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Boards of Directors and Bank Performance in United Arab Emirates

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This study presents an empirical analysis about corporate governance of financial institutions in United Arab Emirates (UAE). The purpose of this research is to analyze the influence of the structure of board of directors on the performance of these institutions. To examine the effect of control exerted by particular families on bank management, we estimated models where the dependent variable is return on assets (ROA) and return on equity (ROE), independent variables are board of directors variables, and control variables are bank management variables. Our results show that the control of corporate governance by a ruler's family within a board of directors has a positive effect on bank profitability. Our results indicate that control by a ruler's family through a bank's board of directors compensates for the inadequacy of UAE's corporate governance system.

Keywords: Board of directors, Bank performance, Corporate governance, GCC banks

JEL classification: D22, G34

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institutions in United Arab Emirates (UAE). The purpose of this research is to analyze the

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examine the effect of control exerted by particular families on bank management, we

estimated models where the dependent variable is return on assets (ROA) and return on

equity (ROE), independent variables are board of director variables, and control variables

are bank management variables. We consider that boards of directors provide corporate

governance for UAE banks. Our results show that the control of corporate governance by a

ruler's family within a board of directors has a positive effect on bank profitability. Our

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1 Introduction

This study investigates whether bank performance during the recent crisis in United Arab Emirates (UAE) was related to their governance structure. We test how the presence of ruler or business group family members on the boards of these banks influences bank performance.

The economies in Gulf Arab countries are fundamentally supported by the petroleum industry. However, in the long run, it will be difficult to maintain petroleum dependence due to declining reserves, rapid population growth, and youth unemployment. Conversely, growth of the banking sector has been remarkable in recent years, with a portfolio of abundant domestic finance, private funds, and a rich capital base. Moreover, the Gulf financial institutions have started to invest to other developing countries. The banking sector in Gulf Arab countries is increasing in importance so as to promote economic growth in the region and in other developing countries.

Nevertheless, the management of financial institutions in the Gulf States is not transparent. An analysis of financial institutions in the Middle East and North Africa was gradually begun in recent years. The research is not more sufficient than the other developing countries.

Corporate governance has become an important issue in Gulf Arab countries in recent years. Since the late 2000s, when many Gulf Arab companies began launching overseas operations and foreign investment activities, there has been an increasing demand for improved transparency of corporate management and discipline.

Naciri (2011) surveyed corporate governance in the Middle East and North Africa and found the system of preparation for corporate governance to be different than in the Gulf Arab countries. For example, Kuwait has taken the lead on implementing systems to protect small shareholders and their voting rights; however, further improvement of these systems is still needed in UAE and Bahrain.

Improvement in corporate governance promotes sustainable growth of the corporate sector and is one of the effective policy challenges to economic growth in developing countries. If appropriate management control mechanisms are insufficient, then the manager has a priority incentive to self-interest rather than shareholders' interests. As a result, companies will have difficulty with efficient resource allocation, which ultimately reduces the profitability of the company. If corporate governance is not conducted properly,

then it is difficult for organizations to realize their growth potential.

To improve corporate governance, boards of directors ("Board/s") in particular play a major role. In general, the function of the Board in a joint stock company is to supervise the management team's behavior and protect the interests of stakeholders, including the shareholders. Directors, in principle, are elected at a general meeting of shareholders and oversee the management of the company. In the case where a management team decision is likely to cause significant losses for the company, the Board has an obligation to report this to the shareholders. Proper corporate governance and supervision of management by the Board are important factors for company growth.

However, the effective functioning of corporate governance in Gulf Arab countries needs to be evaluated. First, Boards may include a number of ruler families and/or family business groups that are also major shareholders. These families play a major role in the ownership and supervision of their companies. Halawi and Davidson (2008) comprehensively examined the influence of major families on Boards of Gulf Arab companies and determined the presence of a corporate "power concentration" among these families. Their findings concluded that particular families occupied the majority of Board positions in Qatar, Oman, and Abu Dhabi. Although these authors pointed out the strength of the influence of particular families on Boards, they did not discuss the effects of this "concentrated power" on corporate management.

Second, we need to consider the fact that the environment surrounding corporate management is changing in Gulf Arab countries. The opening of the stock market to foreign investors has proceeded gradually in Gulf Arab countries. In principle, foreign investors can invest in up to 100 percent of all shares in domestic companies in Saudi Arabia and Bahrain, 49 percent in UAE, Kuwait, and Qatar, and 70 percent in Oman. In addition, foreign investors have access to direct transactions on the Abu Dhabi and Dubai stock exchanges. In 2016, in Saudi Arabia, the direct trading of domestic shares, which had been limited to domestic investors and those from Gulf Arab countries, will be opened to foreign financial institutions. In addition, financial institutions in the Gulf Arab countries have recently appointed foreign directors. Therefore, as the foreign ownership of company stocks advances, many questions arise regarding the impact on corporate behavior in Gulf Arab countries.

This study verifies the involvement of family-based power concentrations on Boards and the effect on corporate management. We then investigate how changes in Board

composition have influenced profitability or performance.

The rest of the study is organized as follows. Section 2 reviews the recent literature on corporate governance in the banking industry. In Section 3, we provide background information on corporate governance in UAE's banking sector. We describe the data set and the methodology in Section 4. The empirical results are contained in Section 5. Section 6 presents some conclusions.

2 Literature Review

2.1 Bank management in Gulf Arab countries

This study contributes to research on the influence of changes to executive ability, shareholder composition, and market structure in banking management.

In Gulf Arab countries, government-affiliated financial institutions have the largest market share and many global financial institutions have an investment interest in these institutions (Kobeissi, 2004). Thus, we need to analyze the effect that executive ability has on bank performance (Al-Musalli and Ismail, 2012).

The entry of foreign banks has an influence on the lending decision of domestic banks (DeHaas and Lelyveld, 2006). Gulf Arab banks have entered each other's markets in recent years, but this influence to their markets is hardly analyzed.

In general, research on financial institutions until the first half of the 2000s focused on efficient management (Al-Jarrah and Molyneux, 2005). However, it is more important to solve the factors that influence the efficiency of management and the priority of each factor.

2.2 Corporate governance and corporate performance

Bhagat and Bolton (2008) comprehensively reviewed the relationship between corporate governance and corporate performance. They analyzed the relationship between aggregated corporate governance variables and corporate performance variables, including return on assets and *Tobin's q*, using the *Compustat Execucomp* database of 1994–2002. Their results showed that overall improvement of corporate governance, stock ownership

by directors, and the separation of the Chief Executive Officer and Chairman of the Board are related to higher corporate performance. Although there are numerous studies on the relationship between Board structure and corporate performance, a unified opinion has been elusive. For example, with respect to the relationship between the size of the Board and corporate performance, Yermack (1996) showed a negative relationship, whereas Dalton, et al. (1999) showed a positive relationship. Even without a relationship between the structure or Board size and corporate performance, some studies have shown that the presence of outside directors improves corporate performance (Fama, 1980, Baysinger and Butler, 1985, and Rosenstein and Wyatt, 1990). Meanwhile, Chaganti, et al. (1985) and Agrawal and Knoeber (1996) reported that the independence of directors does not necessarily improve corporate performance.

Few studies have analyzed Board composition in Gulf Arab companies (Naciri 2011 and Al-Musalli and Ismail 2012). Naciri (2011) compared the progress of the corporate governance environment in the Middle East and North African countries and noted that Boards of Gulf Arab countries are occupied by relatives of the controlling shareholders and government officials appointed by the major shareholders. Al-Musalli and Ismail (2012) examined the relationship between Board characteristics (educational level diversity, nationality diversity, board interlocking, board size, and number of independent directors) and intellectual capital (IC) performance in a sample of 147 banks in Gulf Arab countries for the period 2008–2010. The results show that the IC performance of GCC-listed banks was low. The number of independent directors has a significant negative relationship with the IC performance of GCC-listed banks. All other variables are not associated with IC performance. There are not, therefore, many empirical studies on the association between Boards and bank performance in Gulf Arab countries. This study would fill this gap.

3 Corporate Governance in UAE's Banking Sector

3.1 Corporate governance rules in UAE's banking sector

Boards of directors play a crucial role in supervising the behavior of executives and protecting the interests of stakeholders, including shareholders in stock corporations.

Directors are, in principle elected at a general meeting of shareholders and monitor the management of the company. In cases where the management decisions of executives might cause significant loss to the company, the Board has a duty to report that fact to its shareholders. Sound corporate governance and supervision of management by the Board are important factors for corporate growth.

In UAE, initiatives to improve corporate governance have recently been implemented, including specific improvements for the governance of financial institutions. In UAE, there are multiple laws and regulations on corporate governance that are duplicated and partially covered among industries, Emirates and free zone. **Table 1** presents some corporate governance rules in UAE. The comprehensive *Ministerial Resolution No.* (518) of 2009 Concerning Governance Rules and Corporate Discipline Standards partly defines the duties of Boards and Chairpersons. This ministerial resolution applies to non-financial companies in the private sector that are listed on the stock exchange, whereas Government-owned companies, listed foreign companies, and financial institutions under the supervision of central bank are outside the scope of this rule.

Insert Table 1

To domestic financial institutions, Central Bank has been advising (not necessarily as a binding rule) for the conditions of the Board of Directors and management by Central Bank Circular: 23/2000 on Required Administrative Structure in Banks. However, that guidance is restrictive such as not occupying the post of the Chief Executive Officer by the Chairman.

The next subsection reviews the legal framework related to corporate governance and organizes the correlations among the UAE financial institutions from the perspective of Board structure.

3.2 Board of directors structure in UAE's banking sector

Ruler and business group families often play a large role as major shareholders in UAE banks (Saito, 2015) and are often also appointed to the Boards of financial institutions. **Table 2** shows the structure of the Boards for UAE banks from 2000 to 2012. Directors

from rulers' families occupy 13–15% of Board positions. For example, the two largest banks, Emirates NBD and National Bank of Abu Dhabi, elect their directors from persons of the Maktoum family and Nahyan family, respectively, which are ruler families in Dubai and Abu Dhabi. With respect to Emirates NBD, Sheikh Ahmed bin Saeed Al Maktoum from the Maktoum family takes office as Chairman of the Board of Directors. It is often observed in UAE that a member of a ruler family becomes the Board Chairperson in financial institutions.²

Insert Table 2

Business family members also constitute a large share in Board directorships—almost the same as ruler family members. As major shareholders, business families send their representatives into Boards to participate actively in the management of the financial institution. However, it is not often observed in UAE that any single business group possesses the greater part of Boards or that they have strong influence over executive officers. The Boards of UAE financial institutions mainly consist of rulers' family members and more than one business family. It is rare that a Board is comprised entirely by members of a single family. For example, in Abu Dhabi Commercial Bank's case, of its eleven directors, five are from four business families, al Khouri, al Dhaheri, al Khoory, and al Suwaidi.

The separation of supervision and management are also improved as a part of the actions of comprehensive corporate governance in financial institutions. Lately, some financial institutions have proactively appointed independent directors who do not hold company stock and announce this action in their annual report or website. Many large commercial banks such as Emirates NBD and Abu Dhabi Commercial Bank have no provisions for independent director appointments. On the other hand, some medium-sized banks such as Union National Bank and Abu Dhabi Islamic Bank designate independent directors. The

² In the bank sample used in this study, as at the end of 2012, the banks with Chairpersons from ruler families are as follows: Emirates NBD, First Gulf Bank, Dubai Islamic Bank, Union National Bank, Emirates Islamic Bank, Noor Islamic Bank, United Arab Bank, National Bank of Fujairah, and Ajman Bank. The chairperson of the imperial family is observed in 10 banks out of 23 commercial banks.

Mashreq Bank, affiliated to the Al Ghurair group, is an exceptional bank. The chairperson is Abdullah bin Ahmed Al Ghurair. His son, Abdul Aziz Abdulla al Ghurair, is appointed to CEO. His other son, Sultan Abdulla Ahmed Al Ghurair, and his two nephews, Rashid Saif Al Ghurair and Abdul Rahman Saif Ahmad Al Ghurair are selected directors.

cases where non-executive directors are appointed have been increasing in recent years.

4 Methodology and Data

4.1 The model

In this section, we investigate how bank performance is affected by Board of Directors structure. Our general model can be summarized as follows:

Performance
$$_{it} = \alpha_0 + \beta_1 Bank management_{it} + \beta_2 Board of Directors_{it} + \beta_3 Financial crisis dummy_{it} + \epsilon_{it}$$

Where *Performance* it is the dependent variable for bank performance for bank i in year t. Bank management it is the control variable for management variables for bank i in year t. Board of Directors it is the independent variable for Board structure variables for bank i in year t. Financial crisis dummy it captures the global financial crisis in 2007–2008. ϵ it is the disturbance term.

4.2 Bank performance

We use two alternative measures of bank performance. The first is the bank's return on assets (ROA), defined as the bank's net income divided by total assets. The second profitability measure is the bank's return on equity (ROE), defined as the bank's net income divided by total equity.

4.3 Bank management

In our regressions, we need to control for various bank management characteristics. The first variable is the scale of bank management represented in the amount of net loans (Net Loan). The second control variable is the non-interest business ratio or income diversification ratio (Security Lending Ratio), defined as the amount of total securities divided by the net loan amount. The third variable comprises interest factors. Deposit Rate

is defined as total interest expense divided by total customer deposits. Lending Rate is defined as gross interest and dividend income divided by total loans to customers. The fourth variable represents the soundness of bank management. Tier 1 Capital Ratio is defined as total equity divided by total assets. The non-performing loans ratio (NPLs Ratio) is defined as reserves for impaired loans divided by gross loans.

4.4 Board of directors

Since information regarding Boards of Directors of UAE banks is limited in the Bankscope database, we need to access Board data in the annual reports and corporate governance reports and the yearbooks of the UAE Banking Federation. Using this information, we create the following five variables with regard to Boards of UAE banks. The first variable is Number of Directors and the second is for family control of the banks' Boards. Ruler Family Directors Rate is defined as the number of ruler family members divided by the total number of Board members. Business Family Directors Rate is defined as the number of private business group family members divided by the total number of Board members. The third variable is the New Directors Rate, defined as the number of newly elected Board members divided by the total number of Board members. Finally, we create Remuneration per Director, measured by the total remuneration to directors divided by the total number of Board members.

4.5 Data set and summary statistics

Our main data source is each bank's annual reports and the *Bankscope* database. Our sample covers the period 2000 through 2012. Using the annual reports and corporate governance reports of the UAE banks and the yearbooks of the UAE Banking Federation, we obtained information on Board structures and directors' remuneration for commercial banks. Some banks do not release their Board members' information.

Table 3 provides summary statistics for our sample of banks in 2012. It shows that we cover almost all commercial banks in UAE. The UAE's Central Bank reported that the number of locally incorporated commercial banks stood at 23 during 2012. The number of GCC banks branches in 2012 was six while the number of other foreign banks branches was 22. In our research, we focus on UAE bank Board structure and require Board

members' information. Consequently, our study examines only domestic banks and excludes foreign banks from the sample. Bank profitability (ROA and ROE) indicated an average of 1.3 percent and 8.3 percent, respectively. With regard to changes in the ROA and ROE from 2000 to 2012, UAE banks' profitability was damaged after the global financial crisis in 2007 and the Dubai shock in 2009 (**Figure 1**). At the end of 2012, mean total asset value was 69,476 million AED and median total asset value 27,250 million AED. As for UAE banks, their fixed assets compared with total assets are not recorded for 2012. The proportion of fixed to total assets was only 1.1 percent in 2012. In 2012, on average, the security lending ratio was 34.7 percent, the deposit rate was 1.7 percent, and the lending rate was 6.5 percent. The *Tier 1 Capital Ratio* was 15.6 percent and the *NPLs ratio* was 5.9 percent in 2012. In 2012, the average remuneration per director was 2.19 million AED (US\$595,000).

Insert Table 3

Insert Figure 1

5 Empirical Results

Table 4 presents the estimation results from panel data regressions of ROA on bank management variables, control variables, and five board of director variables. We estimate regressions with both the random and fixed effects models. The regression specification reported in Column (1) only includes the set of bank management variables and control variables. The regression specification reported in Column (2) adds five Board variables to the regressions in Column (1). As a consequence of the Hausman test, the regression specifications for Column (1) are selected in the fixed effects model and those in Column (2) for the random effects model.

Insert Table 4

As Table 4 shows for both the random (Column 1) and fixed (Column 2) effects models, the coefficient of $ln(Net\ Loan)$ is positively significant. These appear to be positive effects

of bank scale on bank performance as ROA. A possible explanation is that large banks are well known to be good banks by customers and investors; therefore, large banks could win projects with higher returns compared with smaller banks.

The Security Lending Ratio is negatively significant in regressions (1) in the fixed effects model. This result is consistent with Beltratti and Stulz (2012). As argued by Beltratti and Stulz (2012), banks with diversified activities derive less of their income from interest. In the UAE bank market, non-interest activities, such as securities, are not more profitable than interest activities.

We see that the coefficient on *deposit rate* is significantly negative in regression (2) in the random effects model. High deposit rates increase the interest rate paid to the depositors and, therefore, represent a burden on the total cost of the banks. In regression (2) in the random effects model, *Lending Rate* has a positive and highly significant relation with ROA. High lending rates contribute to bank profitability. The core business of UAE banks in recent years has been lending rather than commission-based; thus, the return from lending is an important source of revenue for UAE banks.

In addition, we find a positive relationship between soundness of bank management (*Tier 1 Capital Ratio*) and bank ROA. The result here is consistent with the empirical result of Beltratti and Stulz (2012) and contradicts Fahlenbrach and Stulz (2011). We find that banks with more Tier 1 capital performed better in terms of ROA. Banks with Tier 1 capital are considered stable by customers, borrowers, and investors; such banks are likely to attract better borrowers and investment projects in the markets.

The impact of *NPLs Ratio* on bank performance was not significant in this regression. From 2000 to 2012, UAE banks have not suffered from problems related to non-performing loans. In 2000, the average ratio of non-performing loan to gross loans was 9.2 percent. This rate decreased after 2000. In 2005, the average non-performing loan ratio was 4.6 percent, 2.6 % in 2008, 4.4 percent in 2010, and 5.9 percent in 2012.

The coefficient of the *After Shock dummy* variable is negative and significant. As shown in **Figure 1**, after the international financial crisis in 2007, the profitability of UAE banks was largely damaged, and the impact was felt throughout the range of UAE banks.

When we analyze the relationship between bank performance and the five Board structure variables in Column (2) in the random effects model, we find some Board factors affect banks' ROAs.

The coefficient of $ln(Number\ of\ Directors)$ is not significant. This finding contradicts

Aebi et al. (2012) and Beltratti and Stulz (2012). In some studies, Board size is usually considered to indicate poor governance (Yermack, 1996). Aebi et al. (2012) concluded that Board size may be a less important corporate governance characteristic for banks compared with non-banks. Adams and Mehran (2003) and Aebi et al. (2012) indicated that the size of banks' Boards may need to be larger, at least compared with industrial firms, due to higher business complexity and related advisory requirements.

Most importantly, the *Ruler Family Directors Rate* has a significantly positive relation to ROA. As the rulers' families have more seats on Boards of UAE banks, their profitability (ROA) is higher. Thus, monitoring of the bank management by ruler family members increases earnings to the management team and, hence, can improve the profitability of UAE banks.

As shown in **Table 2**, many representatives from business group families become members on Boards of UAE banks. However, the estimation results in **Table 4** do not report their influence on bank performance.

The variable measuring the rate of new directors to total directors (New Directors Rate) is never estimated to be significant in Column (2) in the random effects model. We considered that new directors are unfamiliar with monitoring bank management. Some new directors might be busier than conventional directors. Thus, the parameter indicating this relationship between New Directors Rate and bank performance was expected to be negative. However, our regression results show that even if new directors are busy and unfamiliar with their new Board obligations, they do not reduce bank profitability. Aebi et al. (2012) used a dummy variable for whether a Board is busy (Busy Board) and classified a Board as busy if a majority of outside directors hold three or more directorships. If we assume the New Directors Rate is a proxy variable of Busy Board, then the findings of no relationship between New Directors Rate and bank performance is consistent with the findings of Aebi et al. (2012).

Finally, we find that the coefficient on ln(Remuneration per Director) is positive and significant in Column (2) in the random effects model ROA regression. This finding means that higher compensation for directors is associated with higher bank earnings. Discipline based on incentives for directors may also lead to the expansion of bank revenue in UAE's banking sector.

Table 5 shows the panel data regression results for return on equity (ROE). We also estimate regressions for ROE with both the random and fixed effects models. The regression specifications reported in Column (3) only includes the sets of bank management and control variables. The regression specifications reported in Column (4) adds five Board variables to the regressions in Column (3). As a consequence of the Hausman test, the regression specifications are selected in the fixed and random effects models. However, the results of the Hausman test for Model (4) mean the hypothesis that "the random effects model is more accurate than the fixed effects model" is correct at 11.9 percent. Accordingly, when interpreting Model (4), we can also refer to the fixed effects model and not only the random effects model.

First, we will explain the results of the basic model, excluding the variable for the Board of Directors. The results for the fixed effects model in Column (3) are similar to the results of ROA in Column (1), whereas the estimated results for several variables are different from the results of ROA. The coefficient of bank scale (ln(Net Loan)), non-interest activities (Security Lending Ratio), and impact of the crisis (After Shock dummy), as well as the results of the ROA, are strongly significant. However, the results for the fixed effects model in Column (3) find no relationship between soundness of bank management (Tier 1 Capital Ratio) and ROE. Soundness of a bank's management has a positive relationship with the profit for assets of stakeholders in general but does not have any correlation with the benefit to shareholders' equity.

In the random effects model in Column (4), the coefficient of *Deposit Rate* is not significant in comparison to the results of ROA in the random effects model in Column (2). The coefficient of *NPLs Ratio* is weakly negative to ROE in the random effects model in Column (4). Though significance is not enough, bank management risks, such as non-performing loans, have an impact on shareholder equity.

Second, according to estimation results of the random effects model in Column (4), coefficients of both *Ruler Family Directors Rate* and *ln(Remuneration per Director)* are significantly positive in the estimation results of the random effects model in Column (2). However, the results of the fixed effects model in Column (4) report that the coefficient of *ln(Number of Directors)* is weakly positive on ROE, contradicting the results of all other estimation models. In the case of UAE banks, the monitoring of bank management by large numbers of directors may increase shareholders' benefit. The coefficient of *New Directors*

Rate in the fixed effects model in Column (4) is significantly negative, whereas the coefficient in the random effects model in Column (4) is not significant. Frequent changes of directors may harm shareholders' benefit.

6 Conclusions

The purpose of this study is to analyze the influence of Board structure on the performance of financial institutions in UAE. Corporate governance initiatives in United Arab Emirates have recently been established. Among these initiatives, the most discussed aspect has been improvement of governance in financial institutions.

In the case of UAE commercial banks, the major feature of corporate governance is that ruler families and family conglomerates control bank management through the Boards of Directors. Rulers' and business group families often play a large role as major shareholders in UAE banks and often they also are appointed to the Boards of Directors. As major shareholders, business families send their representatives into Boards to actively participate in the management of these financial institutions.

To examine the effect of Board control by a particular family on bank management, we estimated some models where the dependent variable is ROA or ROE, independent variables are board of directors variables, and control variables are bank management variables.

Our estimate considers that boards of directors are partially effective in the corporate governance of UAE banks. Interestingly, our results show that the control of the bank management by rulers' families has a good effect on bank profitability. Our results conclude the possibility that direct control by ruler families through these Boards compensates for the inadequacy of UAE's corporate governance system.

References

- Adams, R.B., Mehran, H., 2003. Is corporate governance different for bank holding companies? Federal Reserve Bank of New York Economic Policy Review 9, pp.123-142.
- Aebi, V., G. Sabato, and M. Schmid, 2012. Risk management, corporate governance, and bank performance in the financial crisis, Journal of Banking & Finance, 36, pp.3213-3226.
- Agrawal, A., and Knoeber, C.R., 1996 Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders, *Journal of Financial and Quantitative Analysis*, 31(3), pp. 377 397.
- Al-Jarrah, I. and P. Molyneux, 2005. Efficiency in Arabian Banking. *in Islamic Perspectives on Wealth Creation*. eds. M. Iqbal and R. Wilson, pp.97-117. Edinburgh University Press.
- Al-Musalli, M., and K. Ismail, 2012. Intellectual Capital Performance and Board Characteristics of GCC Banks, *Procedia Economics and Finance*, Volume 2, pp.219-226.
- Baysinger, B. and Butler, H., 1985. Corporate Governance and the Board of Governance: Performance Effects of Changes in Board Composition, *Journal of Law and Organization*, 1, pp.101–124.
- Beltratti, A. and Stulz, R. M., 2012. The credit crisis around the globe: Why did some banks perform better? *Journal of Financial Economics*, 105, pp.1–17.
- Bhagat, S. and B. Bolton, 2008. Corporate Governance and Firm Performance, *Journal of Corporate Finance*, 14, pp.257-273.
- Chaganti, R.S., Mahajan, V. and Sharma, S., 1985. Corporate Board Size, Composition and Corporate Failures in the Retailing Industry, *Journal of Management Studies*, 22(4), pp.400–417.
- Dalton, D. R., Johnson, J. L. and Ellstrand A. E., 1999. Number of Directors and Financial Performance: A Meta-Analysis, *Academy of Management Journal*, 42(6), pp.674-686.
- De Haas, R. and van Lelyveld, I., 2006. Foreign banks and credit stability in Central and Eastern Europe. A panel data analysys, *Journal of Banking & Finance*, 30, pp. 1927-1952.
- Fahlenbrach, R. and Stulz, R. M., 2011. Bank CEO Incentives and the Credit Crisis. Journal of Financial Economics, 99, pp.11-26.

- Fama, E. F., 1980. Agency Problems and the Theory of the Firm, *Journal of Political Economy*, 88, pp.288–307.
- Halawi, A. and B. Davidson, 2008. Power Matters: A Survey of GCC Boards, *National Investor*, Investment Research.
- Kobeissi, N., 2004. Ownership Structure and Bank Performance: Evidence from the Middle East and North Africa. *Economic Research Forum Working Paper*.
- Naciri, A., 2011. The MENA Countries National Systems of Corporate Governance, in Naciri, A. ed. *Corporate Governance around the World*, Routledge, pp. 302-322.
- Rosenstein, S. and J.C. Wyatt, 1990. Outside Directors, Board Effectiveness and Shareholders Wealth, *Journal of Financial Economics*, 26, pp.175-191
- Yermack, D., 1996. Higher Market Valuations of Companies with a Small Board of Directors, *Journal of Financial Economics*, 40, pp.185-211.

Table 1 Corporate governance rules in UAE

Dubai Other Emirates Non-listed Non-listed Listed Listed Non-financial Financial Financial Non-financial Financial Non-financial Financial Non-financial Corporate Governance Code for Small small and small and small and small and and Medium Enterprises (Dubai) medium medium medium medium enterprises enterprises enterprises enterprises Ministerial Resolution No. (518) of 2009 Concerning Governance Rules and Corporate Discipline Standards Decision No.(32/R)of 2007 concerning on Corporate Governance 1 Code for Joint Stock Companies and Institutional Discipline Criteria Central Bank Circular: 23 /2000 on Required Administrative Structure in Bank

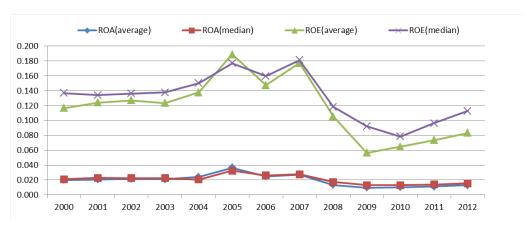
Source: Authors' compilation.

Table 2 Board of directors structure

_	Number of Directors	Directors from rulers family	Directors from business family	Other Direcotrs	NewDirectorsRate	
2000	7.0	14.1%	26.7%	59.2%	5.6%	
2001	8.3	13.0%	28.6%	58.4%	23.4%	
2002	8.1	13.2%	27.8%	59.0%	11.0%	
2003	8.3	13.2%	28.4%	58.4%	7.6%	
2004	8.2	13.4%	28.6%	58.0%	11.1%	
2005	8.2	13.4%	26.5%	60.1%	12.2%	
2006	8.4	12.0%	27.8%	60.2%	14.4%	
2007	8.3	12.6%	28.0%	59.4%	19.2%	
2008	8.7	13.2%	29.2%	57.6%	7.4%	
2009	8.3	13.9%	27.8%	58.3%	10.3%	
2010	7.3	15.0%	29.5%	55.5%	6.8%	
2011	8.0	15.1%	28.5%	56.4%	18.2%	
2012	7.7	15.1%	31.4%	53.5%	8.9%	

Source: Author's calculation.

Figure 1 Bank performance from 2000 to 2012



Source: Bankscope database.

Table 3 Sample summary statistics for 2012

	Number of					Standard
Variable	Banks	Average	Maximum	Minimum	Median	deviation
ROA	23	0.013	0.051	-0.092	0.016	0.024
ROE	23	0.083	0.246	-0.584	0.113	0.151
Total Asset	23	69,476	308,296	5,490	27,250	87,148
Fixed Asset	23	743	2,469	48	626	662
Security Lending Ratio	23	0.347	4.926	0.017	0.126	0.979
Deposit Rate	21	0.017	0.033	0.006	0.016	0.007
Lending Rate	23	0.065	0.126	0.037	0.061	0.020
Tier 1 Capital Ratio	23	0.156	0.279	0.070	0.150	0.054
NPLs Ratio	23	0.059	0.132	0.013	0.057	0.032
Remuneration Per Director	11	2.186	11.860	0.489	0.700	3.280

Source: Bankscope database.

Table 4 Return on assets (ROA) and Board of Directors structure

Dependent variable		ROA											
		(1)					(2)						
	Random Effect			Fixed Effect				Random Effect			Fixed Effect		
Constant		-0.038	**		-0.074	***		-0.045	***		-0.028		
	(0.010)	(0.000)	(0.009)	(0.379)	
ln(Net Loan)		0.005	***		0.008	***		0.004	**		0.002		
	(0.000)	(0.000)	(0.014)	(0.431)	
Security Lending Ratio		-0.016	***		-0.019	***		0.012			0.002		
	(0.000)	(0.000)	(0.267)	(0.870)	
Deposit Rate		-0.133	*		-0.096			-0.227	**		-0.182		
	(0.073)	(0.262)	(0.018)	(0.158)	
Lending Rate		0.084	*		0.047			0.292	***		0.198	**	
	(0.055)	(0.371)	(0.000)	(0.027)	
Tier 1 Capital Ratio		0.127	***		0.171	***		0.128	***		0.131	***	
	(0.000)	(0.000)	(0.000)	(0.000)	
NPLs Ratio		-0.057	***		-0.037			-0.042			-0.023		
	(0.009)	(0.129)	(0.166)	(0.544)	
After Shock dummy		-0.012	***		-0.015	***		-0.012	***		-0.013	***	
	(0.000)	(0.000)	(0.000)	(0.002)	
ln(Number of Directors)								0.004			0.006		
							(0.176)	(0.278)	
Ruler Family Directors Rate								0.015	**		-0.002		
							(0.029)	(0.914)	
Business Family Directors Rate								-0.005			-0.003		
							(0.274)	(0.818)	
New Directors Rate								-0.008			-0.007		
							(0.105)	(0.190)	
ln(Remuneration per Director)								0.003	**		0.005	**	
							(0.016)	(0.023)	
Number of observations	179			179			111			111			
Hausman test C		Chi-squa	are(7)	=	23.912			Chi-squa	re(12)	=	14.279		
				(0.001)				(0.283)	

^{*} Signifiant at the 10% level

Source: Author's calculation.

^{**} Significant at the 5 % level

^{***} Significant at the 1 % level

p-value is in parentheses

Table 5 Return on equity (ROE) and Board of Directors structure

Dependent variable		ROE										
		(3)					(4)					
		Random Effect			Fixed Effect			Random Effect			Fixed Effect	
Constant		-0.188	**		-0.345	***		-0.143			-0.076	
	(0.029)	(0.003)	(0.182)	(0.675)
ln(Net Loan)		0.037	***		0.054	***		0.026	***		0.017	
	(0.000)	(0.000)	(0.006)	(0.309)
Security Lending Ratio		-0.103	***		-0.117	***		0.016			-0.005	
	(0.000)	(0.000)	(0.810)	(0.951)
Deposit Rate		-0.558			-0.499			-0.705			-0.239	
	(0.193)	(0.313)	(0.218)	(0.741)
Lending Rate		0.327			0.256			1.175	***		0.722	
	(0.197)	(0.403)	(0.003)	(0.149)
Tier 1 Capital Ratio		0.140			0.212			0.001			-0.001	
	(0.238)	(0.172)	(0.993)	(0.995)
NPLs Ratio		-0.314	**		-0.228			-0.314	*		-0.180	
	(0.013)	(0.104)	(0.086)	(0.405)
After Shock dummy		-0.081	***		-0.099	***		-0.076	***		-0.078	***
	(0.000)	(0.000)	(0.000)	(0.001)
ln(Number of Directors)								0.015			0.054	*
							(0.406)	(0.083)
Ruler Family Directors Rate								0.129	***		0.002	
							(0.008)	(0.986)
Business Family Directors Rate								-0.015			-0.050	
							(0.587)	(0.419)
New Directors Rate								-0.043			-0.054	*
							(0.119)	(0.075)
ln(Remuneration per Director)								0.014	**		0.031	**
							(0.047)	(0.013)
Number of observations		179			179			111			111	
Hausman test		Chi-squ	are(7)	=	14.856			Chi-squa	re(12)	=	17.908	
				(0.038)				(0.119)

^{*} Signifiant at the 10% level

Source: Author's calculation.

^{**} Significant at the 5 % level

^{***} Significant at the 1 % level

p-value is in parentheses