# CORPORATE GOVERNANCE STRUCTURE AND FIRM' FINANCIAL PERFORMANCE: EVIDENCES FROM EGYPT

*Mohammed M. Soliman\*, Aiman A. Ragab\*\*, Mohammed B. Eldin\*\*\**

## Abstract

Recent financial international scandals have generated hyped interest in the area of corporate governance as a mean to mitigate financial problems faced in developing nations. The purpose of this study is to examine the link between corporate governance structure and firm' financial performance in Egypt. The data for analysis are gathered from manual review of the financial statements and websites of the thirty enterprises that make up the (EGX 30) covering the four years period 2007-2010. Results from the study indicate that board size; the presence of audit committee; and audit quality significantly have relationship with firm' financial performance measured by ROA and ROE. The results also, indicate that board independence; and institutional ownership have no significant correlation with firm' financial performance. For CEO duality, the results indicate that CEO duality has a positive impact upon companies' financial performance measured by ROE, at the same time, is not correlated with the ROA measure of financial performance. This study is important because it offers evidence on the impact of corporate governance structure on firm financial performance. In addition, it provides useful information that is of great value to policy makers, academics and other stakeholders.

**Keywords:** Corporate Governance; Audit Committees; Audit Quality; Financial Performance; Egypt

*\* College of Management & Tech., Arab Academy for Sciences & Tech., Egypt*
*E-mail: Mohamed.soliman@aast.edu*
*\*\* Dean of College of Management & Tech., Arab Academy for Sciences & Tech., Egypt*
*E-mail: aaragab@aast.com*
*\*\*\* College of Management & Tech., Arab Academy for Sciences & Tech., Egypt*
*E mail: Mohamed.bahaa@aast.edu*

## 1. Introduction

Several researchers have examined the position of corporate governance in developed countries, however, developing nations were nearly absent from the corporate governance research arena (Samaha, 2010). The special problems faced by developing nations makes the type and degree of corporate governance in developing nations significantly different from that in developed nations (Rabelo and Vasconcelos, 2002 and Mensah, 2002). Developing nations are known to have different political and socio-economic environments than those of the developed nations. Developing nations usually suffer from state ownership of companies, weak legal and judiciary system, weak institutions, limited human resources capabilities, and closed/family companies (Young *et al.,* 2008). In addition, individual developing countries are very different between themselves. There are major difference in the Middle East, North Africa countries and sub-Saharan African countries (Fawzy, 2004). Therefore, there is a need to study corporate governance in each country separately.

Corporate governance has many benefits for developing nations. It helps developing nations to realize high and sustainable rates of growth, increases confidence in the national economy, and deepens capital market and increases its ability to mobilize savings. In addition, it results in raising investment rates protecting the rights of the minority shareholders or small investors. Also, it encourages growth of private sector by supporting its competitive capabilities, helping to secure financing for projects, generating profits, and creating job opportunities (Tsamenyi *et al.,* 2007).

Egypt has adopted several far-reaching measures aimed at improving the local investment environment. Among these measures, Egypt engaged in a number of activities aimed at improving its corporate governance practices, in the late 1990s. It has been recognized that if applied properly, corporate governance helps countries to realize

high and sustainable rates of growth. Bremer and Elias (2007) investigate the challenges and assess the progress of corporate governance in Egypt. They concluded that Egypt has started to appreciate the need to introduce corporate governance in the Egyptian businesses. However, they report that there are many integral factors that hider the development of corporate governance in Egypt like: (1) family owned or closely held corporations dominate the Egyptian private sector, (2) State owned enterprise still play a major role in the Egyptian Economy, (3) new and thin capital market, and (4) lack of awareness of corporate governance concepts and benefits, lack of board independence, weaknesses in the Egyptian economic structure. Thus improving corporate governance in Egypt can be used as means of creating value for the country's enterprises, and increasing foreign direct trust and inflows that are much needed by the Egyptian Economy.

Corporate governance structure facilitates access to a wider pool of investors by helping to protect the rights of minority shareholders and small investors. Rashid *et al., (*2010) argue that there are theoretical reasons to assume that improved governance practices will lead to better financial performance through an increase expected cash flows accruing to the investors and a reduction in the cost of capital.
Corporate governance has been identified to have a significant impact on the performance of firms (Coleman and Osei, 2007; Dittmar and Mahrt-Smith, 2007; and Danoshana and Ravivathani, 2013). Therefore, this study addresses the question whether corporate governance structure has a positive impact on financial performance of the most active non-financial 50 companies listed in Egypt.

The rest of this paper is divided into five sections. Section 2 provides a literature review and identifies research hypotheses to be tested in the study. Section 3 explains the research methodology employed by describing the sample, the dependent variable, and the measurement of the independent variables. Section 4 provides the statistical findings, and a final section offers a discussion and some conclusions.

## 2. Literature review and Research Hypotheses

The corporate governance literature identifies a variety of mechanisms that are available to the shareholders to ensure managers act in the best interest of the shareholders. However, most of the studies on corporate governance structure concentrate mainly on a specific aspect of governance, such as size of the board, independence of the board, split chairman/CEO roles, institutional ownership, the establishment of the audit committees, and audit quality. According to previous studies such as Ibrahim *et al,* (2010); Zubaidah *et al,* (2009); Hashim and Devi, (2010); and Danoshana and Ravivathani, (2013), this study uses an extensive set of governance variables which provide comprehensive picture of the company level governance structures. Corporate governance structure is examined in terms of board size; board independence; CEO duality; institutional ownership; the presence of an audit committee; and audit quality. The study also, includes three additional control variables that is firm size; firm age; and leverage.

### 2.1. Board size and firm' financial performance

Khanchel (2007) has indicated that the size of the board has been shown to have a material impact on the quality of corporate governance. Also, Jensen (1993) has indicated that a value-relevant attribute of corporate boards is its size. What should a board size be? This has been a difficult question to answer because it seems to sit in the realms of relativity and subjectivity against the backdrop of unbiased objective measure. However, Lipton and Lorsch (1992) suggest an optimal board size between seven and nine directors. In this respect, empirical studies have shown that the market values firms with relatively small board sizes (Lipton and Lorsch, 1992; Hermalin and Weisbach, 2003; and Sanda *et al*, 2005). Hence, as board size increases board activity is expected to increase to compensate for increasing process losses (Vafeas, 1999). The argument is that large boards are less effective and are easier for a CEO to control. Yawson (2006); and Mak and Kusnadi (2005) argue that the cost of coordination and processing problems is also high in large boards and this makes decision-taking difficult. On the other hand, smaller boards reduce the possibility of free-riding and therefore have the tendency of enhancing firm performance (Hermalin and Weisbach, 2003). Subsequently we test the following hypothesis:

*H₁: There is a significant negative relationship between the size of the board and the company's financial performance.*

### 2.2. Board independence and firm' financial performance

The focus on board independence is grounded in agency theory (Fama and Jensen, 1983). John and Senbet (1998) argue that a board is more independent if it has more non-executive directors (NEDs). As to how this

relates to firm performance, empirical results have been inconclusive. In one breadth, it is asserted that executive (inside) directors are more familiar with a firm's activities and, therefore, are in a better position to monitor top management. On the other hand, it is contended that NEDs may act as "professional referees" to ensure that competition among insiders stimulates actions consistent with shareholder value maximization (Bhagat and Black, 2002) and are more likely to replace poorly performing CEOs (Weisbach, 1988). More independent boards are also more likely to opt for a clean slate when company performance deteriorates significantly, and to hire a replacement CEO from outside the firm rather than promote an internal candidate (Huson, 2001).

Some authors have also found that there is no significant relationship between proportion of NEDs and firm performance (Hermalin and Weisbach, 2002; Bhagat and Black, 2002). It has been shown that the effectiveness of a board depends on the optimal mix of inside and outside directors (Fama and Jensen, 1983; and Baums, 1994). However, the debate in the corporate governance literature continues as to whether an increased participation of outside directors on the board leads to an improvement in the business' financial performance. Subsequently we test the following hypothesis:

*H₂: There is a significant positive relationship between Non-executive directors and the company's financial performance.*

### 2.3. CEO duality and firm' financial performance

The question of whether the chairman and CEO positions should be separate has been controversial. The advantages and the drawbacks of separating the chairman and CEO positions have been studied extensively. Jensen (1993) argues that separating CEO and chairman roles is in the shareholders' interest. In this regard, Fama and Jensen (1983) also argue that concentration of decision management and decision control in one individual hinders boards' effectiveness in monitoring top management. It is argued that there is conflict of interest and higher agency costs when a CEO doubles as board chair (Brickley *et al.*, 1997) and this leads to the suggestion that the two positions should be occupied by two persons. Nonetheless, there is also the argument that when a CEO doubles as board chair, it affords the CEO the opportunity to carry out decisions and projects without undue influence of bureaucratic structures and in this regard it is expected that CEO duality should have a positive relationship with performance (Rechner and Dalton, 1991). However, empirical evidence is not conclusive. Sanda *et al.,* (2005) show a positive relationship between firm performance and separating the functions of the CEO and board chair, while Daily and Dalton (1992) find no relationship between CEO duality and firm performance. We measure CEO duality as a dummy (equals unity when a CEO doubles as board chair and 0 otherwise) and we expect this to have a negative relationship with a company's financial performance. Subsequently we test the following hypothesis:

*H₃: There is a significant negative relationship between CEO duality and the company's financial performance.*

### 2.4. Institutional ownership and firm' financial performance

It has been argued that the nature of ownership of a firm also constitutes a dimension of its governance structure and should, therefore, influence performance (Krivogorsky, 2006). The role that the institutional investors can play in the corporate governance system of a company is a controversial question (Khanchel, 2007). Some studies show that the institutional investors must interfere in the corporate governance system of a company. The result of these studies shows that if the corporate governance system in the companies succeeds, then the institutional investors must play an active role in the entire process. For example, Shleifer and Vishny (1986) observe that institutional investors by virtue of their large stockholdings would have greater incentives to monitor corporate performance since they derive greater benefits from monitoring. Cremers and Nair (2005) argue that some institutional investors such as pension funds might have more incentives to monitor than others and act as more aggressive shareholder activists. Other studies find that institutional investors need not play a role in the corporate governance system of a company. For example, Wharton *et al.,* (1991) argue that institutional investors need not take active interest in the corporate governance of a company because the institutional investors have their primary fiduciary responsibility for their own investors and beneficiaries, which can lead to a conflict of interest with their acting as owners. For instance, Monks (1995) has argued that absence of appropriate incentives and free rider problems hinder institutional activism efforts. Some recent research, however, shows that companies with good governance system have actually generated risk-adjusted excess returns for their shareholders and hence, if an institutional investor invests in companies with good corporate governance records, it will actually help its own shareholders. However, the literature suggests that the nature of these institutional investors might be important in determining their willingness to monitor (Khanchel, 2007). It

is therefore expected that institutional ownership should have a positive relationship with firm performance. Subsequently we test the following hypothesis:

*H4: There is a significant positive relationship between Institutional ownership and the company's financial performance.*

## 2.5. The presence of audit committee and firm' financial performance

Empirical researches provide support that the presence of an audit committee is associated with fewer financial reporting problems (McMullen, 1996). Audit committees thus, represent another internal governance mechanism whose impact is to improve the quality of financial management of a company and hence its performance (Khanchel, 2007; and Danoshana and Ravivathani, 2013). However, very little empirical work has been done on the impact of audit committees on firm performance. Wild (1994) shows that markets react favorably to earning reports after the establishment of audit committees. In this study, we expect that the presence of an audit committee to have a positive relationship with a company's financial performance. Subsequently we test the following hypothesis:

*H5. There is a significant positive relationship between the presence of an audit committee and the company's financial performance.*

## 2.6. Audit quality and firm' financial performance

Audit is an important element of efficient equity markets, because audits can enhance the credibility of financial information, directly support better corporate governance practices through transparent financial reporting (Francis *et al.,* 2003). Theoretically, a large public accounting firm with greater investment in reputational capital has more reason to minimize audit errors via "auditor-reputation effects" (Beatty, 1989). In addition, Dye (1993) argues that large audit firms are inclined to supply a higher quality audit compared to small firms, as more wealth is at stake in large audit firms. They will also experience a greater loss through reputation damage if the quality of their audit does not meet the accepted quality standards. DeFond and Jiambalvo's study (1993) indicated that large audit firms are more independent of management. They found that the (then) Big Eight audit firms experienced a greater number of disagreements with former clients than non-Big Eight firms. Therefore, empirical evidence seems to support the differential audit quality based on the type of audit firm. In addition, as argued by Mitton (2002), that as quality audit is also one aspect of corporate governance, it is expected that firms which are audited by one of Big Four audit firms (a proxy for audit quality) will have a better financial performance. Subsequently we test the following hypothesis:

*H6. There is a significant positive relationship between audit quality and the company's financial performance.*

## 3. Methodology

### 3.1. Sample

The study examines 30 companies which make up the EGX 30 over the period 2007-2010. The EGX 30 companies were selected because these companies are considered the leading and most active in the Egyptian market. EGX 30 is the most commonly used index to measure the performance of the Egyptian Capital Market. It is a price index that includes the top thirty companies with respect to their liquidity and activity. This index is measured by market capitalization and adjusted by the free float that must be at least 15 per cent for a company to be listed on Egyptian Stock Exchange. The banking and insurance sectors are not included in this study as the characteristics of these firms are different from the firms in other industrial sectors in terms of financial statement profitability measures and liquidity assessment (Zeitun and Tian 2007). As no relevant Data Stream exists in Egypt, the annual reports and the Board of Directors reports of the EGX 30 companies, covering the three year period 2007-2010, were purchased from the Egyptian Company for Information Dissemination (EGID) to extract the information on the variables needed to test each of our hypotheses. There are a number of companies that were in the EGX 30 list in 2007 that are not in EGX in 2010 raising concerns regarding the effect that non-surviving firms have on the results. To control the effect of non-survivorship firms on the results, a dumpy variable (SURV) is created which is equal to 1 if the firm is continuously present in all the years of the sampling period from 2007 to 2010, otherwise it is equal to 0.

### 3.2. Variables selection

Two variables are selected as a proxy for firm' financial performance, as dependent variable: The first measure is the return on assets (ROA) which is calculated by taking the ratio of net profit of the firm to the average total assets of the firm. The second measure will be return on equity (ROE) which is calculated by taking the ratio of net profit of the firm to average total equity. Regarding corporate governance structure, as independent variable, this study used six variables as a proxy for it: board size (BSIZ) which is measured by the number of directors serving on such boards; board independence (BIND) which is measured by the proportion of independent members of the Board of Directors to the total members of the Board of Directors; CEO duality (CEOD) which is measured by a dummy variable equals one when a CEO doubles as board chair and 0 otherwise; institutional ownership (INOW) which is measured by the percentage of shares held by the institutional investors; the presence of audit committee (AUCO) is used whereby a value of 1 is awarded to firms having audit committees and 0 otherwise; and audit quality (AUQU) which set equal to one (1) if the information obtained from companies audited reports show that it is audited by one of the "big 4" audit firms, otherwise zero (0). Also, this study controls the differences in firm's operating environment by including the firm size; firm age; and leverage variables in the model. Firm size (FSIZ) is measured by the log of total assets of the firm and firm age (FAGE) is measured as the logarithm of the number of years since the establishment of a firm; and firm leverage (LEV) is measured as total liability divided by total assets at year end. The explanations of dependents; independents; and control variables are presented in Table 1.

**Table 1.** Dependent; Independent and Control Variables

| Variables | Indicators | Expected Signs | Measurement |
|---|---|---|---|
| *Dependent Variables ((Performance)* | | | |
| Return on Assets | ROA | | Net profit of the firm to the average total assets. |
| Return on Equity | ROE | | Net profit of the firm to average total equity. |
| *Independent Variables (Corporate Governance Structure)* | | | |
| Board Size | BSIZ | _ | Total members of the Board of Directors at the end of the year. |
| Board Independence | BIND | + | The proportion of independent members of the Board of Directors to the total members of the Board of Directors. |
| CEO Duality | CEOD | _ | Dummy variable takes the value (1) in the case of a dual role, and value (0) otherwise. |
| Institutional Ownership | INOW | + | The percentage of shares held by the institutional investors. |
| Audit Committee | AUCO | + | Dummy variable takes a value of (1) is awarded to firms having audit committees and (0) otherwise. |
| Audit Quality | AUQU | + | Dummy variable takes a value of (1) if the information obtained from companies audited reports show that it is audited by one of the "big 4" audit firms, otherwise zero (0). |
| *Control Variables* | | | |
| Firm Size | FSIZ | + | Natural log of total assets. |
| Firm Age | FAGE | + | The logarithm of the number of years since the establishment of a firm. |
| Leverage | LEV | + | Total liability divided by total assets at year end. |

### 3.3. Research Model

According to Ibrahim, (2010); Zubaidah *et al,* (2009); Hashim and Devi, (2010); Ehikioya, (2007); and Danoshana and Ravivathani, (2013) the relationship between corporate governance structure and firm's financial performance was tested by the following regression equations:

$$ROA = \beta_0 + \beta_1 BSIZ + \beta_2 BIND + \beta_3 CEOD + \beta_4 INOW + \beta_5 AUCO + \beta_6 AUQU + \beta_7 FSIZ + \beta_8 \quad (1)$$
$$FAGE + \beta_9 LEV + \beta_{10} FSUR + \mu$$
$$ROE = \beta_0 + \beta_1 BSIZ + \beta_2 BIND + \beta_3 CEOD + \beta_4 INOW + \beta_5 AUCO + \beta_6 AUQU + \beta_7 FSIZ + \beta_8 \quad (2)$$
$$FAGE + \beta_9 LEV + \beta_{10} FSUR + \mu$$

Where: ROA, return on assets; ROE, return on equity; BSIZ, is the size of the board; BOIN, board members independence; CEOD, CEO duality; INOW, institutional ownership; AUCO, the presence of audit committee; AUQU, audit quality; FSIZ, firm size; FAGE, firm age; LEV, leverage; FSUR, firm survival; and μ, the error term.

## 4. Results discussion

### 4.1 Descriptive statistics

Table 2 provides the minimum, maximum, mean, and standard deviation of the variables in the study. As for the dependent variables; the mean of the return on assets (ROA) for the companies is 10.40 percent, and mean of the return on equity (ROE) is 21.74 percent. The low values of ROE and ROA indicates poor performance for the Egyptian firms for years 2007-2010. Also, it appears from the Table regarding the corporate governance structure, the average ratio of independent directors is (72%). The results also, reveal that the maximum size of board of directors was 13 members, while the minimum size was 4 members at the end of year, and the average was 6, 67. The data also shows that nearly 47% of the firms have their chairman who also acts as CEO duality. The data also shows that, nearly (52.43%) of the sample firms owned by institutional investors with a standard deviation of 0.301.

**Table 2.** Descriptive Statistics for 2007-2010

| | Dependent Variables | | Independent Variables | | | | | | Control Variables | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROA | ROE | BSIZE | BIND | CEOD | INOW | AUCO | AUQU | FSIZ | FAGE | LEV |
| Mean | 10.40 | 21.74 | 6.67 | 0.72 | 0.474 | 0.524 | .4286 | .3095 | 13.92 | 1.4 | 0.356 |
| Max | 24.74 | 82.89 | 13 | 1 | 1 | 0.950 | 1.00 | 1.00 | 17.82 | 2.0 | 0.98 |
| Min | -3.35 | 5.47 | 4 | 0.621 | 00.0 | 0.10 | 0.00 | 0.00 | 9.96 | 0.00 | -0.12 |
| Std. Dev. | 11.649 | 14.980 | 4,987 | 0,108 | 0,488 | 0.301 | 0.5008 | 0.4679 | 2.60 | 0.32 | 0.31 |

Where: ROA, return on assets; ROE, return on equity; BSIZ, is the size of the board; BOIN, board members independence; CEOD, CEO duality; INOW, institutional ownership; AUCO, the presence of audit committee; AUQU, audit quality; FSIZ, firm size; FAGE, firm age; and LEV, leverage.

### 4.2. Correlation matrix and multicollinearity analysis

Multicollinearity in explanatory variables has been diagnosed through analyses of correlation factors and Variable Inflation Factors (VIF). Table 3 presents the correlation matrix of the dependents; independents; and control variables, from which, it has been observed that the highest simple correlation between independent variables was 0.647 return on assets (ROA) and return on equity (ROE). Bryman and Cramer (1997) suggest that simple correlation between independent variables should not be considered harmful until they exceed 0.80 or 0.90. This confirms that there is no multicollinearity among the variables.

**Table 3.** Pearson Correlation Matrix for (2007-2010)

| | Dependent Variables | | Independent Variables | | | | | | Control Variables | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROA | ROE | BSIZE | BIND | CEOD | INOW | AUCO | AUQU | FSIZ | FAGE | LEV |
| ROA | 1 | | | | | | | | | | |
| ROE | 0.647 | 1 | | | | | | | | | |
| BSIZE | 0.152 | 0.011 | 1 | | | | | | | | |
| BIND | -0.012 | -0.005 | 0.512 | 1 | | | | | | | |

| CEOD | 0.064 | 0.123 | 0.015 | -0.065 | 1 | | | | | | |
| INOW | -0.374 | -0.274 | -0.032 | 0.472 | -0.101 | 1 | | | | | |
| AUCO | 0.357 | 0.486 | 0.245 | 0.428 | -0.013 | 0.367 | 1 | | | | |
| AUQU | 0.432 | 0.328 | 0.001 | 0.391 | -0.045 | 0.091 | 0.375 | 1 | | | |
| FSIZ | 0.150 | 0.010 | 0.180 | 0.111 | 0.062 | 0.202 | 0.047 | 0.471 | 1 | | |
| FAGE | -0.03 | -0.02 | 0.022 | -0.032 | 0.040 | 0.001 | 0.001 | 0.359 | -0.24 | 1 | |
| LEV | -0.068 | 0.035 | -0.064 | 0.003 | -0.100 | -0.074 | 0.094 | -0.011 | -0.04 | -0.03 | 1 |

Where: ROA, return on assets; ROE, return on equity; BSIZ, is the size of the board; BOIN, board members independence; CEOD, CEO duality; INOW, institutional ownership; AUCO, the presence of audit committee; AUQU, audit quality; FSIZ, firm size; FAGE, firm age; and LEV, leverage.

### 4.3. Multivariate analysis

Regression analysis has been preferred to investigate the relationship between corporate governance structures and firms' financial performance of Egyptian companies. Corporate governance structures as independent variables and Firm's financial performance as a dependent variable. Corporate governance structure variables are measured by BSIZ; BOIN; CEOD, INOW; AUCO; and AUQU, while firm's performance is measured by ROA (model 1); and ROE (model 2).

Results of an Ordinary Least Square (OLS) regression for model 1 (ROA) in Table 4 show that the F-value is 3.49 (P = 0.00) and for model 2 (ROE) show that the F-value is 2.42 (P = 0.00). The result statistically supports the significance of both models. These findings suggest that multicollinearity between the independent variables is unlikely to pose a serious problem in the interpretation of the results of the multivariate analysis. Also, we found that the value of the coefficient of determination R square of the model 1 (ROA) is equal to 0.51, and this means that 51% of the variance of the independent variable (ROA) explained by the independent variables included in the model. For model 2 (ROE), the coefficient of determination R square of the model is equal to 0.631 and also, this means that 63% of the variance of the independent variable (ROE) explained by the independent variables included in the model

### 4.4. Results of Regression Model

The results in Table 3 and 4 show that BSIZE has a positive significant relationship with ROA (p-value = 0.011 < 0.05) and ROE (p-value = 0.017 < 0.05) with confidence level of 95% as reported by Sanda, *et.al*, (2005) in the study conducted in Nigeria, which not supports H1. This result is consistent with Khanchel (2007); Ibrahim *et al.,* (2010); and Danoshana and Ravivathani (2013).

**Table 4.** Regression Results

| | *Model 1 (ROA)* | | | *Model 2 (ROE)* | | |
| | *ROA = β0 + β1BSIZ + β2BIND + β3CEOD + β4INOW + β5AUCO + β 6AUQU + β7 FSIZ + β8 FAGE + β9 LEV + β10 FSUR+ μ* | | | *ROE = β0 + β1BSIZ + β2BIND + β3CEOD + β4INOW + β5AUCO + β 6AUQU + β7 FSIZ + β8 FAGE + β9 LEV + β10 FSUR+ μ* | | |
| *Variable* | *β* | *t-value* | *Sig.* | *β* | *t-value* | *Sig.* |
| *Constant* | -8.287 | 1.288 | 0.042 | | -1.258 | 0.009 |
| *BSIZ* | -0.015 | -0.525 | 0.011 | | 2.401 | 0.017 |
| *BOIN* | 0.001 | 0.895 | 0.268 | | -1.243 | 0.215 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *CEOD* | 0.020 | -3.614 | 0.537 | | 2.415 | 0.016 |
| *INOW* | -0.485 | -4.246 | 0.025 | | | 0.072 |
| *AUCO* | 0.719 | 5.390 | 0.032 | | | 0.013 |
| *AUQU* | | | 0.082 | | | 0.121 |
| *FSIZ* | | 2.996 | 0.003 | | 1.742 | 0.023 |
| *FAGE* | | -0.392 | 0.695 | | -0.419 | 0.676 |
| *LEV* | | -1.205 | 0.229 | | 1.340 | 0.181 |
| *Model Summary* | | | | *Model Summary* | | |
| *R* | | | 0.657 | 0.725 | | |
| *R square* | | | 0.514 | 0.631 | | |
| *Adjusted R square* | | | 0.484 | 0.517 | | |
| *F-value* | | | 3.49 | 2.42 | | |
| *Sig.* | | | 0.000 | 0.000 | | |

Dependent variables: ROA and ROE
Significant at .05%

Where: ROA, return on assets; ROE, return on equity; BSIZ, is the size of the board; BOIN, board members independence; CEOD, CEO duality; INOW, institutional ownership; AUCO, the presence of audit committee; AUQU, audit quality; FSIZ, firm size; FAGE, firm age; and LEV, leverage.

On board independence (BOIN), the study shows that the more independence there are on a company's board, the better the performance in terms of return on assets and return on equity. The implication is that when a board is deemed independent, performance of companies becomes better. The results in table 3 and 4 show that, an insignificantly negative impact exists between board independence (BOIN) and firm's performance. Because, in the case of ROA, test of p-value is $0.268 > 0.05$. At the same time, in the case of ROE, test of p-value is $0.215 < 0.05$. Therefore H 2 is rejected. This result is consistent with the findings of Agrawal (1995), who found that boards expanded for other reasons often result in too many outsiders on the board, which does not help performance. While on the other hand, the result is not consistent with the findings of other studies such as Ibrahim, (2010); and Danoshana1 and Ravivathani (2013).

On CEO to serve as the chairman of the company, the study suggests that when a CEO also serves as the board chairman performance worsens. The results in Table 3 and 4 reveal it is positively related with ROE at the 5% significance level (p-value = $0.016 < 0.05$), indicating CEO duality (CEOD) has a positive impact upon companies' financial performance. However, the CEO duality variable is not correlated with the ROA measure of financial performance (p-value = $0.537 > 0.05$). This is consistent with studies of Brickley *et al.,* (1994); and Sanda *et al.*, (2005), which found out that the one-tier board structure type leads to leadership facing conflict of interest and agency problems, thus giving preference for the two tier system. Again, it has been argued that problems tend to be higher when the same person holds both positions (Brickley *et al.,* 1994).

Consideration of the institutional ownership (INOW) variable, the results in Table 3 and 4 reveal it is negatively related with ROA at the 5% significance level, indicating institutional ownership has a negative impact upon Egyptian companies' financial performance. However, the institutional ownership variable is not correlated with the ROE measure of financial performance. This result is in keeping with Danoshana1 and Ravivathani (2013), they found an insignificant relationship between institutional ownership of Korean listed companies and ROE. Also, this is consistent with the Turkish study of Gurbuz and Aybars (2011).

Results show that, a significantly positive impact exists between the presence of audit committee (AUCO) and firm's performance. Because, in the case of ROA, Coefficient is 0.357, test of p-value is $0.032 < 0.05$. At the same time, in the case of ROE, Coefficient is 0.486, test of p-value is $0.013 < 0.05$. So existence of audit committee has significantly positive impact on the firm's performance. Therefore H 5 is accepted and means that, existence of audit committee will result high financial performance, because detailed discussion on the financial statement of the companies will lead to get more ideas regarding the reports and it will guide to increase the firm's performance. This result is consistent with Khanchel (2007); and Danoshana1 and Ravivathani (2013).

The results in Table 3 and 4 show that audit quality (AUQU) has a positive insignificant relationship with ROA (p-value = $0.082 > 0.05$) and ROE (p-value = $0.121 > 0.05$) with confidence level of 95%. Therefore H 6 is rejected. As for the control variables, FSIZ showed a similar result in both model, which is a positive significant

relationship with ROA and ROE, with a confidence level of 95%, while FAGE and LEV showed negative insignificant relationship with ROA and ROE.

## Conclusion

The purpose of this study is to examine the link between corporate governance structure and firm' financial performance in Egypt. The data for analysis are gathered from manual review of the financial statements and websites of the thirty enterprises that make up the (EGX 30) covering the four years period 2007-2010. Results from the study indicate that board size; the presence of audit committee; and audit quality significantly have relationship with firm' financial performance measured by ROA and ROE. The results also, indicate that board independence; and institutional ownership have no significant correlation with firm' financial performance. For CEO duality, the results indicate that CEO duality has a positive impact upon companies' financial performance measured by ROE, at the same time, is not correlated with the ROA measure of financial performance. Also, all the other variables that were not found to have significant relationship still had correlation with firm' financial performance.

The findings of this paper are in line with previous research from other developing nations that indicate that the corporate governance structure in Egypt is low. It also indicates that some of the non-conformity might be due to lack of knowledge about the needs and benefits of corporate governance. Also, the empirical findings in this study shed light on the role of corporate governance structure plays in firm performance, and thus offer insights to policy makers interested in improving corporate governance systems in an emerging economy such as Egypt.

Limitation of the study is that this study is using a small sample of 30 companies. This sample may be small in size and, by construction, composed of the most active Egyptian listed companies and thus may not be representative of the population of Egyptian firms, consequently, caution should be considered in evaluating the results. Thus, it might have been better to look at companies from a wider range. Further, an organization's performance has been measured through Return on Equity (ROE) and Return on Assets (ROA). Other Key Performance Indicators (KPI) may also be introduced in the model for more authentic measurement of a firm's all round performance.

## References

1. Agrawal, A. (1995),"Dismantling the divide between indigenous and western knowledge", Development and Change, Vol. 26, No. 3, pp. 413-39.
2. Baums, T. (1994), "Corporate Governance in Harmony-system & Recent Developments, in M. Issakson & R. Skog (Eds.) Aspects of corporate Governance, Stockholm: Jurist.
3. Beatty, R.P. (1989), "Auditor reputation and their pricing of initial public offerings", The Accounting Review, Vol. 64, pp. 693-709.
4. Bhagat, S. and Black, B. (2002), "The non-correlation between board independence and long-term firm performance", Journal of Corporation Law, Vol. 27, pp. 231-73.
5. Bremer, J., and Ellias, N. (2007), "Corporate Governance in Developing Economies –The Case of Egypt", International Journal of Business Governance and Ethics, Vol. 3 No. 4, pp. 430-445.
6. Brickley, J A, Coles, J L and Jarrell, G. (1997), "Leadership Structure: Separating the CEO and Chairman of the Board", Journal of Corporate Finance, Vol. 3 No. 3, pp. 189-220.
7. Bryman, A., and Cramer, D. (1997). Quantitative data analysis with SPSS for windows. London: Routledge.
8. Cremers, K.J.M. and Nair, V.B. (2005), "Governance mechanisms and equity prices", Journal of Finance, Vol. 60 No. 6, pp. 2859-94.
9. Daily, C M and Dalton, D R. (1992), "The Relationship Between Governance Structure and Corporate Performance in Entrepreneurial Firms", Journal of Business Venturing, Vol. 7 No. 5, pp. 375-386.
10. Danoshana, S., and Ravivathani, T. (2013), "The impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka", Merit Research Journal of Accounting, Auditing, Economics and Finance, Vol. 1 No. 6, pp. 118-121.
11. DeFond, M. and Jiambalvo, J. (1993), "Factors related to auditor-client disagreements over income-increasing accounting methods", Contemporary Accounting Research, Vol. 9, pp. 415-31.
12. Dye, R. (1993), "Auditing standards, legal liability and auditor wealth", Journal of Political Economy, Vol. 101, pp. 887-914.
13. Ehikioya, I. (2007),"Board composition, managerial ownership, and firm performance: An empirical analysis", The Financial Review, Vol. 33, No. 1, pp.1-16.

14. Fama, E.F. and Jensen, M.C. (1983), "Separation of ownership and control", Journal of Law & Economics, Vol. 26 No. 2, pp. 301-26.

15. Fawzy, S. (2004), "How Does Corporate Governance in Egypt Compare with Selected MENA and Emerging Markets?", The Egyptian Center for Educational Studies, Cairo University, June.

16. Francis, J., Khurana, I. and Pereira, R. (2003), "The role of accounting and auditing in corporate governance and the development of financial markets around the world", Asia Pacific Journal of Accounting and Economics, Vol. 10, pp. 1-31.

17. Gurbuz, A. O., and Aybars, A. (2011), "The Impact of Foreign Ownership on Firm Performance, Evidence from an Emerging Market: Turkey. American Journal of Economics and Business Administration, Vol. 2 No. 4, pp. 350-359.

18. Hashim, H. A., and Devi, S. S. (2010), "Corporate Governance, Ownership Structure and Earnings Quality: Malaysian Evidence", Working Paper, University Malaya, Malaysia.

19. Hermalin, B.E. and Weisbach, M.S. (2003), "Board of directors as an endogenously determined institution: a survey of the economic literature", Economic Policy Review, Vol. 9 No. 1, pp. 7-26.

20. Huson, M. (2001), "Internal monitoring and CEO turnover: a long-term perspective", Journal of Finance, Vol. 56 No. 6, pp. 2265-97.

21. Ibrahim, Q; Rehman, R and Raoof, A. (2010), "Role of Corporate Governance in Firm Performance: A Comparative Study between Chemical and Pharmaceutical Sectors of Pakistan', International Research Journal of Finance and Economics, Vol. 5, pp. 7-16.

22. Jensen, M C (1993), "The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems". Journal of Finance, Vol. 48 No. 3, pp. 832-880.

23. Jensen, M. (1993), ''the modern industrial revolution, exit, and the failure of internal control systems'', Journal of Finance, Vol. 48, No. 3, pp. 831-880.

24. John, K. and Senbet, L. (1998), "Corporate governance and board effectiveness", Journal of Banking and Finance, Vol. 22, pp. 371–403.

25. Khanchel, I (2007),"Corporate governance: measurement and determinant analysis", Managerial Auditing Journal, Vol. 22 No. 8, pp. 740-760.

26. Krivogorsky, V. (2006), "Ownership, Board Structure, and Performance in Continental Europe", The International Journal of Accounting, Vol. 41, pp. 176-197.

27. Lipton, M and Lorsch, J. (1992), "A Modest Proposal for Improved Corporate Governance", Business Lawyer, Vol. 48, pp. 59-77.

28. Mak, Y. and Kusnadi, Y. (2005), "Size really matters: further evidence on the negative relationship between board size and firm value", Pacific-Basin Finance Journal, Vol. 13 No. 3, pp. 301-318.

29. McMullen, D.A. (1996), "Audit committee performance: an investigation of the consequences associated with audit committees", Auditing: A Journal of Practice and Theory, Vol. 15, pp. 87-103.

30. Mensah, S. (2002). "Corporate Governance in Ghana: Issues and Challenges." Paper presented at African Capital Markets Conference, December.

31. Mitton, T. (2002), "A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis", Journal of Financial Economics, Vol. 64 No. 2, pp. 215-241.

32. Monks, R.A.G. (1995), Corporate Governance in the Twenty-first Century: A Preliminary Outline, Lens Inc., Washington, DC.

33. Rabelo, F., and Vasconcelos, F. (2002), "Corporate Governance in Brazil", Journal of Business Ethics, Vol. 37 No. 3, pp. 321-335.

34. Rashid, A., De Zoysa, A., Lodh, S., and Rudkin, K. (2010), "Board composition and firm performance: evidence from Bangladesh", Australasian Accounting Business and Finance Journal, Vol. 4 No. 1, pp. 76-95.

35. Rechner, P L and Dalton, D R. (1991), "CEO Duality and Organizational Performance: A Longitudinal Analysis", Strategic Management Journal, Vol. 12 No. 2, pp. 155-160.

36. Samaha, k. (2010)," Do Board Independence and Audit Committees Motivate Disclosure on Different Corporate Governance Information Categories in the Annual Reports in Developing Countries?", International Research Journal of Finance and Economics, Vol.61, PP.206-225.

37. Sanda, A U, Mukaila, A S and Garba, T. (2005), "Corporate Governance Mechanisms and Firm Financial Performance in Nigeria", AERC Research Paper, No. 149.

38. Shleifer, A. and Vishny, R.W. (1986), "Large shareholders and corporate control", Journal of Political Economy, Vol. 94 No. 3, pp. 461-88.

39. Tsamenyi, M., Enninful-Adu, E., and Onumah, J. (2007), "Disclosure and Corporate Governance in Developing Countries: Evidence from Ghana", Managerial Auditing Journal, Vol. 22 No. 3, pp. 319-334.

40. Vafeas, N. (1999), "Board Meeting Frequency and Firm Performance", Journal of Financial Economics, Vol. 53, pp. 113-142.

41. Weisbach, M.S. (1988), "Outside directors and CEO turnover", Journal of Financial Economics, Vol. 20 Nos. 1/2, pp. 431-60.
42. Wharton, C.G., Lorsch, J.W. and Hanson, L. (1991), "Rating the corporate governance", Harvard Business Review, November/December.
43. Wild, J J. (1994), "Managerial Accountability to Shareholders: Audit Committees and the Explanatory Power of Earnings for Returns", British Accounting Review, Vol. 26, pp. 353-374.
44. Yawson, A. (2006), "Evaluating the characteristics of corporate boards associated with layoff decisions", Corporate Governance: An International Review, Vol. 14 No. 2, pp. 75-84.
45. Young, M., Peng, M., Ahlstrom, D., Bruton, G., and Jiang, Y. (2008) "Corporate Governance in Emerging Economies: A Review of the Principal-Principal Perspective", Journal of Management Studies, Vol. 45 No. 1, pp 196-220.
46. Zeitun, R. and Tian, G. (2007), "Does ownership affect a firm's performance and default risk in Jordan?", Corporate Governance, Vol.7 No. 1, PP. 66-82.
47. Zubaidah Z.A., Nurmala M.K. and Kamaruzaman J. (2009), "Board structure and corporate performance in Malaysia", International Journal of Economic and Finance, Vol. 1 No. 1, pp. 150-164.