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## A COMPARATIVE ANALYSIS OF CORPORATE GOVERNANCE AND BANK PERFORMANCE: ISLAMIC BANKS VERSUS CONVENTIONAL BANKS

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### ABSTRACT

**Purpose** - This study examines the relationship between the multi-layer corporate governance model of Islamic banking and bank performance.

**Methodology** - The random-effects GLS method for the regression analysis and two-step generalized methods of moments for the robustness check of the findings were utilized.

**Findings** - The results show that boards are strong and the CEO's are powerful in Islamic banks. While the return variables of Islamic banks are positively correlated with the financial disclosure index and board structure variables, they are negatively correlated with the risk closure index and CEO related variables. The corporate governance and financial disclosure indices lessen the profitability of Islamic banks as they are negatively significant with performance variables.

**Conclusion** - The governance mechanism provides a weak explanation for the changes in shareholders' value of Islamic banks, which shows that conventional banks have better, more effective, governance system than Islamic banks in this regard.

**Keywords:** Corporate Governance, Islamic Banks, Conventional Banks, Bank Performance, Shari'ah Supervision

**JEL Codes:** G01, G21, G34

### 1. INTRODUCTION

The last few decades have witnessed a quick evolution of Islamic finance and banking and its rapid growth in the markets including the non-Islamic countries. Thus, the Islamic finance and banking associated subjects have heightened interest, become a very hot topic, attracted the academic as well as practical curiosity and come under greater inquiry. In recent years, the concept of Islamic finance and banking as well as its principles has been rapidly gaining recognition across the globe, with more financial institutions and corporations adopting the idea into their systems. In line with this interest, Islamic finance and banking has extended its operation and activities significantly in even non-Islamic countries in terms of assets and market share.

Islamic finance, which is based on Shari'ah principles or Islamic rules that promotes responsible risk sharing, has been attracting greater attention in the wake of the recent financial crisis, as evidenced by the rise in Shari'ah -compliant transactions in the global market, and has emerged as an effective tool for financing development worldwide, including in non-Muslim populated countries. Major financial markets have been discovering a solid evidence that Islamic finance has already been mainstreamed within the global financial system and that it has the potential to help address the challenges of ending extreme poverty and boosting shared prosperity.

It is commonly accepted that Islamic finance is equity-based, asset-backed, ethical, sustainable, environmentally and socially responsible finance. It promotes risk sharing, connects the financial sector with the real economy, and emphasizes financial inclusion and social welfare. Likewise, Islamic finance, through its core principles, as supporting for the just, fair, and equitable

distribution of income and wealth during the production cycle and provides a sound mechanism for redistribution to address any imbalances that may occur.

The financial assets of the Islamic financial sector reached US\$1.7 trillion in 2013 and grew 50% faster than the overall banking sector with an average annual growth of 17.6% from 2008 to 2012 (Ernst & Young 2012). Furthermore, Islamic finance assets are expected to reach US\$3.4 trillion by 2018 (Ernst & Young 2013) and US\$6.5 trillion by 2020 (Cihak and Hesse 2010).

However, Thomson Reuters' 2016/2017 'State of The Global Islamic Economy' report claims that the present Islamic financial market raised up at an estimated US\$2 trillion in assets in 2015, of which, Islamic banking was responsible for US\$1.451 trillion, the Takaful (insurance) sector for US\$38 billion, sukuk (bonds) outstanding for US\$342 billion, Islamic funds for US\$66 billion, and other financial institutions for US\$106 billion. Moreover, the total Islamic finance assets are expected to reach US\$3.5 trillion by 2021, a compounded annual growth rate (CAGR) of 12%, with Islamic banking responsible for most of this growth, and projected to reach US\$2.7 trillion in assets by 2021.

On the other hand, the recent global financial crisis has attracted attention as well as intensified interest in the link between corporate governance and bank performance (Aebi et al., 2012; Pathan and Faff, 2013). It can be said that the performance and accountability of the executive managements and their attitude towards risk-taking and ethical principles in banking has become under amplified inquiry. The massive amounts of losses with some of the world leading financial institutions and banks have underlined and emerged some critical issues like regulatory oversight, risk management, and disclosure. Many people including academics, practitioners, regulators, and observer see a strong correlation between the recent financial crisis and failures in corporate governance, such as sloppy board oversight and unsound executive compensation practices that encourage aggressive risk taking (Erkens et al., 2012; Kirkpatrick, 2009; Sharfman, 2009). This observation has led many researchers to the studies that compare the different aspects, like corporate governance mechanism, performance and risk taking attitudes, of conventional banks with Islamic banks.

The existing corporate governance mechanism in conventional financial institutions during the recent financial crisis did not prove effective enough in safeguarding shareholder interests and several major financial institutions be absorbed by other financial institutions, or faced government bailouts, or outright crash. For example, Lehman Brothers and Merrill Lynch, among the world's largest financial institutions, were bailed out during the crisis. However, Islamic banks were not exposed and none of them have announced massive write-offs or needed government capitalization but have been rather resilient during the financial crisis (Chapra, 2009, 2010; Green 2010). While conventional banks tackled with substantial difficulties with the recent global financial crisis, Islamic banks were not exposed, rather handled successfully and passed it through without having a serious problem. Accordingly, Wilson (2010) raises up the possible contributions of Islamic banks and governance reforms in restoring integrity and stability in the international financial market.

There can be argued that there are major distinctions between Islamic and conventional banks regarding the corporate governance mechanism. For example, Islamic banks must have a Shari'ah Supervisory Board, which is additional layer of corporate governance, as a fundamental characteristic of their governance. This board acts as an independent control mechanism in restraining all the governance means and decision makers from engaging in risk taking and unethical or dishonest investment and operations, which are forbidden by Islam.

Moreover, charging interest, which is called 'riba' in Islamic terminology, and engaging in speculation are not allowed in Islamic banking, whose operation should be based on a profit-loss and hence risk-sharing model. The Shari'ah Supervisory Board is a basic but critically important feature of Islamic banks and thus, are considered as the 'Supra Authority' (Choudhury and Hoque, 2006). Together with the routine boards and regular executives with other operational committees, the institution of the Shari'ah Supervisory Board in Islamic banks alters or revises their corporate governance so that we face the multi-layer governance, which contrasts with the single-layer governance structure of conventional banks. To summarize, the Shari'ah Supervisory Board of Islamic banks is an extra layer of governance and monitors, oversights, and constraints the operations and all kind of activities. Thus, it can be said that their governing mechanism and structure might restrain boards of directors and management from engaging in aggressive lending and major risk taking activities and hence prevent Islamic banks from aggressive risk taking especially during financial turmoil. It can be claimed that the same argument is also valid with the powerful CEOs. That means the powerful CEO has a potential incentive to be engaged in less risky investments (Hermalin and Weisbach, 2003, and Pathan, 2009). On the other hand, having a higher level of disclosure and transparency makes Islamic banks less risk-taking and hence, maximizes the shareholders' value and the performance.

This study examines the effect of a multi-layer corporate governance model of Islamic banks, instituted by the Islamic banking system via Shari'ah compliant corporate governance, on the firm performance and value. Using the data set containing the total 154 banks, 77 Islamic and 77 Conventional, from the United Kingdom, Turkey, Malaysia, Indonesia, Saudi Arabia, the United Arab Emirates, Qatar, Bahrain, Kuwait, Jordan, Egypt, Pakistan, Bangladesh, Sudan, Senegal, and Tunisia over the period of 2005 and 2011 and conducting the extended survey questionnaires over the Shari'ah board members with the sample Islamic banks from several countries including non-Islamic countries, we scrutinized corporate governance

mechanism, board structure, board independence, and board attendance to see what roles they play on the firm performance and value. Specifically, we analyze the effect of Shari'ah supervision and corporate governance on the performance of Islamic banks vis-à-vis their conventional counterparts. Emphasizing the relationship between governance and performance (Aebi et al., 2012; Pathan and Faff, 2013), we try to expose the role of Shari'ah supervision, board of directors' structure and CEOs' power on Islamic and conventional banks' performance. The emphasis on Islamic banks in relation to conventional banks is critically important because the contemporary debate about the role and performance of Islamic banks and some recent studies on stability, efficiency, and profitability put some reservation on the current state of Islamic banks (Abedifar et al., 2013; Ariss, 2010; Beck et al., 2013; Bourkhis and Nabi, 2013).

The rest of the paper is organized as follows. Section 2 reviews the related literature and develops the hypotheses. Section 3 identifies the description of the data, measurements of variables and the model applied. While the empirical results reported in section 4, and finally section 5 concludes.

## 2. LITERATURE REVIEW

In this section, we deliver a brief review of the relevant literature given the emphasis of the study on the effects of important dimensions of corporate governance on firm/bank performance. The scope of the review is limited to issues related to the development of hypotheses concerning the relationship between the firm/bank performance and the governance structure as well as the Shari'ah Supervisory Board of Islamic banks.

Individual directors' incentives to acquire information and monitor managers are kind of low in large boards. That makes easier for CEOs to control the large boards better (Jensen, 1993). Thus, board size is expected to affect the firm performance negatively (Hermalin and Weisbach, 2003) due to the coordination cost and free-riding problems. Conversely, strong boards measured by board size and independent board members (Pathan, 2009) are expected to audit and supervise bank managers better for shareholders' interest as well as high risk-taking.

We see that there is a substantial literature that examines the effects of corporate governance mechanisms on firms' performance and shareholder value for the non-financial firms (Weir et al., 2002 and Stanwick and Stanwick, 2010), although there are no definite results revealed by experimental studies (Gani and Jermias, 2006; Larcker et al., 2007; Stanwick and Stanwick, 2010; and Bauer et al., 2008). While some studies offer evidence that confirm a positive effect of corporate governance on non-financial firm value (e.g. Lee et al., 1992), some other studies provide a negative relationship between corporate governance and firm value (e.g. Hutchinson, 2002). Moreover, there are some other works that determine no effect of corporate governance on firm value (e.g. Gupta et al., 2009).

When it comes to the banking sector, we see a little empirical literature for corporate governance and performance and/or value (Sierra et al. 2006; Anders and Valledado, 2008; Adams and Mehran, 2012; Francis et al. 2012; Wintoki et al. 2012 and Pathan and Faff, 2013). Sierra et al. (2006) propose that strong board improve bank performance. Adams and Mehran (2012) report alike outcomes for board size while they do not propose any relation between performance and independent directors. Likewise, Wintoki et al. (2012) reveal no relation between board size or independent directors and firm performance. Anders and Valledado (2008), on the other hand, find a positive / concave effect of board size and independent directors on bank performance. Similarly, Francis et al. (2012) assert that better governed firms perform well especially during financial crisis periods.

Although there are relatively more studies made recently on corporate governance and firm performance, the literature, however, is very limited regarding the Islamic banking side. Among a few studies, Safieddin (2009) emphasizes that the Islamic banking has a unique corporate governance mechanism, adhered to the Shari'ah governance (Abu-Tapanjeh, 2009; and Chowdhury and Hoque, 2006). Henceforth, the Shari'ah board plays a critical function in the governance mechanism of the Islamic banking (Lewis, 2005). The existing literature on corporate governance of Islamic banking (Abu-Tapanjeh, 2009; Chowdhury and Hoque, 2006; Grais and Pellegrini (2006), Hassan (2011), and Lewis, 2005) generally addresses the theoretical perspectives. Nevertheless, Safieddin (2009) studied the agency framework related to the cash flow and control rights of investors based on a survey over GCC economies. It can be said that the existing literature on corporate governance is not just limited but also has failed to link the Shari'ah governance and corporate governance mechanisms of the Islamic banking.

As clearly mentioned and discussed above, the monitoring ability of the Shari'ah Supervisory Board restrains Islamic banks from Shari'ah incompliant products and refrains them from excessive risk taking and, in turn, help them perform better. Since this study examines the Islamic banking governance mechanism and the role of the Shari'ah Supervisory Board on the performance of Islamic banks especially for the recent global financial crisis period, we implement the following hypotheses to examine the relationship between the bank performance and governance structure as well as Shari'ah Supervisory Boards of Islamic banks.

**Hypothesis 1:** *There is no relationship between board structure and performance.*

**Hypothesis 2:** *There is no relationship between CEO power and performance.*

**Hypothesis 3:** *There is no relation between Shari'ah Supervisory Boards and performance of Islamic banks.*

### 3. DATA AND METHODOLOGY

#### 3.1. Data Sample

There are about 150 Islamic Banks listed in the BankScope database. However, there are some missing data in the Bankscope database for Islamic Banks, and a reasonable number of Islamic Banks do not fully involve into the Shari'ah compliant products. Although there are around 150 Islamic banks listed in BankScope database, but due to the data availability limitations, we included 77 Islamic banks and matched with same number of conventional banks. For sake of our objective, we selected Islamic banks based on their 2005 asset size and matched them with conventional banks based on firm size and country of registration. The study considers 77 Islamic and 77 conventional banks in 16 countries for the period of 2005 - 2011. The final sample covers three periods, 2005 - 2007 pre-crisis, 2008 - 2009 crisis, and 2010 - 2011 post-crisis. We collected the data from BankScope, Datastream as well as World Bank country level macroeconomic data. We also had some hand collected data on Shari'ah supervision and corporate governance from the annual reports of 154 banks for the sample period. The final sample consists of 1078 bank-year observations for 77 Islamic banks and 77 conventional banks, and 539 bank-year observations in each sub-sample. Table 1 provides data sample distribution.

	<b>Islamic Banks</b>	<b>Conventional Banks</b>	<b>Full Sample (All Banks)</b>	<b>Observations</b>	<b>Percentage</b>
Bahrain	8	8	16	112	10,39%
Bangladesh	5	5	10	70	6,49%
Egypt	2	2	4	28	2,60%
Indonesia	1	1	2	14	1,30%
Jordan	3	3	6	42	3,90%
Kuwait	5	5	10	70	6,49%
Malaysia	11	11	22	154	14,29%
Pakistan	11	11	22	154	14,29%
Qatar	2	2	4	28	2,60%
Saudi Arabia	6	6	12	84	7,79%
Senegal	1	1	2	14	1,30%
Sudan	7	7	14	98	9,09%
Tunisia	1	1	2	14	1,30%
Turkey	4	4	8	56	5,19%
United Arab Emirates	7	7	14	98	9,09%
United Kingdom	3	3	6	42	3,90%
<b>Total</b>	<b>77</b>	<b>77</b>	<b>154</b>	<b>1078</b>	<b>100%</b>

The data set contains the total 154 banks, 77 Islamic and 77 Conventional, from the United Kingdom, Turkey, Malaysia, Indonesia, Saudi Arabia, the United Arab Emirates, Qatar, Bahrain, Kuwait, Jordan, Egypt, Pakistan, Bangladesh, Sudan, Senegal, and Tunisia over the period of 2005 and 2011 and conducting the extended survey questionnaires over the Shari'ah board members with the sample Islamic banks from several countries including non-Islamic countries.

We conducted 65 extended survey questionnaires over the Shari'ah scholars with the sample Islamic banks in Bahrain, Malaysia, Saudi Arabia, Pakistan, Turkey and the UK.

#### 3.2. Measures and Definitions of Variables

We measure the performance by the return on equity (ROE) and the return on assets (ROA). As known, the ROE is the net income divided by the total equity and the ROA is the net income divided by the total assets. We also use the Tobin's Q as a market-based measure of the firm value and calculate it as the Market-to-Book-Value of the equity ratio.

We construct four indices to be able to constitute the corporate governance structure;

- The index of board structure (IBS) constitutes different features of board and CEO structure,
- The index of financial disclosure (IFD) includes different aspects of the audit firm/committee, risk committee, and Shari'ah committee,
- The index of risk disclosure (IRD) contains the disclosure of the different key risk parameters,
- The index of corporate governance (ICG) consists of all the characteristics of the above-mentioned three sub-indices, (IBS, IFD, IRD).

Lastly, the Shari'ah Supervisory Board (SSB) is introduced as a dummy variable in the model. The other explanatory variables are board and CEO power variables, firm specific variables and country specific variables.

The table 2 presents the description of the variables applied in the study.

<b>Table 2: Description of the Variables</b>		
This table presents the description of the corporate governance and other firm and country specific variables applied in the study. The description includes the calculation procedure for each variable.		
<b>Corporate Governance Indices</b>		
<b>Name</b>	<b>Abbreviation</b>	<b>Calculation Procedure</b>
<b>Board Structure Index</b>	<b>IBS</b>	The Board Structure Index (IBS) is built depending on sixteen components. Each component of the index gains 1 point; then, the index range between 1.00 - 0.00. The index institutes the followings: <b>a) Board Size:</b> Is the board size larger than the median board size of the sample? If yes, 1; otherwise 0, <b>b) Board Independence:</b> Does the board have more than 50% independent members? If yes, 1; otherwise 0, <b>c) Board Meeting:</b> Does the bank conduct more meetings than the median number of meeting? If yes, 1; otherwise 0, <b>d) Board Attendance:</b> Does the members attend more than 75% of meetings? If yes, 1; otherwise 0, <b>e) Board Committees:</b> Does the bank have more than the median number of board committees? If yes, 1; otherwise 0, <b>f) Chair/CEO Split:</b> Is there Chair/CEO roles split? If yes, 1; otherwise 0, <b>g) Chair Independence:</b> Is the Chairman independent? If yes, 1; otherwise 0, <b>h) CEO Qualification:</b> If he has master's or higher, 1; less = 0, <b>i) CEO Banking Experience:</b> Does CEO have more than the median years of experience? If yes, 1; otherwise 0, <b>j) CEO Tenure:</b> Does CEO have more than the median tenure? If yes, 1; otherwise=0, <b>k) Chair Executive:</b> Is Chairman executive? If yes, 1; otherwise=0, <b>l) Senior Management Team (SMT):</b> Is Senior Management Team (SMT) listed? If yes, 1; otherwise 0, <b>m) Non-Executives in SMT:</b> Are non-executive members in SMT more than half? If yes, 1; otherwise =0, <b>n) Separation Theorem:</b> Is the CEO a member of SMT? If no, 1; otherwise 0, <b>o) Non-executive Directors:</b> Is the number of non-executive directors more than the half of the board size? If yes, 1; otherwise=0, <b>p) Affiliated Directors:</b> Is the number of affiliated directors less than the half of the board size If yes, 1; otherwise=0.
<b>Financial Disclosure Index</b>	<b>IFD</b>	The Financial Disclosure Index (IFD) is built based on eleven components of three committees; the audit committee, Shari'ah committee, and risk committee. Each of the eleven components of the IFD gains 1 point; then, the index range between 1.00 - 0.00. The index institutes the followings: <b>a) Has the bank appointed a BIG 4 audit firm?</b> If yes, 1; otherwise, 0. <b>b) Has the bank formed an audit committee?</b> If yes, 1; otherwise, 0 <b>c) Has the bank at least 3 members on the audit committee?</b> If yes, 1; otherwise, 0. <b>d) How many meetings the audit committee hold in the year?</b> If 4 or more, 1; otherwise, 0. <b>e) Has the bank formed a Shari'ah committee?</b> If yes, 1; otherwise, 0.

		<p>f) Has the bank at least 3 members on the Shari’ah committee? If yes, 1; otherwise, 0.</p> <p>g) How many meetings the Shari’ah committee hold in the year? If 4 or more, 1; otherwise, 0.</p> <p>h) Has the bank formed a risk committee? Yes=1, no=0,</p> <p>i) Has the bank at least 3 members on the risk committee? If yes, 1; otherwise, 0.</p> <p>j) How many meetings the risk committee hold in the year? If 4 or more, 1; otherwise, 0.</p> <p>k) Does the bank take the risk management actions normally? If yes, 1; otherwise, 0.</p>
<b>Risk Disclosure Index</b>	<b>IRD</b>	<p>The Risk Disclosure Index (IRD) is built based on the five components; credit risk, liquidity risk, fund management risk, market risk, and operational risk. Each of the five components of IRD gains 1 point; then, the index range between 1.00 - 0.00. The index institutes the followings:</p> <p>a) Did the bank disclose Credit risk? If yes, 1; otherwise, 0.</p> <p>b) Did the bank disclose Liquidity risk? If yes, 1; otherwise, 0.</p> <p>c) Did the bank disclose Fund management? If yes, 1; otherwise, 0.</p> <p>d) Did the bank disclose Market risk? If yes, 1; otherwise, 0.</p> <p>e) Did the bank disclose Operational risk? If yes, 1; otherwise, 0.</p>
<b>Corporate Governance Index</b>	<b>ICG</b>	The Corporate Governance Index is built based on the all the thirty-two corporate governance features of the board structure index, financial disclosure index, and risk disclosure index
<b>Strong Board and CEO Power Variables</b>		
<b>Board Size</b>	<b>Board</b>	Number of the members in the board.
<b>Independent Director</b>	<b>Independent</b>	Proportion of independent non-executive directors in the board.
<b>CEO duality</b>	<b>Ceo_chair</b>	If the CEO and Chairperson is the same person, then 1; otherwise 0.
<b>Internally Recruited CEO</b>	<b>Ceo_internal</b>	If the CEO is internally recruited then 1, otherwise 0.
<b>Firm Specific Variables</b>		
<b>Asset Size</b>	<b>Size</b>	Log of Total Assets
<b>Tier 1 Capital</b>	<b>Tier1</b>	Tier 1 Capital
<b>Leverage</b>	<b>Leverage</b>	Customers’ Term Deposit/Equity
<b>Big 4 Audit Firm</b>	<b>Big4</b>	If the bank appoints one of the big 4 audit firms as the auditor, then 1; otherwise 0.
<b>Shari’ah Supervisory Board</b>	<b>SSB</b>	SSB is the dummy variable for the IBs.
<b>Country Specific Variables</b>		
<b>Log_GDP</b>	<b>Log_Gdp</b>	Log of GDP for the country.
<b>Religion</b>	<b>Religion</b>	Religion is a dummy variable. If Islam is the primary religion of the county, then 1; otherwise 0.

After providing the definitions and measurements of the variables, we can offer the following model to be used to test our hypotheses;

$$Y_{b,\lambda(RT)} = \alpha_0 + \alpha_1 * IBS_{b,\lambda} + \alpha_2 * IFT_{b,\lambda} + \alpha_3 * IRD_{b,\lambda} + \beta * SSB_{b,\lambda} + \gamma * X_{b,\lambda} + \delta * ME_c + \epsilon_{b,\lambda} \tag{1}$$

$$Y_{b,\lambda(RT)} = \alpha_0 + \alpha_1 * ICG_{b,\lambda} + \beta * SSB_{b,\lambda} + \gamma * X_{b,\lambda} + \delta * ME_c + \epsilon_{b,\lambda} \tag{2}$$

$$Y_{b,\lambda(RT)} = \alpha_0 + \alpha_1 * CG_{b,\lambda} + \beta * SSB_{b,\lambda} + \gamma * X_{b,\lambda} + \delta * ME_c + \epsilon_{b,\lambda} \tag{3}$$

where

$Y_{b,\lambda(RT)}$  is the proxy for the Risk-taking for bank a in country b at time t,  
 $IBS_{b,\lambda}$  is the Index of Board Structure for bank a in country b at time t,  
 $IFT_{b,\lambda}$  is the Index of Financial Disclosure for bank a in country b at time t,  
 $IRD_{b,\lambda}$  is the Index of Risk Disclosure for bank a in country b at time t,  
 $SSB_{b,\lambda}$  is the Shari’ah Supervisory Board variables for bank a in country b at time t,  
 $ICG_{b,\lambda}$  is the Index of Corporate Governance for bank a in country b at time t,  
 $CG_{b,\lambda}$  is the Corporate Governance variables for bank a in country b at time t,

$X_{b,\lambda}$  is a matrix of firm level variables,  
 $ME_c$  is a matrix of country level macroeconomic variables,  
 $\epsilon_{b,\lambda}$  is the error term, and  $\alpha, \beta, \gamma, \delta$  are the vectors of coefficient estimates.

### 3.3. Estimation Method

As an application technique, we employed a random-effects GLS method for the regression analysis. We employed this technique, developed by Baltagi and Wu (1999), due to the following reasons;

- An OLS ignores the panel structure of the data (Gambin 2004).
- A time-invariant parameter cannot be estimated with fixed-effect methods.
- The index of corporate governance does not vary much over time, so the fixed-effect estimation could be inappropriate (Wooldridge 2002) and could lead to a loss in degrees of freedom (Baltagi 2005).

#### 3.3.1. Descriptive Statistics

Table 3 displays the descriptive statistics of the variables.

<b>Table 3: Descriptive Statistics</b>									
Tobin's Q is the firm value parameter, ROA and ROE are the firm performance proxies, IBS is the board structure index, IFD is the financial disclosure index, IRD is the risk-disclosure index, ICG is the corporate governance index, BOARD_SIZE is the board size, INDEPENDENT is the ratio of independent board members to total number, CEO_CHAIR is the dummy variable for CEO/Chair role duality, CEO_INTERNAL is the dummy variable for internally recruited CEO, BIG4 is the dummy variable for the big four audit firms, TIER1 is the regulatory capital, RISK is the risk exposure, ASSET_SIZE is the asset size of the bank, LEVEAGE is the leverage ratio of the bank, RELIGION is the dummy variable for the major religion of the country of the bank, LOG_GDP is the log of country GDP, SSB is the dummy variable for Shari'ah Supervisory Board of Islamic banks.									
Variables	PANEL A: Islamic Bank Sample				PANEL B: Conventional Bank Sample				Pair-wise T-test
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	
Tobin's Q	0.21	0.25	0.00	0.97	0.03	0.03	0.00	0.87	7.45***
ROA	0.06	0.05	-0.01	0.36	0.02	0.02	-0.10	0.11	5.74***
ROE	0.35	0.36	-0.22	1.95	0.17	0.23	-0.61	0.56	4.21***
IBS	0.32	0.12	0.10	0.71	0.35	0.21	0.00	0.79	-1.31
IFD	0.33	0.27	0.00	1.00	0.36	0.31	0.00	1.00	-1.94*
IRD	0.52	0.34	0.00	1.00	0.65	0.35	0.00	1.00	-3.41***
ICG	0.36	0.19	0.08	0.77	0.41	0.23	0.00	0.85	2.98**
RISK	0.29	0.37	0.00	1.72	0.04	0.08	0.00	0.41	7.49***
ASSET_SIZE	15.12	1.92	9.75	22.05	16.02	2.03	9.45	23.76	-0.38
INDEPENDENT	0.46	0.31	0.00	0.92	0.25	0.23	0.00	0.89	5.91***
CEO_CHAIR	0.04	0.18	0.00	1.00	0.03	0.17	0.00	1.00	0.81
CEO_INTERNAL	0.19	0.41	0.00	1.00	0.03	0.19	0.00	1.00	3.91***
BIG4	0.76	0.32	0.00	1.00	0.88	0.39	0.00	1.00	-1.52
TIER1	1.43	1.54	0.21	1.00	0.32	0.15	0.00	0.75	-19.17***
BOARD_SIZE	15.15	1.98	9.87	20.10	13.91	1.43	1.72	16.75	1.38
LEVERAGE	5.71	5.57	-4.56	26.14	5.37	3.86	0.04	21.72	0.78
RELIGION	0.92	0.25	0.00	1.00	0.86	0.31	0.00	1.00	-
LOG_GDP	25.39	1.64	23.24	28.76	25.82	1.51	23.69	28.83	-
SSB	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	-

As it is seen from the table, the mean of Tobin's Q is 0.21 for the Islamic sample and 0.03 for the conventional sample. The Tobin Q values, as a firm value parameter, of 21% and 3% for the Islamic sample and the conventional sample respectively show that the market values of both Islamic and conventional banks are considerably undervalued. This result is kind of surprising and sample selection would be the possible reason. The results of ROA and ROE are 0.06 and 0.35 with respective standard deviations of 0.05 and 0.36 for the Islamic sample and 0.02 and 0.17 with respective standard deviations of 0.02 and 0.23 for the conventional sample. As the numbers clearly confirm, ROA and ROE are largely higher with the Islamic sample

than the conventional sample. There is no surprise with that since the previous studies clearly ascertain that Islamic banks have been highly profitable in comparison to conventional ones. Thus, this result is in line with the previous evidences.

Since IBS, IFD, and IRD are the sub-indices of corporate governance index (ICG), the results gives us an indication of how both bank types have corporate governance. According to the results, conventional banks have reasonably better corporate governance indicators, (IBS = 0.35, IFD = 0.36, IRD = 0.65, and ICG = 0.41), than Islamic banks, (IBS = 0.32, IFD = 0.33, IRD = 0.52, and ICG = 0.36). On the other hand, we see a totally different picture when the board and CEO specific variables are examined. There is a significant difference regarding the board and CEO specific variables between Islamic banks and conventional pairs Even though the BOARD\_SIZE (t-test: 1.38) and CEO\_CHAIR (t-test: 0.81) variables are insignificant, the board independence (INDEPENDENT) (t-test: 5.91) and internal recruited CEO (CEO\_INTERNAL) (t-test: 3.91) are significant and BOARD\_SIZE and CEO\_CHAIR variables are slightly, and INDEPENDENT and CEO\_INTERNAL variables are considerably higher in Islamic banks (means of 15.15, 0.04, 0.46 and 0.19 respectively) than conventional pairs (means of 13.91, 0.03, 0.25 and 0.03 respectively).

This clearly shows that the boards are strong and the CEOs are powerful in Islamic banks, which also have higher proportion of independent directors and internally recruited CEO than conventional pairs. As we mentioned before, conventional banks were selected by considering nearly same size and location with the Islamic pairs. At this point, we have to underline the fact that there are excessively much more conventional banks than Islamic banks in the global market. Thus, selecting different conventional banks might result in different outcomes. On the other hand, the Islamic banks' exposures to risky securities are much higher than the conventional pair (0.29 versus 0.04). Although financial leverages are very close each other (5.71 versus 5.37) meaning that the financial leverage is relatively similar for both banking practices, the capital adequacy ratio in Islamic banks (1.43) is significantly different from their conventional pair (0.32). That shows the existence of the excess liquidity in Islamic banks. As mentioned above, conventional banks were selected by considering nearly same size and location with Islamic pairs, and thus as expected, both banks practices have quite similar assets size (15.12 versus 16.02)

#### 4. FINDINGS AND DISCUSSIONS

##### 4.1. Correlation Analysis

Table 4 displays the correlation matrix for both Islamic and conventional banks over the period of 2006 and 2011.

As a market based performance variable, Tobin's Q is positively correlated to all the corporate governance indices [IBS (0.13), IFD (0.18), and ICG (0.08)] except the risk disclosure index [IRD (-0.21) of Islamic banks. Interestingly, there is exactly opposite correlation between Tobin's Q and corporate governance indices in case of conventional pairs [IBS (-0.02), IFD (-0.12), IRD (0.13) and ICG (-0.04)]. That means, Tobin's Q is negatively related to all the corporate governance indices except the risk disclosure index of conventional banks. Moreover, while Tobin's Q is also positively related to the board independence (0.06 and 0.26), it is negatively related to board\_size (-0.06 and -0.19), ceo\_chair (-0.05 and -0.09) and ceo\_internal (-0.17 and -0.31) for both Islamic banks and conventional banks. As it is clearly seen, totally opposite outcomes are revealed regarding the corporate governance of Islamic and conventional banks. The interpretation of the coefficient of correlation results is that while the corporate governance initiatives are kind of value stimulating for Islamic banks, they are value dismantling for conventional pairs.

We face quite opposite picture when we look at the return variables, which show the accounting based performance. In general, while the return variables (ROA and ROE) are positively related to IBS (0.07 and 0.09), IFD (0.23 and 0.07), ICG (0.07 and 0.00), BOARD\_SIZE (0.25 and 0.22), and CEO\_CHAIR (0.01 and 0.12) and negatively related to IRD (-0.27 and -0.25), and INDEPENDENT (-0.39 and -0.32), and CEO\_INTERNAL (-0.14 and -0.14) for conventional banks, the consequences are mixed for Islamic banks. While the return variables (ROA and ROE) are positively related to IBS (0.17 and -0.13), IFD (0.18 and 0.12), BOARD\_SIZE (0.15 and 0.14), INDEPENDENT (-0.03 and 0.08), and negatively related to IRD (-0.18 and -0.26), ICG (-0.07 and -0.14) and CEO related variables, CEO\_CHAIR (-0.10 and -0.07) and CEO\_INTERNAL (-0.22 and -0.20) for Islamic banks, which creates a kind of complication.

It is commonly practiced and believed that Islamic banks have been following the Basel accord austerely, have never fallen below the minimum capital requirements, and have had excess liquidity. Furthermore, their majority of customers are strongly devoted to the faith-based operations like depositing and investing. These aforementioned characteristics are claimed as the major success indicators for Islamic banks, which are revealed in the relationships between tier 1 capital and the financial leverage variables. They are positively and highly correlated for conventional banks (0.42), the relationship becomes negative and slight (-0.06).



**TABLE 4: Correlation Matrix**

This table presents the correlation coefficients for the two panels (Islamic and Conventional) over the period 2005-2001. **Tobin's Q** is the firm value parameter, **roa** and **roe** are the firm performance proxies, **ibs** is the board structure index, **ifd** is the financial disclosure index, **ird** is the risk-disclosure index, **icg** is the corporate governance index, **board size** is the board size, **independent** is the ratio of independent board members, **ceo\_chair** is the dummy variable for ceo\_chair role duality, **ceo\_internal** is the dummy variable for internally recruited ceo, **big4** is the dummy variable for big four audit firms, **tier1** is the regulatory capital, **asset size** is the asset size of the bank, **leverage** is the leverage ratio of the bank, **religion** is the dummy variable for the religion of the country of the bank, **log-gdp** is the log of country's GDP.

**PANEL A: Islamic Sample**

	Tobin's Q	Roa	Roe	ibs	ifd	lrd	icg	board_size	Independent	ceo_chair	ceo_int ernal	big4	asset_size	tier1	leverage	religion	log_gdp
Tobin's Q	1.00																
roa	0.14	1.00															
Roe	0.38	0.69	1.00														
ibs	0.13	0.17	-0.13	1.00													
lfd	0.18	0.18	0.12	0.59	1.00												
lrd	-0.21	-0.18	-0.26	0.23	0.35	1.00											
lcg	0.08	-0.07	-0.14	0.82	0.89	0.62	1.00										
board_size	-0.06	0.15	0.14	-0.24	-0.04	0.10	-0.08	1.00									
independent	0.06	-0.03	0.08	0.14	-0.04	-0.15	-0.03	-0.17	1.00								
ceo_chair	-0.05	-0.10	-0.07	-0.11	0.07	0.13	0.03	0.04	-0.03	1.00							
ceo_internal	-0.17	-0.22	-0.20	-0.08	-0.17	0.13	-0.07	0.01	-0.13	0.09	1.00						
big4	-0.03	-0.03	0.05	-0.18	0.08	-0.03	-0.05	0.03	0.03	0.11	0.22	1.00					
asset_size	0.04	-0.26	-0.07	0.03	0.06	-0.14	-0.06	-0.07	0.09	0.14	-0.06	0.03	1.00				
tier1	0.06	0.28	0.25	-0.15	-0.04	-0.19	-0.17	0.13	0.09	-0.03	-0.14	-0.07	0.42	1.00			
leverage	0.29	0.15	0.59	0.05	-0.19	-0.08	-0.09	-0.03	-0.29	0.02	-0.17	-0.13	0.17	-0.06	1.00		
religion	0.05	0.15	0.21	-0.24	-0.22	-0.14	-0.24	-0.14	0.09	0.03	0.07	-0.08	0.48	0.27	0.21	1.00	
log_gdp	0.37	0.20	0.23	0.44	0.51	-0.24	0.41	0.03	0.12	0.02	-0.24	0.01	0.06	0.16	-0.13	-0.45	1.00

TABLE 4: Correlation Matrix (Continued)																	
PANEL B: Conventional Sample																	
	Tobin's Q	Roa	Roe	ibs	ifd	ird	icg	board_size	independent	ceo_chair	ceo_int_ernal	big4	asset_size	tier1	leverage	religion	log_gdp
Tobin's Q	1.00																
roa	-0.21	1.00															
roe	0.08	0.83	1.00														
ibs	-0.02	0.07	0.09	1.00													
ifd	-0.12	0.23	0.07	0.76	1.00												
ird	0.13	-0.27	-0.25	0.68	0.64	1.00											
icg	-0.04	0.07	0.00	0.95	0.91	0.85	1.00										
board_size	-0.19	0.25	0.22	0.05	0.15	-0.01	0.11	1.00									
independent	0.26	-0.39	-0.32	-0.16	-0.06	0.19	-0.07	-0.20	1.00								
ceo_chair	-0.09	0.01	0.12	0.24	0.24	0.07	0.24	-0.13	-0.08	1.00							
ceo_int_ernal	-0.31	-0.14	-0.14	-0.06	0.03	-0.07	-0.03	0.18	0.13	0.04	1.00						
big4	-0.11	0.01	0.00	0.16	0.14	-0.01	0.13	0.24	-0.25	-0.04	0.14	1.00					
asset_size	-0.15	-0.47	-0.52	-0.09	-0.18	0.17	-0.09	-0.34	0.19	-0.07	-0.23	-0.13	1.00				
tier1	0.40	0.27	0.56	0.15	0.19	-0.07	0.15	0.24	-0.16	0.16	-0.18	0.13	-0.63	1.00			
leverage	-0.10	0.67	0.53	0.14	0.33	0.01	0.24	0.43	-0.25	0.05	0.14	0.12	-0.73	0.42	1.00		
religion	0.29	-0.52	-0.34	-0.24	-0.34	-0.08	-0.25	-0.22	0.13	-0.04	-0.24	0.06	0.46	-0.05	-0.77	1.00	
log_gdp	0.36	0.23	0.24	0.44	0.52	-0.28	0.36	0.02	0.12	0.01	-0.26	0.02	0.06	0.15	-0.13	-0.47	1.00

## 4.2. Regression Results

The relationship of bank performance and shareholders' value with corporate governance mechanism is modelled with three equations 1, 2, and 3 for both Islamic and conventional banks. The regression results are presented in Table 5. All the models are fitted with Random effect GLS method, and produced highly significant F-statistics.

In Islamic banks sample (Panel A), IFD and ICG are found negatively significant with the firm performance proxies for ROA (-0.05 with -3.32 t-test) and (-0.04 with -1.71 t-test) and ROE (-0.41 with -3.49 t-test) and (-0.52 with -3.39 t-test), which clearly confirms that these variables deteriorate the profitability of Islamic banks, which is also demonstrated under the full-sample (Panel C). The regression results reveal that there are no significant relations between the firm performance proxies (for both ROA and RAE) and IBS and IRD variables.

Moreover, while BOARD\_SIZE and INDEPENDENT, which shows board independence (the number of independent board members) are found as positively significant variables with ROA, which highlights these variables as the motivating forces for Islamic banking profitability.

It is found very similar relations between the firm performance proxies and both board and ceo related variables. No significant relationship found between ROE and these board related variables. Likewise, no significant relationship also found between the firm performance proxies (both ROA and ROE) and ceo related variables, CEO\_CHAIR and CEO\_INTERNAL.

Conversely, IRD is found negatively significantly related to performance in conventional sample, which shows that IRD functions as important role in conventional banks' performance and is kind of value decreasing.

It is also revealed that financial leverage is found positively significantly with all the samples although it has very small and ignorable coefficients. Thus, leverage has positive stimulus on both Islamic and conventional banks' profitability.

We see that Tobin's Q is not significant with the corporate governance indices of Islamic banks, which shows that the governance mechanism does not support enough the firm value and it provides a weak explanation of the changes in shareholders' value measured by Tobin's Q for Islamic banks. Although Tobin Q has significant relationship with IFD and IRD (with ignorable coefficients), we face very similar interpretation for conventional banks as well. That means there is no meaningful explanation of the changes in shareholders' value measured by Tobin's Q for conventional banks.

## 4.3. Robustness Checks for the Board Variables

In econometrics, simultaneity is a specific type of endogeneity problem in which the explanatory variable is jointly determined with the dependent variable.

In our models, board structure related variables, board size and board independence (the number of independent board members) might have been determined simultaneously. Adopted by Arellano and Bover (1995) and Blundell and Bond (1998) the two-step system generalized methods of moments (GMM) approach was implemented for endogeneity tests with adjusted standard errors for potential heteroscedasticity by Arellano and Bond (1998) to solve the simultaneity problem.

This method lets us assume all the independent variables as endogenous and orthogonally use their previous values as their matching instruments, while it generates a corresponding equation of the first differences of all variables and estimates the model through GMM using the lagged values of explanatory variables. By taking the first differencing, unobserved heterogeneity is eliminated and variable bias is omitted. This method allows us to assume all bank features as endogenous covariates and country and macro controls as strictly exogenous. The system GMM estimates were generated by using the (xtabond2) module of Roodman (2009) in Stata.

We considered the variables, board size and board independence, as the instruments, which are potentially endogenous, under the GMM system. The results show that the second-order autocorrelations and Hansen J-statistics are insignificant and number of instruments reduces for all the models. Although we see some variation with the significance levels while testing against financial fragility or risk-taking variables, negative directional relationship unchanged. As a result, we have the same interpretations of the consequences from the GMM system as presented in Tables 5. Reporting the almost same consequences and interpreting them again will be redundancy.

**Table 5: Corporate Governance and Firm Performance**  
 This table presents the regression results for corporate governance and firm performance models. The table contents three panel for Islamic Banks, Conventional Banks and Full sample. Each panel presents nine models combining the performance and firm value. **roa** is the return on assets, **roe** is the return on equity, **Tobin's Q** is the firm value. **ibs** is the board structure index, **ifd** is the financial disclosure index, **ird** is the risk-disclosure index, **icg** is the corporate governance index, **board\_size** is the board size of the bank, **independent** is the ratio of independent board members to the total number, **ceo\_chair** is the dummy variable for ceo\_chair role duality, **ceo\_exe** is the dummy variable for the internally recruited CEO, **big4** is the dummy variable for the big four audit firms, **tier1** is the regulatory capital, **asset\_size** is the asset size of the bank, **leverage** is the leverage ratio of the bank, **risk** is the risk-taking variable, **religion** is the dummy variable for the major religion of the country of bank, **log\_gdp** is the log of country GDP, **ssb** is the dummy variable for Shari'ah Supervisory Board of Islamic banks.

\*\*\*, \*\*, \* indicate the significance level at 1%, 5%, and 10% levels.

PANEL A: ISLAMIC BANKS									
	Firm Performance Proxy: ROA			Firm Performance Proxy: ROE			Firm Value Proxy: Tobin's Q		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
ibs	.021 (0.63)			-.17 (-0.82)			-.17 (-0.94)		
ifd	-.05*** (-3.32)			-.41*** (-3.49)			-.09 (-0.49)		
ird	.01 (1.12)			.06 (0.71)			.05 (0.54)		
icg		-.04* (-1.71)			-.52*** (-3.39)			-.14 (-0.77)	
board_size			.01* (1.76)		.02 (1.51)				.00 (-0.24)
independent			.03*** (2.89)		.11 (0.94)				-.11 (-0.86)
ceo_chair			-.00 (-0.03)		-.07 (-0.52)				-.06 (-0.56)
ceo_internal			-.01 (-0.89)		-.03 (-0.43)				0 (-0.07)
big4			-.02 (-1.51)		.00 (0.08)				.08 (0.92)
tier1	.00 (-0.83)	.00 (-1.12)	.01 (-0.87)	-.01 (-0.62)	-.01 (-0.77)	-.01 (-0.65)	.00 (0.22)	.01 (0.351)	.01 (0.64)
asset_size	0* (-1.75)	0 (-1.32)	0 (-0.81)	.01 (0.81)	.02 (1.16)	.03 (0.95)	-.05* (-1.79)	-.04* (-1.83)	-.04 (-1.52)
leverage	.01*** (-2.74)	0*** (-2.97)	.01*** (-2.99)	.02*** (4.32)	.02*** (4.02)	.03*** (3.76)	.01** (2.66)	.02** (2.59)	.01** (2.67)
risk	.04** (1.99)	.03* (1.72)	.03** (2.16)	.09 (0.81)	.08 (0.79)	.01 (-0.03)	-.25 (-1.15)	-.26 (-1.28)	-.27 (-1.12)
religion	.09*** (3.39)	.07*** (2.76)	.07** (2.49)	.24 (1.61)	.21 (1.12)	.22 (1.18)	.26 (1.18)	.21 (1.10)	.25 (1.11)
log_gdp	.01*** (2.78)	.01** (2.10)	.00 (0.87)	.05** (2.16)	.05 (1.59)	.02 (0.59)	.13*** (3.99)	.12*** (4.71)	.12*** (4.59)
Ssb	.03*** (2.99)	.04*** (2.91)	.03** (2.19)	.05 (0.62)	.06 (0.78)	.12 (1.21)	.23*** (4.73)	.2*** (4.63)	.23*** (4.12)
Adj. R square	0.14	0.10	0.15	0.14	0.12	0.08	0.26	0.31	0.24
F-stat	2.72***	2.51***	2.72***	3.31***	3.22***	2.10***	2.81***	3.48***	2.09**

Table 5: Corporate Governance and Firm Performance (Continued)									
PANEL B: CONVENTIONAL BANKS									
	Firm Performance Proxy: ROA			Firm Performance Proxy: ROE			Firm Value Proxy: Tobin's Q		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
ibs	.04			.33**			.01		
	(1.51)			(2.13)			(-0.53)		
ifd	.03			-.13			.01**		
	(1.23)			(-1.31)			(-2.27)		
ird	-.03***			-.12*			.01***		
	(-4.42)			(-1.92)			(2.89)		
icg		.01			-.1			.01	
		(-0.07)			(-1.11)			(-1.12)	
board_size			.01			-.01			.01
			(0.09)			(-0.81)			(-1.31)
independent			-.03			-.13*			.01
			(-1.52)			(-1.92)			(0.97)
ceo_chair			-.01			-.025			-.07
			(-0.13)			(0.32)			(-0.56)
ceo_internal			.01			-.09			.01
			(0.21)			(-0.54)			(-1.23)
big4			-.04**			-.06			.01
			(-2.69)			(-0.89)			(0.19)
tier1	.00	.00	.00	.00	.00	.00	.00	.00	.00
	(0.19)	(-0.28)	(-1.11)	(0.59)	(0.72)	(0.34)	(0.28)	(0.69)	(0.23)
asset_size	.00	.00	.00	.00	.00	.01	.00	.01	.00
	(-0.18)	(0.39)	(0.16)	(0.28)	(0.19)	(0.29)	(-1.12)	(-1.54)	(-0.32)
leverage	0***	0**	0***	.04***	.03***	.03***	.01***	0***	0***
	(-3.13)	(-2.49)	(-2.98)	(2.82)	(3.47)	(2.89)	(4.54)	(3.91)	(4.43)
risk	-.08*	-.04	-.04	-.24	-.18	-.27	.02	.00*	.00
	(-1.93)	(-0.91)	(-0.79)	(-0.91)	(-0.69)	(-0.75)	(-1.10)	(-1.65)	(-0.49)
religion	.09***	.07***	.08***	.37***	.38***	.31**	.00	.00	.00
	(5.12)	(4.71)	(3.79)	(3.63)	(3.11)	(2.68)	(-0.79)	(-0.71)	(-0.29)
log_gdp	.00	.00	.00	.01	.00	.01	.00	.00	.00
	(1.22)	(0.98)	(0.64)	(0.43)	(-0.05)	(0.23)	(-0.58)	(-0.55)	(0.67)
Adj. R square	0.49	0.37	0.39	0.41	0.41	0.43	0.44	0.38	0.37
F-stat	7.13***	5.39***	5.27***	6.34***	6.44***	5.23***	6.25***	5.23***	4.52***

**Table 5: Corporate Governance and Firm Performance (Continued)**

<b>PANEL C: FULL SAMPLE</b>									
	Firm Performance Proxy: ROA			Firm Performance Proxy: ROE			Firm Value Proxy: Tobin's Q		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
ibs	.024			.062			-.014		
	(1.13)			(0.59)			(-0.31)		
ifd	-.03**			-.34***			.07		
	(-2.43)			(-3.94)			(1.02)		
ird	.00			.05			-.03		
	(0.31)			(0.71)			(-0.91)		
icg		-.03			-.30***			.04	
		(-1.11)			(-2.95)			(0.56)	
board_size			.00			.00		.00	
			(1.80)			(1.29)		(-0.64)	
independent			.03**			.02			-.01
			(2.56)			(0.26)			(-0.59)
ceo_chair			.01			-.07			-.08
			(-0.36)			(-0.78)			(-1.12)
ceo_internal			-.02			-.02			-.02
			(-1.02)			(-0.39)			(-0.87)
big4			-.011**			-.04			.05
			(-2.39)			(-0.63)			(1.09)
tier1	.00	.00	.00	.00	.00	.00	.00	.00	.00
	(-0.76)	(-0.49)	(-0.86)	(-0.48)	(-0.65)	(-0.54)	(0.92)	(0.65)	(0.89)
asset_size	-.02	-.03	0	.01	.01	.01	.01	.02	.01
	(-1.18)	(-1.02)	(-0.45)	(1.104)	(1.05)	(0.93)	(1.10)	(1.17)	(1.11)
leverage	0***	0***	.01***	.02***	.01***	.01***	.01***	.01***	.02***
	(-4.91)	(-4.51)	(-3.68)	(5.73)	(5.12)	(4.32)	(2.91)	(3.14)	(2.29)
risk	.04**	.03**	.04**	.07	.03	.01	-.04	-.03	-.05
	(2.32)	(2.12)	(2.68)	(0.89)	(0.71)	(0.12)	(-0.52)	(-0.49)	(-0.67)
religion	.08***	.06***	.07***	.32**	.23**	.21	.13	.15*	.14*
	(4.65)	(4.03)	(3.65)	(2.72)	(2.18)	(1.81)	(1.41)	(1.87)	(1.73)
log_gdp	.02*	.00	.00	.02	.03	.02	.04***	.06***	.06***
	(1.81)	(1.43)	(0.71)	(1.51)	(1.11)	(0.65)	(4.12)	(4.31)	(4.71)
Adj. R square	0.25	0.21	0.28	0.20	0.18	0.20	0.37	0.43	0.41
F-stat	6.81***	6.91***	6.31***	5.82***	5.35***	4.12***	7.56***	8.76***	5.61***

## 5. CONCLUSION

The main objective of this study is to investigate whether having different governance structures affect the performance of banks (Islamic versus Conventional banks). Specifically, we examine the relationship between the multi-layer corporate governance model, instituted by the Islamic banking system via Shari'ah compliant corporate governance, and bank performance and value.

Using the data set containing the total of 154 banks, 77 Islamic and 77 Conventional, from the United Kingdom, Turkey, Malaysia, Indonesia, Saudi Arabia, the United Arab Emirates, Qatar, Bahrain, Kuwait, Jordan, Egypt, Pakistan, Bangladesh, Sudan, Senegal, and Tunisia over the period of 2005 and 2011, we scrutinized board structure, board independence, and board attendance to see what roles they play on the banks' performances and values. Specifically, we examine the effect of Shari'ah compliant corporate governance on the performance of Islamic banks vis-à-vis their conventional counterparts.

Employing the random-effects GLS method for the regression analysis and using a two-step generalized methods of moments (GMM) method for the robustness check of the findings, the results show that the boards are strong and the CEO's are powerful in Islamic banks, and the return on assets and return on equity (ROA and ROE) are considerably higher in Islamic banks than their conventional counterparts. There is no surprise with that since the previous studies clearly ascertain that Islamic banks have been highly profitable in comparison to conventional ones.

Although there is no significant relationship between board related variables and ROE, they, the board size and the board independence (number of independent members) of Islamic banks, are positively correlated with ROA, which confirms that these board structure variables are important driving forces in the profitability of Islamic banks.

The results reveal very similar relations between the firm performance proxies and both board and ceo related variables for conventional banking practice except the relation between board independence and ROE, which has 10% significance level. No significant relationship also found between the firm performance proxies (both ROA and ROE) and ceo related variables, CEO\_CHAIR and CEO\_INTERNAL.

Moreover, it is revealed that while the return variables of Islamic banks are positively correlated with the financial disclosure index (IFD) and board structure variables, they are negatively correlated with the risk closure index (IRD) and CEO variable variables. On the other hand, the corporate governance and financial disclosure indices (ICG and IFD) lessen the profitability of Islamic banks as they are negatively significant with the performance variables. However, it is found no significant relations between the firm performance proxies (for both ROA and RAE) and IBS and IRD variables.

Conversely, IRD is found negatively significantly related to the performance in conventional sample, which shows that IRD functions as important role in conventional banks' performance and is kind of value decreasing.

We also find that Islamic banks have much higher exposures to risky securities than their conventional counterparts while the both have similar financial leverages, which are positively significantly related with all the samples although they have very small and ignorable coefficients. Thus, leverage has positive though very small stimulus on both Islamic and conventional banks' profitability.

We see that Tobin's Q is not significant with the corporate governance indices of Islamic banks, which shows that the governance mechanism does not support enough the firm value and it provides a weak explanation of the changes in shareholders' value measured by Tobin's Q for Islamic banks. On the other hand, Tobin Q has significant relationship with IFD and IRD in conventional banks with very small coefficients.

Our findings correspondingly show that the index of corporate governance (ICG) and the index of financial disclosure (IFD) appear as the motivating factors for risk taking attitudes of Islamic banks while the board structure is driven by short-term profitability. However, the governance mechanism provides a weak explanation for the changes in shareholders' value of Islamic banks, which shows that conventional banks have better, more effective, governance system than Islamic banks in this regard.

Before concluding, we must again stress the fact that we matched conventional banks with Islamic banks based on 2005 asset size and same countries. Thus, the outcomes of the study should be evaluated with these data constraints. In fact, there are much more conventional banks than Islamic banks in the global market. Hence, selecting different conventional banks might result in different outcomes.

The findings of this study offer a valuable and practical evidence for academics, practitioners as well as policy makers and regulators, and makes a humble contribution to the literature on the comparative study of Islamic banks vis-à-vis conventional pairs regarding the corporate governance and bank performance relationship.

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