.88)***	
Board of structure index		0.523 (3.12)*		0.432 (2.13)**		0.262 (0.41)
Risk management Index		0.059 (2.33)**		0.294 (2.56)**		0.627 (1.06)
Transparency and disclosure index		0.095 (0.26)		0.196 (1.05)		0.009 (0.33)
Audit committee Index		0.821 (1.35)		0.965 (0.40)		0.065 (0.33)
Sharia supervisory board index		0.065 (2.62)**		0.229 (0.19)		0.112 (2.42)**
Investment account holders index		0.003 (0.02)		0.075 (0.05)		0.226 (0.31)
Bank characteristics	0.026 (2.46)**	0.296 (0.57)	0.447 (0.72)	0.984 (0.21)	0.625 (1.95)***	0.118 (0.39)
Bank Size	0.257 (2.52)**	0.029 (1.85)***	0.190 (1.01)	0.099 (0.86)	0.265 (2.32)**	0.066 (1.83)***
Equity	0.043 (0.21)	0.957 (2.27)**	0.482 (2.08)***	0.053 (2.43)**	0.055 (0.06)	0.098 (2.01)**

Risk						
<u>Financial industry and</u>	0.514	0.098	0.976	0.440	0.402	0.7216
<u>Macroeconomics. measures</u>	(0.48)	(0.72)	(0.09)	(0.23)	(0.72)	(0.24)
Banking sector development	0.065	0.056	0.229	0.442	0.009	0.095
	(1.92)***	(1.43)	(1.09)	(1.97)***	(1.06)	(1.28)
Banking Concentration	0.067	0.560	0.664	0.245	0.062	0.081
	(1.21)	(0.98)	(0.95)	(0.09)	(0.90)	(0.43)
GDP growth	0.358	0.096	0.504	0.138	0.621	0.095
	(0.98)	(0.08)	(0.02)	(0.27)	(0.31)	(0.21)
Inflation	32.56*	45.29*	31.82*	25.90*	19.22*	25.33*
	0.325	0.386	0.488	0.445	0.156	0.295
Wald $\chi^2$	0.579	0.453	0.509	0.399	0.369	0.439
AR(1) p-value	0.729	0.558	0.663	0.582	0.406	0.552
AR(2) p-value	81	81	81	81	81	81
Sargan p-value						
Observations						

Notes: AR(1) and AR(2) are tests for the first-order and second-order serial correlation. The Sargan/Hansen is a test of the overidentifying restrictions for the GMM estimators. \* significant at 1%, \*\* significant at 5%, \*\*\* significant at 10%.

One major concern in corporate governance studies is endogeneity. Corporate governance may be endogenous to performance. To take into account the endogenous nature of the relation between governance and performance, we introduce in the all regression models a lagged dependent variable by employing the generalized methods of moments (GMM). This method allows us to control for persistency and endogeneity and therefore provides consistent estimates. A number of tests are used in these models to evaluate reliability of our econometric methodology (Sargan's test) and to analyze the first and the second order serial correlations in the error process (AR(1), AR(2)). The results from the system GMM estimator reported in table 5 are qualitatively similar to the baseline regressions. Most variables keep the same sign and remain significant as they were in the previous findings (OLS).

## 5. Conclusion

The relationship between corporate governance and performance has been widely analyzed for developed markets but a few research studies have been done in emerging countries. In this paper, we fill this gap by investigating the role of corporate governance disclosure on Islamic bank performance in the GCC countries. Using content analysis on the banks' annual reports, we construct a CGDI by consolidating six components of governance, namely board structure, risk management, transparency and disclosure, audit committee, Sharia supervisory board and investment account holders. Bank performance is measured by three indicators, ROA and ROE as operating performance measure and Tobin's Q as market performance measure. We analyzed data for 27 Islamic banks from GCC countries over the 2011-2013 periods.

The results on corporate governance practices show high levels of disclosure and compliance with guidelines (AAOIFI, IFSB) on some areas, and relatively low levels in other dimensions. The CGDI analyzed by dimension indicates that the most frequently reported elements are on the SSB dimension (71%) followed by board structure (64%) and risk management (56%). It means that the majority of GCC Islamic banks comply with the basic requirements of governance. The dimension of IAHS and AC are found to be the category with the lowest level of disclosure, with the average dimensional index of 37% and 46% respectively. This seems to lead to the conclusion that information related to IAHS and to other elements such as ownership structure, board remuneration and bank Zakat obligations are relatively missed in the annual reports of Islamic banks. The results also show that there are gaps in corporate governance practices between countries. The current study finds that only two countries, the UAE and Bahrain, possess a higher level of CGDI. The other countries (Qatar, Saudi Arabia, and Kuwait) present a low score of CGDI, which can be explained by weaknesses especially in, three dimensions: IAHS, AC and transparency and disclosure.

Regarding the relationship between corporate governance and performance, we document a positive and significant association between CGDI and bank performance measured by ROA and ROE, suggesting that well-governed banks outperform poorly governed banks. We also find weak evidence that CGDI positively impacts Tobin's Q. The results of the study illustrate the fact that three corporate governance

dimensions, board of direction, SSB and risk of management, are positive and significant as regards ROA and ROE. There is a clear indication that the structure of the board, the function of SSB and the implementation of risk management committee played an important role in the performance of the Islamic banking sector.

Concerning internal and external factors, we identified three bank specific characteristics, size, equity, and risk that were associated with bank performance. As of the effect of macroeconomic and financial industry indicators, we conclude that those variables have no significant impact on ROA and ROE except for bank concentration.

The above findings have important implications for researchers, decision makers and corporate boards. Since the average overall CGDI of the GCC Islamic banks is relatively low (54%), the majority of Islamic banks in this region should revise and improve all aspects of corporate governance and specifically categories that are unique to them: SSB, IAHs, internal Sharia review and information on Zakat. Detailed information on these aspects has to be disclosed in the Islamic banks' annual reports. Second, regulators in GCC countries should encourage Islamic banks to improve governance practices by adopting standards issued by the AAOIF and the IFSB given the implications on performance and the development of the Islamic banking industry. Several regulations concerning SSB, IAHs and risk management have to be imposed by the regulators in the Arab Gulf region. The development of strong governance practices will win public confidence and thereby promote trust amongst investors, equity holders and other parties dealing with Islamic banks. Finally, as suggested by Sulaiman et al (2011), in order for Islamic banks to play an optimum role in the development of GCC Islamic countries, it is pertinent to develop regulatory structures to control fraud, exploitation and un-Islamic behavior.

## Notes

1. See governance standard for Islamic financial institutions.
2. PER is an amount set aside from the income of both IAH and shareholders before the allocation of the bank's share as Mudarib to smooth the profit of IAH to match the returns of instruments in the market, thereby encouraging IAH to retain the funds with the bank to manage them on their behalf.
3. IRR is an amount set aside from the income of IAH, but not the shareholders, after the allocation of the bank's share as a Mudarib to absorb losses attributed to investments financed by IAH before the losses affect the equity of IAH.
4. OECD guidelines of 2004, corporate governance codes in the respective GCC countries, the standard on CG promulgated by the accounting and auditing organization of Islamic financial institutions (AAOIFI) and the framework introduced by the Islamic financial services board (IFSB).

## Appendix1: dimensions and items for corporate governance disclosure index

### \* Board structure (board of directors)

- Size of board of directors is at least 5 but not more than 11 members.
- The CEO and board chairman are different persons or a lead director is specified.
- The bank conducts more meetings than the median number of meeting of the sample banks.
- The qualifications of the board members are revealed.
- All members attended at least 75% of board meetings.
- Independent directors are > 1/3 of the total board size.
- Share holdings of members are available.
- The chairman of the board is non-executive director.
- Predefined set of criteria upon the selection of members.
- The bank has more than the median number of board committees.
- There are representatives of minority shareholders in BOD.
- The bank has developed a formal and transparent procedure for fixing the remuneration packages of board members.
- The number of board meetings held in the year and the attendance of every board member are disclosed in the bank's annual report.
- The bank has implemented a procedure for a regular assessment of the board.
- The bank has formed at least three committees (for example, nominating committee, remuneration committee, audit committee, and so on) to assist BOD in the decision making process.

*\* Risk management*

- The bank has a risk management committee (RMC) or a risk management division.
- The RMC comprises only non-executive directors with at least three members.
- Duties and responsibilities of RMC.
- The bank has in place effective and comprehensive risk management policies, processes and infrastructure to identify measure and control the various types of risk undertaken by the Islamic bank.
- Risk management report in the annual report.
- The bank discloses credit risk.
- The bank discloses liquidity risk.
- The bank discloses market risk.
- The bank discloses operational risk.
- The bank discloses legal risk.
- The bank discloses credit compliance risk.
- The bank discloses reputation risk.
- The bank discloses other risks.

*\* Transparency and disclosure*

- The bank has a transparent ownership structure.
- Bank annual report discloses information on remuneration of members of BOD and executive staff.
- The bank reports the accounting standard followed.
- The bank has full disclosure of corporate governance practices.
- Bank annual report discloses details on the corporate social responsibility.
- Bank discloses the number of RMC meetings held in that year and information on the number of meetings attended by each member of committee.
- The bank discloses information about method used for determining the Zakat base.
- The annual reports specify Zakat distribution and beneficiaries.
- The bank has a statement of sources and uses of Zakat fund.

*\*Audit committee (AC)*

- The bank has formed an audit committee.
- AC consists solely of non-executive directors.
- Two-thirds of members in AC are independent directors.
- The chairman of AC is an independent director.
- One member at least of AC has accounting expertise or experience in the field of finance.
- Size of AC is at least three members.
- AC holds regular meetings 3-4 times per year.
- Banks has a formal policy on functions and responsibilities of AC.

*\*Sharia supervisory board (SSB)*

- The qualification and experience of members are revealed.
- SSB contains of a minimum of three members.
- The bank has formed an internal Sharia review to help the SSB in their task and to carry out an ex post Sharia audit.
- SSB members are not entitled to be members of the board of directors and do not own any shares of the bank.
- The bank discloses information on remuneration of members.
- The bank has a formal policy on duties and responsibilities of SSB.
- The bank discloses the attendance of every member.
- The members of SSB are chosen and dismissed according to policies and procedures established by the bank.
- The bank discloses a report of SSB on the conformity of the Islamic bank's operations with the Sharia principles.
- SSB holds regular meetings at least 4 times per year.

\**Investment account holders (IAHs)*

- Disclosure on contractual risks and rights of IAHs.
- Strategies relating to the investment and asset allocation.
- A disclosure of returns of each type of investment account.
- The bank discloses information relating to the methods used in allocating and distributing the profits between shareholders and IAHs.
- The bases applied to the utilization of profit equalization reserve (PER).
- The bank discloses notes related to the use of investment risk reserve (IRR).
- The changes occurred during the financial period in the PER and the IRR.
- IAHs are involved in the strategic management of the bank.

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