

# CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE: AN EMPIRICAL STUDY ON EGYPTIAN BANKS

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## Abstract

There is a distinct lack of research into the relationship between corporate governance and banks' financial performance in the banking sector in Egypt. This research paper tries to fill this gap by examining the impact of corporate governance, with particular reference to the role of board of directors and ownership concentration, on the financial performance of Egyptian banks. Using a sample of 39 banks represent all commercial banks operate in Egypt for the period 2004– 2015 and controlling banks size and age. The study relied on the data through the annual reports of the respective banks, website of the central bank of Egypt and Data scope. The banks were selected for the study cutting across the local Islamic and Conventional banks, foreign Islamic and conventional banks, and regional Islamic and conventional banks. The results showed that banks ownership either foreign or national has an obvious effect on the banks' financial performance. Board size has no significant effect. However, the hierarchy of the board of directors and the duality of the CEO has a direct effect on the banks financial performance in Egypt.

**Keywords:** Corporate Governance; Bank Financial Performance, Egypt

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## 1 Introduction

### 1.1 The introduce of Corporate Governance Practices for Banks

Banks play a huge role in the development of any country. To ensure a developed country, it has to have a developed financial system. Banks provide services to the country that it operates in, that will guarantee the development of the society. As per (Capel, J., 2011) banks promote savings through deposits, has a major role in capital formation, generate loans to finance projects and encourage investments. The concept of corporate governance for banks in developing economies is essential for several reasons. First, banks have an overwhelmingly predominant position in developing-economy monetary systems. Second, banks in developing economies are commonly the most imperative wellspring of money for the more firms as financial markets are normally underdeveloped (Huq, B., & Bhuiyan, M. (2012).

Egypt, like other developing countries, has started recently to give attention to corporate governance on 5<sup>th</sup> July 2011, when the Central Bank of Egypt issued a decision on the corporate governance rules and guidelines for banks in Egypt, towards the development of the Egyptian banking system and keeping up its respectability through the application of

worldwide best practices. Directions had been dispersed to all banks supervised by the Central Bank of Egypt on 23<sup>th</sup> August 2011 to start creating frameworks and systems of governance. Banks had been focused on the application in an extreme time of 1 March 2012. In case that any bank couldn't keep any of the obliged instructions, it ought to show it to the Central Bank joined by strong avocations for its thought, which underlines the significance of sticking to the key rule of governance, namely: "Comply or Explain". The main features of the regulations on bank corporate governance are the concept of governance according to the Central Bank's vision, Board of Directors, balance and individuality of the bank Board of Directors, relationship between banks' internal audit committee and board of directors with the external auditors, and finally comply or explain rule. Egyptian banks operate according to the eight principles of the Basel committee guidance on corporate governance for banks:

*Principle 1: Board qualifications, capabilities and responsibilities*

*Principle 2: Board's role regarding the bank's strategic objectives and corporate values*

*Principle 3: Lines of responsibility & accountability*

*Principle 4: Ensuring oversight by senior management*

*Principle 5: Auditors and internal control functions*

*Principle 6: Board & key executive compensation*

*Principle 7: Transparent governance*

*Principle 8: Know your operational structure”*

There is no single system that is proper for all nations as the corporate governance; courses of action and institutions vary from one country to another. Moreover, The codes of Corporate governance covers each part of the hierarchical set up, right from how assets are created and how they are used. Hence, there is a need to understand the concepts, forms, and issues of corporate governance both from the individuals’ point of view whom immediate those concerned with returns and accountability. In light of the fact, there is a developing agreement that corporate governance has a positive association with national development and improvement (Obeten, O., Ocheni, S., & John, S. (2014). In general, the concept of corporate governance of banks could be different from corporate governance of other business enterprise due to the existence of depositors in addition to the shareholders and the high governance regulations in banks (Kamaly, A., El-Ezaby, S., & El-Hinawy, M. (2015).

### **1.2 The Concept of Corporate Governance<sup>1</sup>**

(Yuskel, 2008) defined corporate governance as the way that is utilized to deal with the connection between the organization’ administration, chiefs and the shareholders of this organization. Additionally it is the way that makes the top managerial staff sure that the guidelines and regulations of the organization are utilized as a part of the right way. (Proimos, A., 2005), defined it as an umbrella term that incorporates particular issues emerging from the communications among senior administrations, shareholders, board of executives and other corporate shareholders.

Whereas, (McGee, 2008) stated that Corporate Governance is concerned with structures and the allotment of obligation inside organizations and helps in setting the organization’ objectives which is composed by the organization administration and their connection with the organization’ shareholders and different stakeholders. Furthermore (Feng, 2010) expressed that it assumes a critical part in enhancing the organization performance and firms execution which is reflected in all the segment of the economy.

While, (Duca & Gherhina, 2009) stated that in order to succeed any corporate governance must focus and take into its consideration four important areas known as principles of corporate governance including: fairness, transparency, accountability and responsibility.

Corporate Governance relies on one’s purposes; it changes from a wide definition upheld with authority to a limited one concerning securing minor shareholders and stakeholder’s interest. As indicated by the OECD Principles of Corporate Governance

(2004), the corporate governance context ought to advance transparent and efficient markets, additionally be predictable with the law, and clearly express the division of power among diverse supervisory and administrative powers. Corporate governance assigns the structure of rights and accountabilities between the parties that have a stake in the bank (Aguilera, R. V., & Jackson, G. 2003).

System of corporate governance could be characterized as a set of procedures and structures used to guide a bank’s business once applied, an efficient corporate governance framework can help to guarantee a suitable division of power among shareholders, the board of directors, and administration. Moreover, the idea of corporate governance has pulled in a great enthusiasm in the late years, because of its conspicuous vital impact on the economic conditions of financial institutions and society in General. In 1999, there were instructions related to the adoption of banks’ best practices by the Basel committee for bank supervision.

Good corporate governance requires suitable also effective legitimate, administrative, and institutional basics. There are numerous elements including the arrangement of business laws and accounting guidelines that can influence market honesty and general financial accomplishment (Bhuiyan & Hug 2012). Supervisors were encouraged to be aware enough of legal and institutional impediments to sound corporate governance, and to make moves to foster effective establishments for corporate governance where it is inside their legitimate power to do so (Basel Committee on Banking Supervision, 1997).

Good corporate governance enhances also financial productivity and development improves the investors’ certainty. Likewise, it expands access to external financing by firms, lowers the expense of capital, and increments operational performance, which demonstrated that the investors are ready to pay extensive premiums for banks with successful corporate governance. Thus, it can be contended that effective corporate governance will prompt in increasing the firm value as well as better firm execution.

Poor corporate governance was recognized as one of the central point in all the cases as Different indications of bad corporate governance were insider misuses, low quality administrations, and frail supervisory structures. The issue of corporate governance is vital and fundamental for the acknowledgment of the essential corporate goal of profitability and liquidity.

The standards of corporate governance are utilized to represent the principles, regulations, and methods that accomplish the best adjust between the interests of corporate managers, board of directors, Shareholders, and different stakeholders. It is building credibility, guaranteeing transparency, responsibility, and in addition to keeping up a compelling channel of

data disclosure that would ensure corporate governance practices within the sector. The degree of corporate governance has been extended to incorporate the immediate managers of the bank as well as different stakeholders that have enthusiasm for the bank's operation as creditors, regulators, and employees

### 1.3 Corporate Governance and Banks

Since the financial crisis, Academics dedicated their research to focus on corporate governance, analysed its dimension to find a conclusion whether there is a relationship between corporate governance system and effective banking performance or not and its role in the development of banks. (Simpson et al, 2002) showed that it enhances markets, firms and economy. It is accompanied by high level of efficiency and return on equity and a low cost of capital. The law and finance literature highlighted the importance of corporate governance in monitoring and ensuring development of banking system. Therefore, it will indirectly enhance the economy when banking systems are developed.

As a result of the importance of banks to the economy, regulators such as the Basel committee require suitable corporate governance framework to guarantee that observing banks can work and sufficient corporate governance is accessible in all banking associations, banks won't work successfully without executing great corporate governance. Basel also emphasized on the principle role of directors is checking if the bank has solid accountability and if the steadiness is sufficiently high for the bank to run easily. Sufficient corporate governance makes it simpler on directors and would bring about a shared working relationship among bank administration and the supervisors (Basel, 1999).

(Chalhoub, 2009) stated also the importance of Corporate Governance, that it is exceptionally basic and required at the administration of the banks, in light of the fact that it helps in executing and creating plans for the execution of the bank. (Nippani et al., 2008) likewise said that it helps not just in enhancing the banks' net revenues and its financial performance additionally it helps in arriving at a fair relationship between the bank and its client.

It is very crucial to understand the codes and standards that monitor the banks' performance in Egypt. Furthermore as stated by Basel II, The view for corporate governance should be more of the strategic role of the board of directors to maximize the value of the bank to its owners. In fact, applying corporate governance is not only to focus on implementing a set of rules and abided by it in a restricted manner, it is a way of managing the relationship between the three parties which are the bank's owners, its directors and its shareholders and stakeholders.

The corporate governance has gained an obvious part due to the significant role of the financial services

offered by the banking sector. It gets the bank take into consideration the potential risks, to be obliged to protect the depositors', and the shareholders' interests and other related parties as the employees and the commissioners of the bank.

Hence, the interests of the whole community become more achievable when more people apply the code provisions. Corporate governance codes vary from one country to another as each country has its own framework, which is applicable within rules and regulations. The Corporate governance codes covers each part of the bank's set up, right from how assets are produced and how they are used. Hence, there is have to follow the concepts, techniques and Problems of corporate governance both from the point of view of the individuals whom direct, those concerned with returns and accountability and also those concern with corporate regulation, as there is a developing agreement that corporate governance has a positive association with national development and growth.

According to the report of the international finance corporation (IFC), applying effective corporate governance will help the banks to enhance their performance and advantage the needed accomplishment. In the past years, meaningful progress has been made in spreading this idea to the MENA region. Consequently, it is obvious that if the Egyptian's banks perfectly apply the corporate governance codes, this will lead to have a great profitability and better performance. In addition to an efficient financial system in Egypt, this is a main goal to enhance the economy.

The aim of this research is to figure out the effect of applying the corporate governance on financial performance of the Egyptian banks as bank performance is a main driver for the economic growth in Egypt. In this empirical study, a sample of 39 Egyptian banks represent all Egyptian banks operate in Egypt was taken to analyze the effect of the bank-specific factors and the corporate governance variables for the period 2004- 2014. The return on assets, return on equity and the net interest margin where used to measure the banks' financial performance while the independent variables are the corporate governance indicators which are the board related variables and ownership concentration variables.

The remainder of this research proceeds as follows. The next section provides a discussion recent literature review and discussion on the relationship between corporate governance and banks' financial performance. This followed by the hypothesis development. Afterwards we discuss our research design, in terms of sample data, measurement of variables and the model, before we present the results and their analysis. The conclusion and recommendation is given in the final section

## 2 Literature review and hypothesis development

### 2.1 Separation of Ownership and Control (Agency Theory)

Berle & Means (1932) are the first who referred to the problem of corporate governance through the model of the separation of shareholders' ownership and management's control in the modern corporation. Agency problems occur when the shareholders lack the necessary power or to monitor and control the managers and when the compensation of the shareholders and the managers is not aligned. Several factors work to reduce these principal-agency costs.

The "market for managers" penalizes management teams that try to advance their own interest at shareholders' expense.<sup>2</sup> Shareholders can soften manager conflicts by creating incentive-compatible compensation arrangements.<sup>3</sup> and, of course, competition in product markets and capital markets constrains managers.

Most importantly, the market for corporate control aligns managers' incentives with those of shareholders by displacing inept or inefficient management through hostile takeovers.

The agency theory is based on the reality that control and ownership are separated in large corporations. As the managers were hired to do their job and take decisions, the owners will benefit from it in order to maximize the profit of the shareholders (Fanta, A., Kemal, K., & Waka, Y. 2013). It states that "in the presence of information asymmetry the agent is likely to pursue interest that may hurt the principal", Kiruri, (2013). The theory assumed that the parties that enter into an agreement will action to minimize their own interest and all the actors have the freedom to enter into a contract or to contract elsewhere. Besides, it is concerned about making sure that the representatives are making their best to achieve the interests of the principles. Unfortunately, these assumptions made the agency theory very distinctive benefit motivation leading the principal-agent interest discrepancy may not hold for all managers; therefore, exclusive reliance on the agency theory is undesirable, because the theory does not take into consideration the complexities of the organizational life.

An alternate perspective (Shleifer, A., Vishny, R., 1997) expressed that the agency problem is because of the issue that board of directors is working for its own advantage when dealing with the firm and thus this influence shareholders adversely. The managerial control issue is mostly brought about by internal governance by the board of directors and external by shareholders. The division of both managers and shareholders is alluded to as agency cost. The best answer for this issue is expansive shareholders scattered this is on account of they are substantially more controlled then spread of shareholders.

One of the solutions to the agency cost problem is to give shareholders direct control over management. This only happens when management and shareholders are the same party and control rights automatically rest in the hands of shareholders. But this is not the case since some specific problems arise when shareholders seek to exercise control. When shareholders are widely dispersed, free-rider problems prevent shareholders from exerting meaningful constraints on management.

Problems also arise when large shareholders participate in management. Large shareholders may face conflicts of interest that undermine their incentives to maximize firm value. For example, they may enjoy private benefits of control that distort their decision making.

Alternatively, large shareholders may themselves be part of organizations that face governance problems. Although these are potentially powerful concerns about the effectiveness of shareholder control, recent research suggests that more fundamental trade-offs may guide the desired involvement of shareholders in corporate control. Burkhart, Gromb, and Panunzi (1997), for example, show that direct shareholder control may discourage new initiatives on the part of managers. These observations are consistent with real-world corporate governance arrangements, which almost without exception limit direct shareholder involvement. In some cases this is facilitated by relatively dispersed ownership. This limits direct shareholder involvement to at most periodic interference via proxy fights, hostile takeovers, or other mechanisms that seek to mobilize shareholders. Allen and Gale, (2000),

### 2.2 Stakeholders' theory:

The stakeholders' theory was implemented to fill the gap created by the agency theory. Therefore, the frameworks of the stakeholders' theory to widen the agency theory to include multiple principles, Peters & Bagshaw, (2014) which are the relationships that help the suppliers, employees and other business partners. It states that the decisions made by the company affects all the parties so the managers should direct the company to reach the interests of its stakeholders in order to certify their role in the decision making process. Moreover, the management will act as a stockholder's agent to guarantee the long-term stakes of each participant group.

#### 2.1.3 Resource dependency theory:

According to Ajoa (2014), the resource dependency theory is unlike both the agency and the stakeholders' theory because it targets the managers as they are the main and important source of information that will help the corporation to reach its goals such as environmental scanning, legal requirements, political association, and social interactions. It focus on the role of directors as providers of major resources to the

corporation for the achievement of their aims most especially the outside directors whom may be experts in other practiced fields in life that will be a very good assistance for getting the needed information (Peters & bagashaw, 2014). The initial role of the board of directors is to provide resources to the corporation. When directors are considered as providers of resources so a lot of different dimensions of directors diversity are considered very important for example gender, experience, qualification, and age. The board of directors provides information, proficiency, and potential link between the corporation and the environment. Furthermore, the board of directors would support the management team of the corporation in many areas because of their knowledge in different fields. The framework of the resource dependency model recommends that the board of directors could be used as an instrument to make a connection between the external environment and the corporation in order to support the management team of the firm to achieve the goals efficiently (Wang, 2009). So it obvious that there is a great contradiction between The agency theory and the resource dependency theory as the agency theory concentrated on the supervising and controlling role of the board of directors however the resource dependency theory emphasis on the advisory and counseling role of the board of directors to the firm management.

### **2.3 Corporate Governance and Banking Sector**

No doubt, that the banking system is the main source of finance which sort banks a capable instrument towards applying and receiving corporate governance standards and codes through guaranteeing transparency, information disclosure and accountability. Cornwall 2007, Moustafa 2010, and Carse, 2000, contended that strong corporate governance Standard is critical for banks. This is because of the vast majority of finances that the banks use for business fit in with creditors and depositors. Furthermore, the failure of a bank will influence its own shareholdings as well as have a deliberate influence on other banks. Accordingly, it is essential to guarantee that banks are working appropriately.

According to I Labouya (2005), the performance of good corporate governance can be measured regarding profitability, liquidity, and efficiency along these lines; corporate governance influences the banks' profit.

Moreover, the idea of corporate governance was introduced as internal mechanism such as the board of directors' control by major shareholders and the external mechanism, which is the market for the managers and administrations with its management control (Fama 1980, Fama & Jensen 1983, Turnbull 1997, Omair et al., 2014). Corporate governance does influence the bank performance, therefore the majority of banks with strong appliance to the codes of

corporate governance controls compensated over long-term.

### **2.4 Corporate Governance Mechanisms**

Corporate governance consists of two main mechanisms; internal mechanisms and external mechanism. Banks having this crucial part, it is critical to guarantee that banks are appropriately governed "internally" and to guarantee governance structures to their clients "externally" keep in mind the end goal to secure the interest of the different stakeholders and to support the working of the financial framework in the economy.

#### **2.4.1 Internal Mechanisms**

(Bassen, A., 2004), defined the internal mechanism that is concerned with discussions with managers and officials of an organization to screen their exercises and afterwards take choices focused around the observations done. Internal mechanisms consist of many factors but the light will be focused on the board of directors and ownership.

##### **2.4.1.1. Board of Directors related variables**

Board of directors is the head of hierarchal authoritative structure of any partnership and is responsible for any key and non-key viewpoints everywhere throughout the association (Avgouleas, E., 2009) connected the success and failure of the organizations to the part of those boards maintaining the business. The study of Lefort on the acts of Latin America presumed that there is a solid connection between the independency of the board of directors and the great practices of the corporate governance. (Park, J., 2009) emphasized that the dependency level of the board of directors will impact the actions taken in the organization. High independency will prevent the shareholders from interfering in the decision making, were on the other hand low independency and shareholders interfering will hinder the performance. Due to the major role of board of directors it is concluded as the degree of independence increase the better form of effective and suitable corporate governance can be implemented.

**Board composition:** it is proposed that greater extent of non-official executives in the board serves to lessen the agency cost (kee et al., 2103). (Hutchinson and Gul, 2003) help this perspective by demonstrating that the greater amounts of non-official chiefs on the board debilitate the undesirable relation between firms' execution and firm's investment chances.

(Coles et al., 2001), and (Weir et al., 2002) question this relation by expressing that there is no worthy relationship between non-official executives' and representation. Likewise, (Yermack, 1996) present that little board has a higher business market valuation.

In addition, as demonstrated by (Kemaly et al, 2013), the board size and existence of audit committee in the board had negative impact on the bank's performance. To add, the bank size has a positive impact on the performance of the conventional banks. However, the absence of good corporate governance, high governmental interventions, and weak legal structure has negative effect on the performance.

The larger the size of board the larger the resources and the opportunities for better bank's financial performance as the board size increase the bank's corporate governance will be boosted. (Cheng Wu, Chiang Lin, I-Cheng & Feng Lai (2005)), study was resolved that the size of board has a negative effect on the performance of the bank as it is statistically significant. On the other hand, it was found that the board structure is positively and significantly correlated to the bank performance. (Yung, 2009, agreed that the size of the board of directors has a great control on the profitability and the good corporate governance.

However, there is diverse evidence in the literature connecting the size of board to bank performance or good corporate governance. Consequently, (Jensen, 1993), argued that if the bank has large size of board of directors this would lead a miss-function and effective work of the board of directors. By supporting Jensen's theory (Yermack, 1996), discovered that there is an existence of a negative relationship between the size of the bank and the performance, bank size measured by logarithm of total asset which is Consistent with the Yermack's findings and (Eisenberg, Sundgren, and Wells, 1998). Other literature indicates that an inverse relationship between the size of the board and the bank profitability measured by industry-adjusted return on asset. On the other hand, in the studies of Dalton, Daily, Ellstrand, and Johnson (1998), Wang (2001), and Belkhir (2009), discovered a positive relationship between board size and efficiency.

**Board Independence:** The second corporate governance variable that has been widely studied is independency of the board of directors or the hierarchy of the board. Boards with a higher percentage of outside directors are positively associated with the bank's performance. Meanwhile they are highly expected to be effective supervisors of the executive members, as the percentage of non-executive board members increase the board will simplify in independent decision-making, and therefore this will lead to enhanced performance. In the study of (Chung, Wright, & Kedia, 2003) and (Hutchinson & Gul, 2003), maintained that higher percentage of non-executive directors in the board benefits to diminish organization cost. However, Coles, McWilliams, and Sen (2001) and Weir, Laing, and McKnight (2002) found no important relationship between non-executive directors' representation and the banks' performance.

#### 2.4.1.2 Ownership

Ownership structure is not only how assets of the bank are financed from. In fact it is the structure that is divided among insiders (shareholders) and outsiders (creditors). How to divide the structure among owners and creditors is not only financial matter but also a key for management level of dependency and degree of control. This structure affects the firm's transaction and helps in how to implement corporate governance (Lefort, F., 2005)

The viability of corporate governance is generally controlled by ownership structure and it, thusly, effect performance. The association between corporate governance, performance and ownership structure has been the topic of a progressing argument in the corporate finance literature. According to (Levine, 2004). In the banking industry, the topic of corporate governance gets to be more convoluted than in other commercial ventures because of various components, including the level and nature of bank regulation and supervision, the hazy nature of banks assets and the condition of market improvement.

(Hutchinson and Gul, 2003), report that administration ownership and supervisors' compensation debilitate the negative relationship among the company's performance and company's opportunities. Conversely, (Coles et al, 2001), do not find any commitment to execution by managerial ownership.

A large number of studies have examined the relationship between ownership structure and bank's financial performance. Moreover, it was contended that higher ownership concentration has a positive impact on the bank's performance as it expand the capacity of shareholders to appropriately monitor administrators Coles, J. (2000). Profitability can be measured in many ways for instance, return on assets or on investment, and so forth.

The banks' ownership and the board related variables have a significant effect on the profitability of the banks, which highly correlated. On the other side, corporate governance has a positive relation with the profitability in banks when considering other variables of the corporate governance as the size of board, and the percentage of the shares owned by the shareholders the profitability of the bank is highly effected by changing the percentage of these two variables.

#### 2.4.2 External Mechanisms

Corporate governance is the identifications and improvement of ineffectiveness in the operations of a firm. In pursuing this objective, firms rely not only on their own internal mechanisms but also on external mechanisms. External mechanisms refer to the outside impact by untouchables, non-controllable elements, for example, the offering of shares, privileges of shareholders and public relation. The focus will be on takeovers and the legal system. (Arun, T., Turner, J., 2000)

#### 2.4.2.1 Take-over

Studies have figured out that the increment in the quantity of takeover happen when top managerial staff of the firm and shareholders has an aberrant financial interest or when administrators are not eager to keep their employment. One of these studies (Arjoon, S., 2005), mentioned that the takeover can likewise occur by the managers in the firm for instance when the supervisors use greater part votes that is more than half votes to change the board of directors of the firm.

(Arun, T., Turner, J., 2000) stated that the primary point of interest of a takeover is that it builds the estimation of the target enterprise and along these lines therefore benefits are liable to rise after that. Notwithstanding that take-overs normally focus on the firm that failing to meet expectations and have issues, when the takeovers happen their directors are changed. This aide in tackling the cash flow issue as they bring about the conveyance of the business profit to the financial investors by time.

#### 2.5 Corporate Governance and Bank's Financial Performance

(Levine. R, 2004) mentioned that when "banks apply good governance, banks will efficiently mobilize and allocate funds, this lowers the cost of capital to firms, boosts capital formation, and stimulates productivity growth". Corporate failures are a consequence of terrible corporate governance. The establishment of great corporate governance over the globe defends the effect of this failure. Most studies presumed that corporate governance systems are to be connected and related to firm performance (Avgouleas, E., 2009), discovered a positive connection between firm particular corporate governance and firm valuation, investors and firms utilizing corporate governance reports lessen risk and enhance business sector estimation of firms. Corporate governance is relied upon to influence bank's cost of capital, risk taking, valuation, execution and conduct. (Levine. R., 2004) Agency Theory (Jensen and Mackling, 1976) recommends that solid corporate governance prompts better execution and accounting results. It has a significant part to play in the improvement of the banking sectors. It also brings about bank's comprehensive results in less cost of funds, higher company's market value, and higher productivity. Poor corporate governance may help banks to fail, which will posture critical public expenses, lead market loss of trust in the capacity of banks to legitimately deal with its assets and liabilities which will prompt liquidity risk, (Capel, J., 2011).

Earlier research studies which are centered on features of corporate governance demonstrated that is has a positive effect over bank's success. Discoveries demonstrate that a small board of directories of maximum 8 members can help enhance banks execution (Jensen, 1993). There are studies led after some time in different nations ( France, Germany, UK, Malaysia, Switzerland and Hong Kong)

recommend that leadership structure demonstrated a positive connection with the firm execution, (Franks and Mayer, 1990). Then again, earlier writing concentrated on evaluating size as mechanism of corporate governance demonstrate a negative connection between board size and firms value, (Yermack, 1996). An alternate study was directed demonstrated that with the increment of variety of banks transactions, this makes new difficulties in banks corporate governance. Additionally, studies demonstrate that board of directories; official administration and shareholders have high critical relations on the performance of firms, (Boot and Schmits, 2000).

The impact of corporate governance on firm execution has been a lot of incredible enthusiasm to economists and financiers as Maher and Anderson expressed that it has no extraordinary effect on firm execution so why financiers and economists concerns a great deal with this subject, (Maher and Anderson, 1999). Allen and storm expressed that even with the vicinity of powerless corporate governance the solid product market rivalry may match director's objective with the goal of being efficiently productive (McGee, R. W., 2008).

In the US market studies finished up that it demonstrates that corporate governance instruments have positive effect on firm execution for instance it was observed that banks with solid shareholders rights have higher gainfulness rate than feeble shareholders. A few late studies showed that board autonomy is not emphatically identified with bank execution in banking sector, while beoard sized is certain identified with the execution of banks. A study in Pakistan shows the results propose that there was an effect of corporate governance changes on the banks performance and efficiency and had a positive effect.

### 3 Research Design

#### 3.1 Research Objective

The purpose of this research is to critically examine the impact of specific corporate governance mechanisms (mainly internal) on the financial performance of banks. This study will test whether there is a significant relation between corporate governance and banks performance in Egypt. Moreover, the study examines how the corporate governance's codes, polices and rules affect the stakeholders and the growth of the banks in Egypt that will certainly have a positive effect on the Egyptian economy as a whole.

#### 3.2 Research questions:

- 1) Is there are any relationship between the corporate governance and the bank's financial performance? And if yes;
- 2) Is the ownership of the bank affecting its performance whether it is foreign or national ownership?

3) Is the hierarchy of the board of directors and duality of the CEO has any noticeable effect of the bank's financial performance?

4) What are the factors that have an influence if the relationship holds between the variables?

5) Does this relation differ from national to foreign Banks?

### 3.3 Research Hypothesis

#### 3.3.1 The null hypothesis

**H<sub>0</sub>:** the relation between Corporate Governance and the financial performance of banks in Egypt is zero or negative.

#### 3.3.2 against the alternative hypothesis

**H<sub>1</sub>:** the relation between corporate governance and the financial performance of banks in Egypt is positive.

#### 3.3.3 The joint hypothesis

##### 3.3.3.1 The null hypothesis

**H<sub>0</sub>:**  $\beta_1 = \dots = \beta_9 = 0$  (i.e the independent variables do not affect the dependent variables, jointly).

##### 3.3.3.2 against the alternative hypothesis

**H<sub>1</sub>:**  $\beta_1 \neq \dots = \beta_9 \neq 0$  (i.e the independent variables affect the dependent variables, jointly).

## 4 Methodology

### 4.1 Data

The study investigates on 39 commercial banks represent all commercial banks operate in Egypt (100%) for the period 2004-2014. Banks included in the analysis are local, regional and international banks regardless if they are conventional or Islamic banks. Variables that will be examined by the analysis model consist of financial variables and non-financial variables. The data for financial variables are related to the performance were collected from the financial annual reports, which are announced by banks either through banks' publications or through the online databases as BankScope. Data on non-financial aspects of corporate governance such as ownership concentration variables, board committees, and board related variables, will be collected directly from the recent published annual reports of the sampled banks. In addition, if the needed data were not found in the annual reports it will be collected directly from official representative parties, which will be done by distributing surveys on the employees and investors in the banks, making interviews with the managers.

**Table 1.** Banks Sample

No.	Local Banks	Foreign and Regional Banks
1	Industrial development workers bank of Egypt	African Export and Import bank
2	Union national bank	Credit Agricole
3	Arab banking corporation	QNB
4	Egypt Gulf Bank	Bank Audi
5	MISR Iran development bank	Faisal Islamic bank
6	Housing and development bank	Ahli united bank
7	Commercial international bank	HSBC bank
8	National bank of Egypt	Arab international bank
9	Banque Misr	National bank of Kuwait
10	The United bank	Barclays bank
11	Suez canal bank	Citi Bank
12	Banque du Caire	Piraeus bank Egypt
13	Arab African international bank	BLOOM bank
14	Principal Bank for development and agricultural credit	Abu Dhabi Islamic bank
15	Export Development Bank of Egypt	Al Baraka bank Egypt
16	Egyptian and Arab Land Bank	Emirates national bank of Dubai
17	Societe Arabe Internationale de Banque	Bank of Alexandria and San Polo
18	Arab Investment Bank	Arab Bank. PLC
19	Mashreq Bank	Alexandrian Commercial and Maritime Banks
20	Islamic International Banks for Investment and development	

### 4.2 Research design

$$\text{Bank's Financial Performance}_{i,t} = \beta_0 + \beta_1 (SZ_{i,t}) + \beta_2 (HB_{i,t}) + \beta_3 (DCEO_{i,t}) + \beta_4 (QBM_{i,t}) + \beta_5 (IO_{i,t}) + \beta_6 (FO_{i,t}) + \beta_7 (fO_{i,t}) + \beta_8 (BZ_{i,t}) + \beta_8 (BA_{i,t}) + \varepsilon_{i,t}, i=1,8 \quad t=1,9$$

The bank's financial performance is the dependent variable (ROA, ROE and NIM), as the financial performance of the year depends on other variable, which are of the year board related,

ownership related variables and; bank size and bank age. Nevertheless, the symbol  $\xi$  represents error term.

### 4.3 Research Variables

Independent Variables		Dependent Variables
Board Related Variables	- Size of the board - Hierarchy of the board - Qualification of the board	Return on Assets Return on Equity Net Interest Margin
Consider controllable variables	- Bank size - Bank Age	
Ownership concentration variables	- Internal ownership - Family ownership - Foreign ownership	

#### 4.3.2 Variables Definition

Table 2. Variable Definition

Dependent Variables	Definition Measurement
Return on Assets (ROA)	Net Income After Tax / Average Total Assets
Return on Equity (ROE)	Net Income After Tax/ Average Total Equity
Net Interest Margin (NIM)	(Interest Earned – Interest Paid)/ Average Total Loans

Independent Variables	Definition and Measurement
Board Related Variables	<ol style="list-style-type: none"> <li><u>Size of Board of Directors (SZ)</u> Total numbers of Board of Directors</li> <li><u>Hierarchy of the board (HB)</u> Non-executives members on the board (%)</li> <li><u>Duality of the CEO (DCEO)</u> Dummy variables; expressed as a set of dummy variables case that the CEO takes the role of the chairman of the board during the period considered for the study takes 1 while if not takes zero.</li> <li><u>Qualifications (OBM)</u> Expressed by the number of members with higher education of qualifications and have a great experience in the field.</li> </ol>
Ownership Concentration	<ol style="list-style-type: none"> <li><u>Internal Ownership (IO)</u> It was expressed by calculating the percentage of the bank largest shareholders' but in this study the banks that totally owned by the Egyptian government or the central bank of Egypt took 0% in this variable.</li> <li><u>Family Ownership (FO)</u> It was expressed as a set of one if family owns more than 50% of the bank. Also, is expressed as zero if not owned by family.</li> <li><u>Foreign Ownership (fo)</u> It expressed as a set of one if the bank has an Arab or foreign ownership. Moreover, is expressed by zero it is nationally owned.</li> </ol>
Bank Size	logarithms of the total assets (BZ)
Bank Age	Number of years since the bank is established to the year of the study. (BA)

#### 4.3.3 Statistical Model

This paper examines the impact of corporate governance on the financial performance of the Egyptian banks in the form of descriptive statistics analysis and regression analysis model. The regression model used between corporate governance variables and profitability variables. It was known that the bank performance could be measured using different indicators such as profitability, efficiency, and liquidity. In this research, the profitability is used as an indicator of performance, which is measured by return on assets (ROA), return on equity (ROE) and the net interest margin (NIM). The return on asset

measurement is considered a good indicator on the performance of the bank's internal management as it includes investors' equity and drawings. In addition, it shows how efficiently the resources of the bank are used to generate income. The return on equity measurement shows how well the bank can generate cash internally. The net interest margin is the amount of what the bank receives on loans in a specific period, in other words, this performance measure gauge the gap between the interest income that the bank receives on loans and the interest costs of the borrowed funds

$$ROA_{i,t} = \beta_0 + \beta_1(SZ_{i,t}) + \beta_2(HB_{i,t}) + \beta_3(DCEO_{i,t}) + \beta_4(QBM_{i,t}) + \beta_5(IO_{i,t}) + \beta_6(FO_{i,t}) + \beta_7(fo_{i,t}) + \beta_8(BZ_{i,t}) + \beta_9(BA_{i,t}) + \epsilon_i, i=1, \dots, 8 \quad t=1, \dots, 9$$

$$ROE_{i,t} = \beta_0 + \beta_1(SZ_{i,t}) + \beta_2(HB_{i,t}) + \beta_3(DCEO_{i,t}) + \beta_4(QBM_{i,t}) + \beta_5(IO_{i,t}) + \beta_6(FO_{i,t}) + \beta_7(fo_{i,t}) + \beta_8(BZ_{i,t}) + \beta_9(BA_{i,t}) + \epsilon_i, i=1, \dots, 8 \quad t=1, \dots, 9$$

$$NIM_{i,t} = \beta_0 + \beta_1(SZ_{i,t}) + \beta_2(HB_{i,t}) + \beta_3(DCEO_{i,t}) + \beta_4(QBM_{i,t}) + \beta_5(IO_{i,t}) + \beta_6(FO_{i,t}) + \beta_7(fo_{i,t}) + \beta_8(BZ_{i,t}) + \beta_9(BA_{i,t}) + \epsilon_i, i=1, \dots, 8 \quad t=1, \dots, 9$$

**5 Data analysis**

**5.1 Descriptive Analysis**

**Table 3.** Descriptive Analysis

	Minimum	Maximum	Mean	Median	Skewness	kurtosis	SD
Dependent Variables							
<i>Return on Assets</i>	-1.051	1.631	0.03820	0.02825	-1.21762	4.14333	1.23215
<i>Return on equity</i>	-55.06	25.902	5.3123	5.31	-2.41924	6.35692	18.05
<i>Net Interest Margin</i>	1.258	5.484	3.2826	3.246	0.02587	2.71314	0.9795
Independent Variables							
<b>Board related variables</b>							
<i>Size of the Board</i>	4.00	23.00	9.1222	8.00	1.65213	9.02050	2.96305
<i>Hierarchy of the Board</i>	0000	0.9998	0.44392	0.48045	-0.19073	1.13464	0.274121
<i>Duality of the CEO</i>	0000	0000	0.4333	0000	026907	1.07240	0.504401
<i>Qualifications</i>	4.00	23.00	7.1234	7.00	1.65157	10.02050	2.93605
<b>Ownership Concentration</b>							
<i>Internal Ownership</i>	000	0.9990	0.43348	0.42635	-0.14038	0.86864	0.23918
<i>Family ownership</i>	0000	1.000	0.6333	1.000	-0.55337	1.30622	0.49013
<i>Foreign Ownership</i>	0000	1.000	0.0667	0000	3.47440	10.07143	1.5371
<i>Firm Size</i>	3.50	5.65946	4.30662	4.22655	0.77731	3.27068	0.51764
<i>Firm Age</i>	0000	113	13.014	33.00	1.638	4.6824	21.0883
Observations	297	297	297	297	297	297	297

Table 3 illustrates the descriptive statistics of the study variables. The observed calculated descriptive statistics consists of minimum, maximum, standard deviation, skewness and kurtosis. As seen from the tables above all the variables are asymmetrical. Especially skewness is positive for all values except

for return on assets, return on equity, hierarchy, internal and family ownership have a negative skewness.

Kurtosis value of all variables also indicates data is not normally distributed because values of kurtosis are deviated from 3.

**Table 4.** Descriptive analysis for Local and Foreign Banks

	Local Banks			Foreign Banks		
	Minimum	Maximum	Mean	Minimum	Maximum	Mean
Dependent Variables						
<i>Return on Assets</i>	0.537	0.867	0.768	0.987	2.109	1.237
<i>Return on equity</i>	0.210	4.153	9.530	7.213	11.298	6.456
<i>Net Interest Margin</i>	1.987	3.230	2.320	3.223	6.100	256
Independent Variables						
<b>Board related variables</b>						
<i>Size of the Board</i>	1023	10.125	10.52	11.00	10.652	11.80
<i>Hierarchy of the Board</i>	0.1983	0.987	0.2352	0.48045	-0.19073	0.5891
<i>Duality of the CEO</i>	0.098	0.458	0.4941	0000	026907	0.327
<i>Qualifications</i>	11.00	9.00	10.523	11.00	10.65	11.80
<b>Ownership Concentration</b>						
<i>Internal Ownership</i>	0.215	0.542	0.33348	0.42635	-0.14038	0.76764
<i>Family ownership</i>	0.457	0.725	0.6333	1.000	-0.55337	1.30622
<i>Foreign Ownership</i>	0000	0.000	0.000	0000	3.47440	0.1058
<i>Firm Size</i>	3.394	6.75946	4.50662	4.22655	0.77731	4.6812
<i>Firm Age</i>	44.234	52.98	40.456.014	31.00	39.158	35.59.6824
Observations	297	297	297	297	297	297

The foreign ownership of the bank had a positive effect on bank profitability this means that higher

levels of foreign ownership result in higher bank profitability Kirari (2013), By categorizing the sample

in to two groups foreign banks and national banks, the foreign banks are donated with dummy variable equals to one while the national banks are donated with dummy variable equals to zero. It was obvious that the foreign banks perform better than national banks according to the ROA with average mean of 1.237 and 0.768 times respectively which indicates that the ownership of the banks have a noticeable effect on the returns. However, the national banks have higher ROE than the foreign banks with average means of 9.530 and 6.456 times respectively. Thus, the NIM of both categories has the same average of 2.320%. As stated that the size of board and the qualifications of board are the same so both variables are equal, in foreign banks is 11 members while in national banks are 10 members however the difference is very minor. By taking into consideration the percentage of duality of CEO, it was 32.4% in the foreign banks' CEO is also the Charmin while it was 49.41% in the national bank. There was no family ownership in the national banks

as Central Bank of Egypt owns some and others related to governments, institutions and investors. While there was about two banks from the foreign banks are family owned. To add, the firm/ bank size for both categories are about 4.5 billion EGP. The hierarchy of the board for the foreign banks has percentage of 58 are non-executive on board while this percentage is 23 for the national banks that because the national banks need to have more executives in the board as they are most administrated by the government. It is very logical that the internal ownership of the foreign banks is higher than the internal ownership of the national banks with 67% and 33% respectively. This wide difference is because of the higher shareholders' ownership of foreign banks, which is necessary to ensure their ownership of the bank to the parent bank. The national banks average firm age is 40 years while only 35 years average of the foreign banks.

**Table 5.** Spearman Correlations Matrix between Corporate Governance Variables and Banks's Financial Performance variables

	ROA	ROE	NIM	SZ	HB	DCEO	QBM	IO	FO	fo	BZ	BA
<b>Return on Assets</b>	1											
<b>Return on Equity</b>	.889**	1										
<b>Net Interest Margin</b>	.638	.580*	1									
<b>SZ</b>	.246**	.213*	.343**	1								
<b>HB</b>	.297	.316**	.186-	.064**	1							
<b>DCEO</b>	-.260**	-.299**	-.151	.142**	-0.08**	1						
<b>QBM</b>	.246**	.213**	.343**	.599**	.0649	.112*	1					
<b>IO</b>	-.200**	-.273**	-.163	-.022**	-.025**	.057**	-.022**	1				
<b>FO</b>	0.058**	0.080	0.099	0.025*	-.027**	-.233**	0.0251	-.05**	1			
<b>fo</b>	0.258	0.114	0.108	0.132	0.403	-.172	0.132	0.36	0.20	1		
<b>Bank Size</b>	0.140	0.254	0.197	-.096	0.077	-.052	-.0967	-.413	-.081	-.26	1	
<b>Bank Age</b>	-.140	0.254	0.197**	-.096**	-.077**	-.0522*	-.0967**	-.413	-.08**	-.26	.490	1

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

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

From the table above it is obvious that most of the independent variables have either a significant positive or negative relationship with the Banks financial performance ratios except Hierarchy of the board, foreign ownership, bank size for Return on Assets. Family ownership, foreign ownership, bank size and age for Return on Equity. Hierarchy of the Board, Duality of the CEO, internal ownership, foreign ownership, family ownership and bank size for Net interest margin.

So most of the corporate governance variables have a significant relationship with return on assets however some of them have significant relationship with return on equity and net interest margin.

### 5.2 Regression Analysis

Three dependent variables are return on assets, return on equity and net interest margin if any of them is affected by the corporate variables factors either board related variables or ownership concentration variables. The qualification of the board members was excluded from the regression analysis due to its very high correlation with the size of board because it was shown according to the data collected that all the board members have higher education and experts in the banking sector management. In addition, the foreign ownership, and the family ownership are excluded from the regression analysis as they were represented by dummy variables (=0 or =1) and their effect on the bank specific variables was shown clearly in the descriptive statistics.

### 5.2.1 The impact of Corporate Governance Variables on Return on Assets as dependent variables.

$$ROA_{i,t} = \beta_0 + \beta_1(SZ_{i,t}) + \beta_2(HB_{i,t}) + \beta_3(DCEO_{i,t}) + \beta_4(QBM_{i,t}) + \beta_5(IO_{i,t}) + \beta_6(FO_{i,t}) + \beta_7(fo_{i,t}) + \beta_8(BZ_{i,t}) + \beta_9(BA_{i,t}) + \varepsilon_{i,t} \quad i=1, \dots, 8 \quad t=1, \dots, 9$$

<b>Return on Assets- Model Summary</b>				
Variables	Coefficient	Std. error	t	p
Size of Board of Directors (SZ)	0.05029	0.05157	1.36283	0.18559
Hierarchy of the Board (HB)	1.50569	0.77345	1.42892	0.16591
Duality of the CEO (DCEO)	-0.50589	0.42408	-1.66452	0.10901
Internal Ownership (IO)	-1.00309	0.69776	-1.86753	0.07409
Bank Size (BZ)	0.45385	0.2237	1.58182	0.12678
Bank Age	-0.03014	0.01168	-1.74159	0.09438
R	0.76593			
R <sup>2</sup>	0.58665			
Adjusted R <sup>2</sup>	0.58053			
F	5.67693			
P value	0.00071**			

\*\* Significant at 0.05

The return on assets which measures the performance of the Egyptian banks has R<sup>2</sup> of 59% this means that the model good fit with p-value 0.00071 that shows that the model is highly significant at 5% confidence level. To start with the independent variables, the size of board (SB) and the hierarchy of the board (HB) and the bank size have positive coefficient, which shows that if the bank increases its board size or the percentage of non-executives or the total assets the ROA will increase by the same amount by holding all the other variables constant. However, no variables are statistically significant at 10% or 5%

significant level. On the other hand, the duality of the CEO (DCEO) has a negative relation with the ROA but with no statistical significance in the model. The internal ownership and the firm age have negative relation with the return on assets with negative coefficient of -1.03 and -0.02 respectively. The p-value of these two variables is statistically significant at 10% confidence level.

### 5.2.2 The impact of Corporate Governance Variables on Return on Equity as dependent variables.

$$ROE_{i,t} = \beta_0 + \beta_1(SZ_{i,t}) + \beta_2(HB_{i,t}) + \beta_3(DCEO_{i,t}) + \beta_4(QBM_{i,t}) + \beta_5(IO_{i,t}) + \beta_6(FO_{i,t}) + \beta_7(fo_{i,t}) + \beta_8(BZ_{i,t}) + \beta_9(BA_{i,t}) + \varepsilon_{i,t} \quad i=1, \dots, 8 \quad t=1, \dots, 9$$

<b>Return on Equity- Model Summary</b>				
Variables	Coefficient	Std. error	t	p
Size of Board of Directors (SZ)	0.8768	0.83446	1.16046	0.357277
Hierarchy of the Board (HB)	11.6026	12.51448	1.43109	0.16591
Duality of the CEO (DCEO)	-10.20519	6.86161	-1.7626	0.09074*
Internal Ownership (IO)	-7.64300	11.28992	-1.56306	0.15409
Bank Size (BZ)	2.45385	0.17788	0.32980	0.42678
Bank Age	-0.02014	0.01168	1.4567	0.59438
R	0.59593			
R <sup>2</sup>	0.35513			
Adjusted R <sup>2</sup>	0.30053			
F	2.37556			
P value	0.05071**			

\*\* Significant at 0.05

The return on equity model showed that the model R<sup>2</sup> is 35% which indicates that the model is slightly poor with p-value of 0.05 that is not significant at confidence level 5% while is statistically significant at 10%. When analyzing this model depending on the 10% significance level, it was obvious that the only variable that affects the ROE is

the duality of the CEO with 9% p-value, which indicates that it is significant at 10% confidence level. Moreover, the size of the board (SB), hierarchy of the board and bank size has positive coefficient which indicates that as each variable of these increase by this number it affect the ROE of the bank while holding all the other variables constant. However, the duality of

the CEO, internal ownership, and firm age has negative effect on the return on equity of the bank with negative coefficient in this model.

### 5.2.3 The impact of Corporate Governance Variables on Net Interest Margin as dependent variables.

$$NIM_{i,t} = \beta_0 + \beta_1(SZ_{i,t}) + \beta_2(HB_{i,t}) + \beta_3(DCEO_{i,t}) + \beta_4(QBM_{i,t}) + \beta_5(IO_{i,t}) + \beta_6(FO_{i,t}) + \beta_7(fo_{i,t}) + \beta_8(BZ_{i,t}) + \beta_9(BA_{i,t}) + \varepsilon_{i,t} \quad i=1, \dots, 8 \quad t=1, \dots, 9$$

<b>Net Interest Margin- Model Summary</b>				
Variables	Coefficient	Std. error	t	p
Size of Board of Directors (SZ)	0.09123	0.83446	0.96046	0.057277*
Hierarchy of the Board (HB)	3.726	12.51448	1.73409	0.36591
Duality of the CEO (DCEO)	-.3745	6.86161	-0.7626	0.29074
Internal Ownership (IO)	-0.63560	11.28992	-1.56306	0.25409
Bank Size (BZ)	0.65185	0.17788	0.32980	0.074678*
Bank Age	-0.021725	0.01168	1.4567	0.00029**
R	0.93138			
R <sup>2</sup>	0.90235			
Adjusted R <sup>2</sup>	0.90053			
F	45.90238			
P value	0.000671**			

This model is highly statistically significant p-value of 0.0067%, which is significant at 1% and 5% confidence level. In addition, the R<sup>2</sup> of the model is very high with 90% that represents that this model is good fit with the other independent variables and shows that 90% of the total variation in the NIM is well explained by the six variables while 6% is remained unexplained by the variables of the model. By investigating the output of the model, the size of board is statistically significant at 5% significant level with 3% p-value also it has a positive effect on the net interest margin of the bank as the size of board increase the net interest margin increase by this amount while holding all the other variables constant. The bank size has p-value of 0.03%, which is highly significant at 1% and 5% confidence level also it has a

direct positive effect on the NIM which positive coefficient. However, the hierarchy of the board (HB) is not statistically significant but have a positive coefficient. The other independent variables; the duality of the CEO, internal ownership, and the firm/bank age are not statistically significant and have negative effect on the NIM of the bank with negative coefficient this effect occurs by holding each of the other variables constant.

### 5.2.4 Regression summary

The following table shows the observations with some variables are not significant at 5% but significant at 10% due to the sample size, the information's and results' variations.

Variables	Banks's Financial performance Variables		
	ROA	ROE	NIM
Size of Board of Directors (SZ)	Not Significant	Not Significant	Significant at 5%
Hierarchy of the Board (HB)	Not Significant	Not Significant	Not Significant
Duality of the CEO (DCEO)	Not Significant	Significant at 10%	Not Significant
Internal Ownership (IO)	Significant at 10%	Not Significant	Not Significant
Bank Size (BZ)	Significant at 10%	Not Significant	Significant at 10%
Bank Age	Not Significant	Not Significant	Significant at 5%

The board related variables, the size of board (SB) and the hierarchy (HB) is not statistically significant with the return on asset and the return on equity and this consistent with (Ansani & Siddique, 2012), which is due to that the average size of board in all the banks operate in Egypt is nearly very close from each other however in terms of the result of the board size effect is inconsistent with the study of (Akpan & Riman, 2012).

The duality of the CEO is not significant in relation to the ROA but have a negative effect as the double power that is with the CEO may delay the ability of the board of directors to evaluate the bank's

management, which is consistent with the study of (Amba, 2012). On the other hand, the duality of the CEO is significant in terms of the ROE as the study made by (Tai, 2015) which is the only variable that have a significant effect on the return on equity while no other variables are significant. It suggests that the return on asset is not affected by the corporate governance variables, as the whole model significance is at 10% however, the ROE model and NIM model are significant at 5%. In addition, the internal ownership variable result is consistent with (Akpan & Riman, 2012) which have 10% significance with the ROA, which indicates that improvement of the

shareholders' work will lead to an improvement in the ROA of the bank. Thus, the internal owners are concerned about the returns of their investments so they put into consideration the effective corporate governance of the bank to notice the performance of their investment as a result the internal ownership is highly correlated with the foreign ownership and the firm size because it considers the sake of the shareholders' interests. The firm age is significant to the ROA as the firm age increases its ability to generate return from its assets is higher so the banks that operated recently generate ROA less than that operated long ago. Concerning the firm size the study is of (Akupan & Riman, 2012) is consisted with the research results that is insignificant with the ROA and ROE because the amount of assets that the bank has does not define the performance of the bank with in the study period of time.

The net interest margin (NIM) is highly significant with 5% confidence level which indicates that the corporate governance variables highly effect the NIM of the bank as the lending rate is higher than the deposits that transforms into loans so the higher the interest margin the higher the profit of the bank. This needs the management of the bank to be highly cooperated with no conflict or different interests to manage the loans as it is reflected in the size of board and the qualifications of the board, which is significant at 10% confidence level. This result is consistent with the study of (Onuonga, 2014). Furthermore, the firm age and size is significant with the NIM with 10% and 5% confidence level respectively this shows that the variables of considering the reliability of the study has a direct effect on decreasing or increasing the bank profitability. The interest received by the bank on the loan and the interest costs of borrowing the funds is highly affected with the firm total assets more than the age.

## 6 Conclusion

The corporate governance definition that was considered in this study is to ensure the transparency, information disclosure, and accountability in the banking sector.

To measure the corporate governance variables it was classified into two groups board related variables and ownership concentration variables. The bank performance was measured by the three main variables return on assets, return on equity and net interest margin. The effect of the corporate governance variables is examined on each bank's performance measure separated in their regression models with including variables to consider reliability, which are the bank age and size.

The board related variables indicates that the average size of board in the Egyptian banks is 10 members and this 10 members have high qualifications and experience; since the size of board increases the ROA of the foreign banks increase which means that it has a positive effect while the

national banks with average 9 board members have small return on assets. The duality of the CEO was expressed with dummy variable one and zero by giving this numbers to the 39 banks, it indicates that 32.4% of the CEO has dual role and are also the chairman. Moreover, 44% of the board members have a non-executives role in the board of directors of the bank. The ownership concentration variables average mean showed that 49.41% of the banks have major shareholders' that own a large number of shares of the bank while the percentage of the banks that are family owned with more than 50% of the shares are owned by the family are 6% only of the banks in Egypt. The foreign ownership is another ownership concentration variable that was expressed by dummy variables (=0 for national banks, =1 for foreign banks). The foreign banks have higher return on asset and net interest margin than the national banks, which is one of the variables that have an obvious effect on the performance while the national banks have higher return on equity than the foreign banks. Considering the firm age and firm size, the average mean of these two variables is slightly close to each other under the differences of the ownership.

Subsequently, applying the correlation matrix to measure how much all the variables in the study affect each other; it was shown that the size of the board and the qualifications of the board are highly correlated. In addition, the foreign ownership variable is highly correlated with the hierarchy of the board, the internal ownership of the banks' shares and the firm age. To add, the internal ownership is highly correlated with the firm size and firm age. Subsequently, all these highly correlated variables were excluded in the three regression models.

To conclude the models of the regression analysis, the effect of the corporate governance variables is on the banks' performance is statistically significant so it is very crucial for the corporate governance regulators and administrates to range the levels of these variables. In order to, increase the control on the banks for effective governance, which leads to effective performance of the banks. Which is good for the whole economy as the banking sector is the central of the economy in Egypt.

## 7 Recommendation for future studies

Since there are different variables used in measuring the Corporate Governance, different size and study period. It open pathways to further studies to conclude the actual relationship between Corporate Governance and Banks' financial performance. Similarly, further studies could classify the relationship of Corporate Governance and banks financial performance to the different kinds of banks, as in Commercial banks, Retailing banks, Islamic banks and so on.

There is a high need to consider a comparative studies between Egypt and other markets in the Middle East to understand which country are stricter in applying the codes of corporate governance and the effect on the banks financial performance. Putting into

consideration that the issue of corporate governance is marginally newly introduced topic into the Middle East with many variables that still not discussed yet in the framework of efficient corporate governance.

The results of this study should be of interest to regulators, banking sector participants, economists, and other parties. Economic reforms in emerging markets such as Egypt should be guided by continuous research and analysis.

## 8 Footnotes

1. The rules of corporate governance specify the rights and obligations of the various claimants on the cash flows of business enterprises. Corporate governance issues arise because of the existence of agency problems that cannot be resolved through contractual solutions due to high transaction costs (see Hart [1995b]). These agency costs manifest themselves in the form of conflicts of interest between investors and other claimants on the firms' cash flows, on the one hand, and the managers and directors who have discretion over how those cash flows are used, on the other.

2. The theory of a "market for managers" belongs to Alchian (1969, pp. 33, 342-351). The theory was extended afterwards in Fama (1980). We can see that the "market for managers" is not perfect, and it does not operate alone to monitor management. According to the corporate finance theory markets discipline managers to maximize stockholders' wealth. Competitive forces in two markets, the market for corporate control and the market for managerial labor services, are viewed as providing complementary enforcement of the stockholder wealth maximization rule." Dann and De Angelo (1983).

3. The adoption of "golden parachute" agreements by shareholders as a means of aligning the interests of managers more closely with their own interests illustrates the ability of shareholders to react effectively to the agency cost problems described above. See William J. Karney, "Pols Poking Holes in Golden Parachutes," Wall Street Journal, April 16, 1984, p 32.

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