

**BANK SPECIFICS, ECONOMICS  
ENVIRONMENT, AND AGENCY THEORY:  
DETERMINANTS OF BANKING  
PERFORMANCE IN GCC**

*Musa Darayseh*

*Abdelaziz Chazi*

American University of Sharjah, UAE

**ABSTRACT**

The financial models used in the literature to investigate the performance of banks show mixed results and a low  $R^2$  in many of the studies. Therefore, Agency theory can be used in addition to the financial models to give investors enough information about banking industry performance. The sample used in this study consist of accounting information (bank specifics) and market information (macroeconomic variables) for a group of national and foreign banks located in the GCC countries during the period 2002 to 2013. The final sample consists of 115 banks with completed data collected from Bankscope database for financial data. The macroeconomic data were collected from sources such as the International Monetary Fund, International Financial Statistics, National Statistics, and the World Bank. Regression models have been developed to examine the factors that may determine banks performance in the GCC. The results of the study provide evidence that the models used in this paper are significant, indicating that all models containing the above financial and macroeconomics factors are important and statistically significant in determining and explaining bank performance. Even though our results indicate that the above factors are important in measuring bank performance, we believe that the agency theory could be used to shed some lights and provide insights on factors affecting bank performance in the GCC countries. There appears to be a need for a common understanding, a balancing of risks with financial rewards, and a building of long-term relationships. The findings enhance our theoretical understanding of the importance of these factors in creating an environment of trust that governs the behavior of the owners and managers, and hence reduces the agency problem. As for general management, the results indicate that opportunistic behavior can be lessened by managing the relationship between the two parties through a contract that clearly specify these factors. Therefore, this paper paves the way for further research in this area.

**JEL Classifications:** G2, E0

**Keywords:** Banks performance, Agency theory, GCC

**Corresponding Author's Email Address:** achazi@aus.edu

**INTRODUCTION**

The banking failures' waves of the 1980's have generated losses that exceeded the ones of the 1930's great depression. These failures led to questioning the effectiveness of banking practices. Due to the leading role of banks in the economy, their activities must be kept under control and scrutiny to ensure that they operate within the country's policies, rules, and regulations and that the economy is not negatively affected.

Therefore, governments should create monetary policies and rules that influence and control banks' activities so that these activities are in line with the development objectives of the economy (Palia and Porter, 2007). In other words, a profitable banking industry minimizes negative economic shocks and contributes to the stability of the monetary policy and the financial system. Adequate earnings also are required in order for banks to survive, grow, and prosper in different environments. The banking profitability has been considered in several studies such as El-Kuwaiz, (94-95), Mohammed and Khababa, (1999), Mazhar (2003), Al-Tamimi (2010), Olson and Zoubi (2011), Al Shaher etl. (2011), Chazi and Darayseh (2013), Murhy and Al-Muharrami (2014), Gharaibeh (2015), and Donnellan and Rutledge (2016). These studies focus on the impact of different factors on banks' profitability. These studies show that the selection of variables is at times lacking internal consistency, but fail to take into consideration the issues related to the relation between bank management (agent) and shareholders (principal). In fact, determining factors that influence banks' profitability is important for all stakeholders including managers, shareholders, and financial authorities.

Banks are founded on the concept of relationships between different interested parties. The capital provider such as shareholders (principal), the bank management (agents), and the debtors are examples of such providers (others). These relationships generally create a principal-agent problem. The essence of the problem between bank managers and shareholders are mainly due to bank managers being reluctant or unwilling to increase banks risk to the level that would maximize shareholders' wealth. The problem also stems from the fact that the agent may not operate or act according to the best interest of the principal because of the conflicting objectives or interests of the different parties.

The agent usually wants to maximize his/her own benefit by increasing his/her personal wealth and job security while the principal wants to maximize his/her own wealth. Therefore, the agent could maximize his income and minimize his effort due to different working motivations in the relationship. When principal and agent have different goals and objectives, and due to lack of knowledge in the part of the principal and lack of communication between the parties, a conflict of behavior and an information asymmetry arise. This would lead the principal to start monitoring more closely the agent's behavior, and the agent to try to deprive the principal of having access to all available information, especially at the time when the agent is in the process of making decisions. The problem also could arise when it is difficult to understand the behavior of the agent, and would lead to a principal/agent miss-trust.

The principal-agent relationship as a branch of agency theory, deals with agency problems by proposing agency models that integrate informational aspects of these problems with contractual issues. This paper examines factors (external and internal) that affect the performance of the banking system in the Gulf Cooperation Council (GCC) and discusses the relationship between banks' managers (agent) and shareholders (principal) using agency theory. Even though our results indicate that financial and macroeconomics factors identified in this study are important and statistically significant in measuring, determining and explaining bank performance, these models fail to explain the remaining 48% to 55% of the variations in banks' performance. We believe that agency theory can be used to explain the shortages in the financial models used in this study. Agency theory is one of the models that economists propose to explain the

relationship between owners and managers and the nature of the contracts. There appears to be a need for common understanding, a balancing of risks with financial rewards, and a building of long-term relationships. It is clear that in addition to the financial models presented in this paper there is a need for agency theory to measure and explain the shortages in these models.

The rest of the paper is structured as follows: Section 2 provides a literature review, and Section 3 presents the data and methodology used in the study. The empirical results are presented in section 4. Finally, in section 5, the summary, conclusion, and implications are discussed.

## LITERATURE REVIEW

The first strand of research related to our study examines bank performance, risk, and profitability in GCC and other countries using different factors such as accounting (banks) specifics and macroeconomic variables. Mazhar (2003) used financial ratios to measure the performance of the GCC banks. He found that most banks have performed well over the past years. He also found that these banks need to be monitored and supervised by different agencies. Siddiqui (2008) examines the risk and other financial characteristics of the Islamic Banks comparing with conventional banks. They found that Islamic banks performed good with respect to the returns on their assets and equity. They also demonstrated better risk management and maintained adequate liquidity comparing with conventional banks. Al-Tamimi (2010) examine some influential factors in UAE's Islamic and conventional banks during the period 1996-2008. The results showed that Islamic banks have a small market share in the UAE banking industry. A regression model employed ROE and ROA as independent factors and a set of internal and external factors were considered as independent variables such as GDP per capita, size, financial development indicator (FIR), liquidity, concentration, cost and number of branches. The results indicate that liquidity and Concentration were the most significant determinants of conventional national banks' performance.

On the other hand, cost and number of branches were the most significant determinants of Islamic banks' performance. Al Shafer et al. (2011) examine the factors that affect commercial banks performance in the Middle East. They used a factor analysis technique in 23 variables to select six different factors that were used in their models to measure the banks performance. Even though all factors were important in measuring banks performance, they found that banks' characteristics to be the most important factors in measuring banks performance and to compete efficiently with global commercial banks. Gharaibeh (2015) examines the influence of certain bank-specific and macroeconomic factors on the profitability of commercial banks in Bahrain for the period 2006-2013. The study uses macroeconomic and financial factors such as inflation rate, interest rate, exchange rate, economic growth in addition to the banks internal characteristics from 2006 to 2013. The study found that capital adequacy ratio, capital strength, interest rate, debt ratio, and type of the bank are the main determinants of commercial banks profitability.

The above studies attempt to identify some of the major determinants of banks' profitability by considering internal and external factors. Most of the studies above use linear models to estimate the impact of various factors in explaining banks' profits.

However, some issues are not studied sufficiently in the literature. First, the literature primarily considers the determinants of profitability at the bank level with the selection of variables sometimes lacking internal consistency, while there is no thorough investigation of the effect of the macroeconomic environment. This is mainly due to the short amount of time covered in the estimations. Second, in most of the current literature, the econometric methodology used is not adequately described and/or does not account for some features of bank profits (e.g. persistence), which implies that the estimates obtained may be biased and inconsistent. It is clear from the above studies that there are very few studies tackle the GCC area.

The second area of related research covers the relationship between bank managers and shareholders. This area deals with the agency problems between bank managers and shareholders. There are no studies found in this area related to GCC countries. According to Abdallah and Darayseh (2013), the form of contracts between bank managers and shareholders can be either exchangeable/transactional, as a delegation of power, or formal legal documents. However, one of the main challenges to the contracting environment is the conflicting interests between bank managers and shareholders, which leads to agency problems where bank managers may act unethically in order to protect and maximize their own interests at the expense of shareholders' interests. This in turn decreases the value of the bank and its shareholders wealth. The agency theory is a model that aims to explain the nature of contracts between these parties. This theory considers the costs associated with monitoring and aligning the behavior of agents to act in the best interest of the principal.

This can be done by reducing moral hazard (Jones, 1995; Eisenhardt, 1989). Agency problems are examined by Holmstrom (1979), Amihud and Lev (1981) and others. Amihud and Lev (1981) study the incentive compensation and risk. The authors argue that managers are motivated to reduce risk in an effort to protect shareholders' capital. Saunders, Strock and Travlos (1990) find that bank managers can induce risk taking by creating management stock ownership. Using the percentage of stock owned by managers and the capital market measures of risk as a substitute for ownership structure can provide evidence that if stockholders controlled the bank, as opposed to managers, they would take on higher risk. Lee (2002) theorize that managers respond to incentive compensation based on his/her risk appetite. A risk-taking manager responds to incentive compensation less aggressively if the risk of bank failure is high. Houston and James (1995) argue that compensation in the banking industry does promote risk-aversion and not risk-taking. They find no evidence that incentives increase the level of risk-taking, but find instead a positive relationship between the ratio of market-value to book-value and the use of equity-based compensation. Gorton and Rosen (1995) find that managers with controlling interests tend to make safe loans while entrenched managers make riskier loans. Demsetz, Saidenbeg and Strahan (1997) find a negative relationship between risk and franchise value, but only for banks with low franchise values do they find a statistically significant relationship between risk and ownership structure.

Hughes, Lang, Moon and Pagano (2003) consider the interaction between managerial incentives and safety-net subsidies and its impact on capital structure. The authors argue that the choice between strategies is a function of agency problems, with low risk and high charter value associated with a higher consumption of agency goods by managers. However, the inability of the owner to completely monitor the agent's

behavior suggests the need for an ideal contract to model any real-world situation. Such a contract would act as a monitoring and bonding mechanism that prevents the agent from making decisions that reduce the value of the owner's invested capital. Donnellan et al. (2016) use agency theory to determine how operational risk is an issue within the banking industry and the impact it presents to the banks liquidity position. Bergen et al. (2001) argue that any contract is incomplete due to the informational advantage of the agent, inefficient market, and inability of a contract to consider all situations in the world (Jones, 1995, Scott & Triantis, 2005).<sup>1</sup> Creating an ideal model that could tackle the relationship between bank managers and shareholders remains an empirical issue that is still of interest to many researchers, regulators, lawyers, corporate managers, owners, and investors.

In summary, the above studies suggest that ethical relationships between bank managers and shareholders reduce agency costs and bank risk taking and promote effective contract implementation. Hence in the absence of any conflict, a contract is said to be optimal. We propose in this paper a discussion on the factors that help achieve an optimal contract. The current study is unique because it focuses on the factors that affect banks performance and risks in the GCC while discussing agency theory.

#### SAMPLE SELECTION AND DATA

The sample used in this study to examine and measure the factors that affect the bank performance (profitability) is divided in two categories: a subsample based on accounting information (bank specifics) and another one based on market information (macroeconomic variables), for a group of national and foreign banks located in the GCC countries during the period 2002 to 2013. The bank specifics data for a list of 191 banks) were collected from Bankscope database. Missing data were manually collected from annual reports of each bank as presented on their individual websites. The macroeconomic data were collected from sources such as the International Monetary Fund, International Financial Statistics, National Statistics, and the World Bank. The final sample consists of 115 banks with completed data. Table 1 presents the descriptive statistics of the variables<sup>2</sup> used in this study.

**TABLE 1. DESCRIPTIVE STATISTICS**

Variable	Mean	Std. Dev.	Min	Max
roaa	2.921035	6.151315	-37.98	35.1
eqas	28.78069	23.34329	-15.69	99.64
cost	45.71131	48.09077	0.59	709.75
lofund	1.09E+07	1.97E+07	44	1.17E+08
size	15.37182	2.241145	8.178	18.171
loans	46.95221	25.04186	0.00270	98.92
secur	0.4576067	0.244544	0.0036417	0.994553
depliab	0.7575365	0.265659	0.0000769	0.997191
ineff	0.2674639	1.787297	-4.375	56

over	0.0271892	0.033115	0.0008827	0.377398
niba	0.050644	0.060801	0.001294	0.756105
lci	0.2882691	1.551738	-6.1875	51
crisk	0.0347623	0.416865	-0.8759	9.761905
capstr	0.2865292	0.234092	-0.1568628	0.99639
conc	0.0123809	0.041306	6.83E-06	0.783138
inf	4.6988	3.496399	0.674	12.776
assgdp	0.0001449	0.000223	1.13E-07	0.0031
macpass	125253.7	809601.2	322.6353	1.43E+07
macgdp	0.7548766	0.437926	0.1968578	1.967074

## RESEARCH DESIGN AND EMPIRICAL RESULTS

The following model has been developed to examine the factors that may determine banks performance in the GCC. The model hypothesize that the performance of banks in the GCC depends on internal factors (bank specifics) and external factors (economic environment data). The model examining GCC banks Performance is as follows:

$$PRF = \beta_0 + \beta_1 eqas + \beta_2 cost + \beta_3 lofund + \beta_4 size + \beta_5 loans + \beta_6 secure + \beta_7 depliab \quad (1)$$

where:

$\beta_0$	constant
PRF	Banks Performance (ROA and ROE)
EQAS	This is a measure of capital adequacy, calculated as equity to total assets.
COST	This is the cost to income ratio.
LOFUND	This is a measure of liquidity, ratio of net loans to customers and short term funding
SIZE	The accounting value of the bank's total assets (in\$)
LOANS	Loan specialization ratio=total net loans/total assets
SECUR	Security specialization ratio=other interest bearing assets (non-loans)/total assets
DEPLIAB	Deposit specialization ratio=total deposits/total liabilities

**TABLE 2. REGRESSION MODEL RESULTS (BANK SPECIFICS)**

<b>Number of obs</b>	1150		
<b>F</b>	54.98		
<b>Prob &gt; F</b>	0.000		
<b>R-squared</b>	0.4918		
<b>Adj R-squared</b>	0.4875		
<b>Roaa</b>	<b>Coef.</b>	<b>t-statistics</b>	<b>P&gt;t</b>
<b>Cons</b>	3.776515	2	0.045
<b>Eqas</b>	0.0736999	8.67	0.000
<b>Cost</b>	-0.0536153	-15.7	0.000
<b>lofund</b>	9.31E-09	1.01	0.311
<b>Size</b>	-0.2666393	-2.92	0.004
<b>loans</b>	0.0308425	2.98	0.003
<b>secur</b>	2.814483	2.62	0.009
<b>depliab</b>	6.032037	2.42	0.016

The regression results for the model that includes both local and foreign banks are reported in table 2. We define a bank to be local (foreign) when locals own more (less) than 50% of its share capital. The sample includes 115 local and foreign banks. The overall model is significant with an adjusted  $R^2$  of 0.4875 and F statistics of 54.98 (0.000), indicating that a model containing the above factors is statistically significant in explaining the variation in the dependent variables (the bank performance). Therefore, this model determines the extent to which independent variables (eqas, cost, lofund, size, loans, secur, and depliab) can explain variations in bank performance. These results provide evidence that the above factors are important for a successful relationship between all banks parties. If owners and managers do not ensure that the above factors are taken into consideration, performance indicators may suffer. Therefore, the results from Table 2 suggest that the bank processes should be revisited by owners and agents in light of the above factors. These findings are consistent with the findings of Gill (2004) that there is a need for common understanding of mutual interest, balancing risks with financial rewards, and building long-term trust relationships between owners and managers.

We further include the following additional variables (inflation, over, niba, lci, crisk, capst, and con) to our regression analysis. The additional factors are included in the models to examine the effect of these variables on bank performance and the relationship between owners and managers. The regression results for model 2 are reported in table 3. The overall model is significant with an adjusted  $R^2$  of 0.4920 and F statistics of 34.85 (0.000), indicating that a model containing the above factors is statistically significant in explaining the variation in the dependent variables (the bank performance). Therefore, this model determines the extent to which independent variables (eqas, cost, lofund, size, loans, secur, depliab, inflation, over, niba, lci, crisk,

capst, and con) can explain variations in bank performance better than a model that includes only the financial factors.

**TABLE3. REGRESSION MODEL RESULTS (BANK SPECIFICS, EFFICIENCY, AND RISKS)**

<b>Number of obs</b>	1150		
<b>F statistics</b>	34.85		
<b>Prob &gt; F</b>	0.000		
<b>R-squared</b>	0.5006		
<b>Adj R-squared</b>	0.4920		
<b>Roaa</b>	<b>Coef.</b>	<b>t-statistics</b>	<b>P&gt;t</b>
<b>Cons</b>	0.3635399	0.18	0.86
<b>Eqas</b>	-0.2392571	-1.45	0.146
<b>Cost</b>	-0.0562813	-16.22	0.000
<b>lofund</b>	1.38E-09	0.15	0.88
<b>Size</b>	-0.0337816	-0.34	0.737
<b>loans</b>	0.026672	2.58	0.01
<b>secur</b>	2.498088	2.33	0.02
<b>depliab</b>	0.7907286	1.22	0.221
<b>Inefl</b>	-1.803159	-6.94	0.000
<b>Over</b>	29.15006	4.37	0.000
<b>Niba</b>	-2.522931	-0.93	0.354
<b>Lci</b>	1.901636	6.45	0.000
<b>Crisk</b>	-1.375997	-3.68	0.000
<b>capstr</b>	31.25002	1.91	0.057
<b>Conc</b>	-8.962556	-2.27	0.023

Therefore, the results from Table 3 suggest that the bank processes should include efficiency and risks factors in addition to the bank financial factors. We include the following additional factors (INFI, GDPGGR, CONC, ASSGDP, MACPASS, and MACGDP) to the independent variables in our regression analysis. The additional factors are included in the models to examine if the macroeconomics factors have an effect on bank performance and the relationship between managers and bank owners. The macroeconomic data come from The International Monetary Fund (IFM), International Financial Statistics (IFS), National Statistics, and the World Bank. The following regression models were developed to determine the quantitative impacts of these factors on bank performance and the relationship between managers and owners:



**TABLE4. REGRESSION MODEL RESULTS (BANK SPECIFICS AND MACROECONOMICS FACTORS)**

<b>Number of obs</b>	1150		
<b>F</b>	44.92		
<b>Prob &gt; F</b>	0.000		
<b>R-squared</b>	0.5269		
<b>Adj R-squared</b>	0.5162		
<b>roaa</b>	<b>Coef.</b>	<b>t -Statistics</b>	<b>P-value</b>
<b>cons</b>	0.9106031	0.48	0.633
<b>eqas</b>	0.0766167	8.9	0.000
<b>cost</b>	-0.0501344	-14.82	0.000
<b>lofund</b>	1.20E-07	3.31	0.001
<b>size</b>	-0.1731813	-1.82	0.069
<b>loans</b>	0.0370922	3.64	0.000
<b>secur</b>	2.684691	2.57	0.01
<b>conc</b>	-9.25833	-2.31	0.021
<b>assgdp</b>	-5660.157	-1.93	0.054
<b>macpass</b>	3.10E-07	1.55	0.122
<b>macgdp</b>	2.365778	6.49	0.000

$$PRF = \beta_0 + \beta_1 eqas + \beta_2 cost + \beta_3 lofund + \beta_4 size + \beta_5 loans + \beta_6 secur + \beta_7 depliab + \beta_8 infl + \beta_9 gdpgr + \beta_{10} CONC + \beta_{11} assgdp + \beta_{12} macpass + \beta_{13} macgdp \quad (2)$$

where:

$\beta_0$  constant

PRF Banks Performance (ROA and ROE)

EQAS This is a measure of capital adequacy, calculated as equity to total assets.

COST This is the cost to income ratio.

LOFUND This is a measure of liquidity, ratio of net loans to customers and short term funding

SIZE The accounting value of the bank's total assets (in\$)

LOANS	Loan specialization ratio=total net loans/total assets
SECUR	Security specialization ratio=other interest bearing assets (non-loans)/total assets
DEPLIAB	Deposit specialization ratio=total deposits/total liabilities
INFL	The annual inflation rate
GDPGGR	The real gross domestic product (GDP) growth
CONC	The C5 concentration measure calculated by dividing the assets of the five largest banks with the assets of all banks operating in the country
ASSGDP	The ratio total assets of the deposit money banks divided by the GDP (ASSGDP). It reflects the overall level of development of the banking sector and measures the importance of bank financing in the economy (in constant US\$)
MACPASS	The ratio stock market capitalization to total assets of the deposit money banks. This variable serves as a proxy of financial development as well as a measure of the size of financial market and the relationship between bank and market financing (in constant US\$)
MACGDP	The ratio stock market capitalization to GDP. It measures the overall level of development of the market and its importance in financing the economy (in constant US\$)

The regression results for model 3 are reported in table 4. The overall model is significant with an adjusted  $R^2$  of 0.5162 and F statistics of 44.92 (0.000), indicating that a model containing the above factors (financial and macroeconomics) is statistically significant in explaining the bank performance. Therefore, this model determines the extent to which independent variables (eqas, cost, lofund, size, loans, secur, depliab, infl, gdpgr, conc, assgdp, macpass, and macgdp) can explain variations in bank performance better than a model that includes only the financial factors. Therefore, the results from Table 4 suggest that the bank processes should include macroeconomic factors in addition to the bank financial factors.

TABLE 5. CORRELATION

	Roaa	Eqas	Cost	Lofund	Size	Loans	Secur	Depliab	Inf	Conc	Assgdp	Macpass	Macgdp
Roaa	1												
Eqas	0.257	1											
Cost	0.38	0.1412	1										
Lofund	0.08	0.358	0.129	1									
Size	0.15	0.558	0.206	0.451	1								
Loans	0.01	0.344	0.199	0.254	0.255	1							
Secur	0.083	0.345	0.0978	0.296	0.288	0.781	1						
Depliab	0.05	0.282	0.033	0.237	0.295	0.2029	0.298	1					
Inf	0.038	0.023	0.032	0.078	0.056	0.022	0.031	0.1068	1				
Conc	0.05	0.0924	0.022	0.167	0.194	0.007	0.004	0.0066	0.13	1			
Assgdp	0.09	0.185	0.007	0.205	0.244	0.0312	0.012	0.0297	0.15	0.159	1		
Macpass	0.063	0.1488	0.0684	0.078	0.29	0.085	0.077	0.0581	0.024	0.04	0.095	1	
Macgdp	0.22	0.0651	0.106	0.126	0.03	0.142	0.121	0.0601	0.047	0.07	0.100	0.0504	1

Table 5 shows the correlation coefficients between the independent variables included in model 3 (bank specifics and macroeconomics factors). The bank specific variables do not seem to be correlated with the macroeconomic ones. Hence both sets of variables contribute significantly and independently of each other to the likelihood function. The results support the premise that bank specific as well as macroeconomic variables are important predictors of bank performance. The correlation statistics presented in Table 5 show that of the independent variables, LOAN, referred to as liquidity ratio (net loans divided by total assets) and SECUR (the ratio of other earning assets to total assets) are the most highly correlated (- 0.781). This is expected because LOAN affects positively the profitability as long as the loans do not involve high risks, and SECUR is positively related to the profitability; but if a bank invests too heavily in securities at the expense of issuing loans, the relationship could become negative. There

is also a correlation (-0.558) between bank size (SIZE), represented by the logarithm of total bank assets, and EQAS, which is a measure of capital adequacy, calculated as equity to total assets. High capital-asset ratios are assumed to be indicators of low leverage and therefore lower risk. It is probably the most frequently used accounting variable in banking studies, and the literature suggests a positive relationship between profitability and bank size. It is clear from the results in the table that we do not have a major problem of multicollinearity in the regression model.

### SUMMARY, CONCLUSION, AND IMPLICATIONS

This paper examines the factors that affect the performance and risks of the banking system (external and internal factors) in the GCC and discusses the relationship between bank managers (agent) and shareholders (principal) using agency theory. The results of the study provide evidence that the models in this paper are significant with an adjusted  $R^2$  that ranges between (0.4875 and 0.5169) indicating that all models containing the above factors (financial and macroeconomics) are important and statistically significant in determining and explaining bank performance. Previous studies such as Demirguc-Kunt and Huizinga (1999), Chazi and Darayseh (2013) present models of the determinants of banks' profitability, with respective adjusted  $R^2$  varying from 0.21 to 0.35. Even though our results indicate that the above factors are important in measuring bank performance, and present better estimates than previous studies, these models fail to explain the remaining 48% to 55% the variations in banks performance. This indicates that there is a need for additional factors to be employed or used other than financial and economic factors in studying bank performance.

The authors believe that a proper estimation of the relationship between the principal/owners and the agent/managers represents the main challenge to this model and other. We argue that the ethical relation between owners and managers from the perspective of incomplete contract is one of the main reasons for the weakness in the models. One of the main challenges to the contracting environment is the conflicting interests between the bank owners and various managers, which leads to agency problems, in which the agent act in an unethical way to maximize his/her own interests, which tends to lower the value of the bank and of its shareholders' wealth (Jensen and Mackling, 1976). The agency theory is one of the models that economists propose to explain the relationship between owners and managers and the nature of the contracts. The purpose of the model is to reduce the agency costs associated with monitoring and aligning (in an ethical way) the behavior of the agent, by reducing moral hazard and adverse selection, in order to act in the best interest of the owner (Jones, 1995; Eisenhardt, 1989).<sup>3</sup> We believe that the agency theory could be used to shed some lights and provide explanations and solutions for this problem. Consistent with the findings of Gill (2004) and James (2002), there appears to be a need for common understanding, a balancing of risks with financial rewards, and a building of long-term relationships.

This study contributes to the debate about incomplete contract between managers and shareholders, and agency theory, and provides theoretical and empirical implications for future research. The results establish a theoretical association between ethics, incomplete contract, and agency theory. The findings enhance our theoretical understanding of the importance of these factors in creating an environment of trust that

governs the behavior of the owners and managers, and hence reduces the agency problem. As for general management, the results indicate that opportunistic behavior can be lessened by managing the relationship between the two parties through a contract that clearly specify these factors. Therefore, this paper paves the way to further investigate issues related to incomplete contract, agency theory, and ethics.

## ENDNOTES

\* We acknowledge the help of Dr. Anis Samet in compiling the data.

<sup>1</sup> Hart (1995) specifies a model that is based on the residual right of control, or who ultimately owns and controls the assets, which in general helps in judging and resolving unanticipated future conflicts. This, however, still does not answer the question of the complete contract.

<sup>2</sup> A complete description of the variables is presented in the Appendix

<sup>3</sup> The other two models are transactional costs (Jones, 1995, Coase, 1937, and Williamson, 1975), and team production (Jones, 1995, Alchian and Demsetz, 1972). Scott and Triantis (2005) argue that economics also propose auction and option contracts as a remedy to incomplete contract.

## REFERENCES

- Abdallah, Abed Al-Nasser, Darayseh, Musa, and Waples, Elaine (2013), "Incomplete Contract, Agency Theory and Ethical Performance: A Synthesis of the Factors Affecting Owners' and Contractors' Performance in the Bidding Construction Process," *Journal of General Management*. V 38, No. 4, (Summer 2013), pp 39-56.
- Al Shaher, Thair, Kasawneh, Ohoud, and Salem Razan, (2011), "The Major Factors that Affect Banks' Performance in Middle Eastern Countries," *Journal of Money, Investment and Banking*, issue 20, pp.101-109
- Al-Tamimi, Hussein A. (2010), Factors Influencing Performance of the UAE Islamic and Conventional National Banks, *Global Journal of Business Research*, Vol. 4, No. 2, pp. 1-9.
- Amihud, Yakov and Baruch Lev. (1981), "Risk Reduction as a Managerial Motive for Conglomerate Mergers". *Bell Journal of Economics* 12: 605-617.
- Athanasoglou, P., Brissimis, S., Delis, M., (2008), Banking-specific, industry-specific and Macroeconomic determinants of banking profitability. *Journal of International Financial Markets, Institutions and Money* 18, 121-136.
- Bergen, Mark, Dutta, Shantanu, and Walker, Orville. (2001), "Agency Relationships in Marketing," *Journal of marketing*, Vol. 56, pp 1-24.
- Chazi, Abdelaziz and Darayseh, Musa, (2013), "A Financial Crisis Buffer: The Case of Islamic Banking," *Academy of Taiwan Business Management Review*, V9, Number 1, (April 2013), pp. 100-108.
- Donnellan, John and Rutledge, Wanda, (2016), "Agency Theory in Banking - 'Lessons from the 2007-2010 Financial Crisis', *International Journal of Business and Applied Social Science*, VOL. 12, No. 3, pp.38-49.
- Eisenhardt, Kathleen M., (1989), "Agency Theory: An Assessment and Review," *Academy of Management Review*, 14 (January) 57-74.
- El-Kuwaiz, Abdullah. (94-95), "Banking in GCC: Challenges and Opportunities." *Arab Bank and Finance Directory*, 1994-95, 372-374.

Gharaibeh, Ahmad, (2015), "Empirical Evidence of the Determinants of Commercial Banks Profitability in Bahrain," *Journal of Emerging Trends in Economics and Management Sciences*, 6(5), pp. 299-314.

Gorton, Gary and Richard Rosen. (1995), "Corporate Control, Portfolio Choice, and the Decline of Banking." *Journal of Finance* 50: 1377-1420.

Holmstrom, Bengt. (1979), "Moral Hazard and Observability". *Bell Journal of Economics* 10: 74-91.

Houston, Joel F. and Christopher James. (1995), "CEO Compensation and Bank Risk: Is Compensation in Banking Structured to Promote Risk Taking?". *Journal of Monetary Economics* 36: 405-431.

Hughes, Joseph P., William W. Lang, Choon-Geol Moon and Michael S. Pagano. (2003), "Managerial Incentives and the Efficiency of Capital Structure in U.S. Commercial Banking". Unpublished paper, FRB Philadelphia.

Jone, Thomas M., (1995), "Instrumental Stakeholder Theory: A synthesis of ethics and Economics," *Academy of management Review*, Vol. 20, No 2 (Apr 1995), pp 404-437.

Mazhar M. Islam, (2003) "Development and performance of domestic and foreign banks in GCC countries", *Managerial Finance*, Vol. 29 Issue: 2/3, pp.42-72.

Mohammed, Ahmed Abdulkader and Khababa, Nourredine (1999), "Performance of banking sector in Saudi Arabia", *Journal of Financial Management and Analysis*, Vol.12 (2), p. 30-36.

Murthy, Sree and Al-Muharrami, Saeed, (2014), "Financial Sector Development and the Determinants of Bank Profitability: A GCC Panel Study," *International Research Journal of Finance and Economics*, pp. 35-44.

Olson, D. & Zoubi, T. (2012), Efficiency and Bank Profitability in MENA Countries, *Emerging Markets Review*, 12, pp. 94-110.

Palia, D., & Porter, R., (2007), Agency theory in banking: an empirical analysis of moral hazard and the agency costs of equity. *Banks and bank systems*, 2(3), 142 - 158.

Saunders, Anthony, Elizabeth Strock and Nickolaos G. Travlos. (1990), "Ownership Structure, Deregulation, and Bank Risk Taking". *Journal of Finance* 45: 643-654.

Scott, Robert E., Triantis George G., (2005), "Incomplete Contracts and The Theory of Contract Design," *Case Western Reserve Law Review*, Vol. 56, pp 1-15.

Siddiqui, Anjum, (2008), "Financial contracts, risk and performance of Islamic banking," *Managerial Finance*, Vol. 34 Issue: 10, pp.680-694.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.