



# The Relationship between Ownership Structure Dimensions and Corporate Performance: Evidence from Bahrain

Reem Khamis<sup>1</sup>, Allam Hamdan<sup>2</sup> and Wajeeh Elali<sup>3</sup>

## Abstract

In this study we examine the relation between ownership structure and corporate performance; the sample of the study included 42 out of 48 companies of all sectors in Bahrain Bourse in five years from 2007-2011. Several dimensions of ownership concentration were studied in addition to managerial and institutional ownership. Two different measurements of performance were used (ROA and Tobin's Q). The study investigated this relation using several control variables and 2SLS statistical method to overcome the problem of endogeneity that may exist between the study variables. It was found that ownership concentration have a negative effect with statistical significance on company performance. Institutional ownership was found to have a positive effect on company performance. Managerial ownership was not found to have a significant effect on company performance, however it was found that managerial ownership has a positive effect on performance only in the case of declining ownership concentration. Other results were revealed by the study regarding company age, size, growth, board size and liquidity. The study is considered to have theoretical and practical implications. It contributes to the debate about agency theory and managerial entrenchment. It also may help officials in Bahrain in making laws and legislations concerning corporate governance improvement in Bahraini market.

JEL Classification: M40, G34

**Keywords:** Ownership structure; Ownership concentration; Foreign ownership; Institutional ownership; Managerial ownership; Company performance, endogeneity, 2SLS (Two Stage least squares), corporate governance.

---

<sup>1</sup> Ph.D. Scholar, in Finance; Brunel University, UK

<sup>2</sup> Ahlia University, Bahrain

<sup>3</sup> Ahlia University, Bahrain

## **Introduction**

The relation between ownership structure and firm performance has been studied intensively by many researchers interested in corporate finance. This area of research is receiving a growing amount of interest due to the mixed results that have been obtained. Most studies were conducted in the Anglo Saxon market environment, however, those results cannot be generalized to other market environments due to the differences found in each one of them. Ownership structure is receiving much attention due to its correlation with agency theory and corporate governance. The mixed results may be justified because of the different dimensions found in ownership. The most important dimensions that will be focused on are ownership concentration and managerial ownership. This relation was discussed early (in 1932) when Berle and Means discussed the role of management and majority versus minority shareholders in the performance of a company. Traditional agency theory emphasises the potential conflict between unmonitored management and widely dispersed shareholders. The vast majority of studies conducted in USA focused on this conflict. However, in other market environments, like the European market and some emerging economies, ownership is much more concentrated which creates majority and minority shareholders creating a potential conflict that may affect the company performance, especially in the absence of laws and legislation that protect minority shareholders.

Recently the debate moved from the USA to other markets around the world to identify how ownership structure affects firm performance under the different market circumstances found outside the Anglo-Saxon markets. This study is concerned with exploring that relation in an emerging small market in the GCC, which is the Bahraini market. Few studies have been undertaken on that issue in the GCC and in the Bahraini market in particular. This study aims to cover this gap by providing evidence from Bahrain that contributes to the current ongoing debate on the relation between ownership and firm performance. This study gains in importance in view of the intensive efforts by the Bahrain Monetary Agency to promote Bahrain as an international financial centre (Hussain & Mallin, 2003). So, it is crucial to take a closer look at the Bahraini market that will benefit researchers, investors and law makers to improve the Bahraini market in serving the vision of the Bahraini Monetary Agency.

## **Related Literature and Hypothesis**

The core of this study lies in agency theory and managerial entrenchment argumentation. It provides new empirical evidence in the ongoing research on ownership structure attempting to uncover the diverging interests of different kinds of shareholders and how this may affect company performance. Agency theory suggests that concentrated ownership will result in better monitoring of the management which makes ownership an important element in corporate governance. This, in turn improves company performance. Some studies such as Demsetz and Lehn, 1985; Demsetz and Vilalunga, 2001; Kumar, 2003; Rowe and Davidson, 2002 found that there is no significant relationship between concentrated ownership and company value. Other studies such as Pivovarsky, 2003; Sanda, Mikailu and Garba, 2005; Joh, 2002; Xu and Wang, 1997 found a significant relationship between the two variables. Some studies found a positive but insignificant relationship between the two variables (McConnell & Servaes, 1990).

Traditional agency theory claims that more concentrated ownership would enhance the ability of shareholders to monitor management of the company, preventing it from taking self-serving decisions affecting the performance of the company negatively. This claim may be true in market environments where laws and legislation protecting minority shareholders are strong like the USA. Concentrated ownership creates majority shareholders and minority shareholders with diverging interests and objectives. In a market environment where laws protecting minority shareholders are absent or weak, a situation of majority shareholders controlling the company will be created and the performance of the company would be affected negatively. Theoretically, it may be said that an increase in ownership concentration should lead to a reduction in the costs of separation of ownership and control benefiting company performance eventually. However, the larger shareholders may benefit from that improvement privately at the expense of smaller shareholders. This study aims at investigating the effect of concentrated ownership on performance in the Bahraini market which is considered to be an emerging market and it is not mature in regard to the laws protecting minority shareholders. The study claims that concentrated ownership in a weak law market environment affects performance negatively.

The first hypothesis of the study may be:

*H<sub>1</sub>: There is a significant negative relationship between ownership concentration and company performance.*

Many studies were interested in finding out the effects of ownership on performance but the results varied widely. In a study of Morck, Shleifer and Vishny (1988), they investigated the effect of insider ownership on company value in the US market and found a non-monotonic relationship between the two variables. This evidence was explained through “incentive and entrenchment integrated theory”. Researchers also found conflicting results regarding managerial ownership as some found a positive relationship (Severin, 2001; Kumar, 2003). Others did not find that relationship (Demsetz & Villalonga, 1999; Rowe & Davidson, 2002; Long & So, 2002).

*H<sub>2</sub>: There is a significant relationship between managerial ownership and company performance.*

When managerial ownership exceeds a certain limit, management becomes more entrenched. This would lead the management to work on its own private interests at the expense of small shareholders. Fama and Jensen (1983) noted that the combination of ownership and control may allow concentrated shareholders to exchange profits for private rents. Researchers have studied widely the effect of ownership concentration, which determines the percentage of cash flow rights, and the identity of the main owner of the company, to determine the effect of that on company performance. According to many studies in the field of ownership structure, family business is believed to be the most common type of ownership that exists in the world. Some studies believe that family owned companies suffer from severe governance problems (Perrini et al., 2008) as their main goal is to maintain the chief executive position in the family and to invest in

low risk projects to ensure the long lasting survival of their business. On the opposite direction, other studies believe that there is a positive correlation between family control and company performance because it mitigates the problem of free riding by management (Anderson & Reeb, 2003). Although this debate exists in accordance with family ownership and control, few studies put other types of concentrated ownership structures such as institutional and managerial ownership under the microscope to investigate its relation to company performance. Studies that were conducted in the US market could not find a significant relation between several types of ownership and performance. Other studies also found little impact on performance (Himmelberg et al., 1999; Holderness, 2003). Most studies neglected the dimensionality of ownership, thus previous findings of no relation between ownership and performance may be justified. Demsetz and Villalonga (2001) found evidence that ownership structures do not affect performance and explained that any maximized returns come from the interplay of market forces. However, Welch (2003) investigated the multi dimensionality of ownership structure and found that institutional ownership and managerial ownership are part of an endogenous system that should be considered when performing other studies concerning the effect of ownership on performance. Their results suggested that higher proportions of institutional ownership resulted in better company performance, measured by T'Q (Tobin's Q). Berger, 2003 and Sarac, 2002 found a positive relationship with a moderate statistic effect between institutional ownership and firm value. Others, like Wan (1990), found a positive, statistical and significant correlation between the two variables.

*H<sub>3</sub>: There is a significant relationship between institutional ownership and company performance.*

In a different kind of markets (the Greek market), Kapopoulos and Lazaretou (2007) found that more concentrated ownership results in better performance. Perrini et al., 2008 also found that managerial ownership does not represent a mechanism of reducing agency costs in concentrated companies in a study that was conducted in the Italian market. In this study we will focus on the Bahraini market to anticipate the effect of ownership concentration and managerial ownership taking into consideration the different nature of this emerging market. The Bahraini market is one of the small markets in the Gulf region. It is considered to be a market with a concentrated ownership (Khamis et al., 2015; Hamdan & Sartawi, 2013). Bahrain has a 30 years vision of becoming an international financial center, thus it is focusing more on upgrading its financial market to having the best governance practices and a good investment environment. Khamis, et al., (2015) which was conducted in the Bahraini market found that institutional ownership is the most common type of ownership in Bahrain and institutional ownership had a positive effect on company performance.

In Turkey, Sarac, (2002) conducted a study on a sample of 138 Turkish manufacturing companies. The results showed a relation between ownership structure and net profit. It also proved that there is a positive relation between institutional ownership and profitability.

A study by Tsegba and Ezi-Herbert, (2011) was conducted on a sample of 73 companies listed on the Nigerian Stock exchange. It investigated the relation between ownership structure and performance. It concluded that there is a negative relation between ownership concentration and performance. There was also a negative relationship between insider ownership and performance. The last finding was that there is a positive but insignificant relation between foreign ownership and performance. Kumar, (2003) investigated the relation between ownership structure and performance using ROA measurement on a sample of 5,224 Indian companies from 1994 to 2000. He found evidence that institutional ownership and managerial ownership are related to performance. Nadia (2004) explored the impact of ownership structure on 15 private banks listed in Amman Stock exchange. The study found that there is a high concentration of ownership in Jordanian banks although this did not affect performance which was measured using the accounting measurement Returns On Assets (ROA).

Another study which was conducted in Jordan was by Jaafar and El-Shawa, (2009) on a sample of 132 Jordanian companies listed on the Amman Stock exchange from 2002 to 2005. The study examined the influence of ownership concentration and board characteristics on performance. The study found that ownership concentration, board size and multiple directorships has a significant and positive relationship with performance.

Bjuggren, Eklund and Wiberg (2007) explored the relationship between ownership structure and performance in Swedish companies from 1997 to 2002. The study found that using dual class shares, which give different voting rights and dividends to public shareholders and founders of the company, has a negative effect on company's performance. Perrini, Rossi and Rovetta (2008) used a sample of companies in the Italian market from 2000 to 2003 to explore the relation between ownership structure and performance. It concluded that ownership concentration of the five biggest shareholders of the company has a positive influence on firm valuation while management ownership benefited only less concentrated ownership companies. A study conducted by Sulong and Nor, (2008) on Malaysian listed firms, investigated the effect of dividends, ownership structure and board governance on firm value. It found that concentrated ownership and managerial ownership have insignificant effect on firm value which was unexpected.

### **Data and Methodology:**

This part includes two sections. Firstly, a discussion of the study sample and sources of data. Secondly, a section discussing the measurement of variables and variable descriptions.

### **Sample and Resources of Data:**

The Bahrain Bourse contains (48) listed companies. Companies were selected according to the following criteria: data is available in the period of (5) years (2007 to 2011). Companies have not been closed or merged with any other company during the study period. We start the sample collection process with all the listed firms on the Bahrain Bourse for the period of (2007-2011). We obtain data on financial statements, board composition, and ownership structure from Bahrain Bourse Database. Six companies were excluded from the sample and they were either non Bahraini or were closed during

the study period, which left us with 42 companies representing 87.5% of the original sample.

**Measuring of Variables and Variable Descriptions:**

The selection of variables is based on an examination of previous empirical studies, table 1 shows the dependent variable, the independent variables, and the control variables employed for all estimated models of the study.

Regarding ownership concentration: We notice from table no. 1 that the percentage of ownership for the first stockholder in Bahraini companies exceeds 33% and in some companies, the percentage exceeds 85% of shares, which may be considered a high concentration of ownership. The mean values of ownership percentages for the second stock holder was less than that, in average it was 14% and it reaches 32% maximum. The same may be said about the other indicators of ownership concentration as ownership percentage declined for other levels of ownership. In general, the top five stock holders in the Bahrain Bourse companies own more than 55% of stocks which indicated high levels of ownership concentration.

Another indicator of ownership concentration was used which is Concentrated ownership dummy. Company is given (1) if the first stockholder owns more than 50% of stocks. It was noticed in table 1 that the mean for this variable is 0.231 which indicates that first stock holder owning more than 50% in Bahrain Bourse is not common. Multiple blockholders dummy variable gave the company (1) if there was more than two stockholders owning more than 10% of the stocks and it was a common thing in Bahrain Bourse as the mean of this variable was 0.667. Financial ownership dummy variable was inserted in the study to identify the role of financial institutions ownership in improving firm performance. It was measured by giving (1) for companies that one of its investors is a financial institution. The mean for this variable was 0.718 which indicates a high financial institutions ownership in Bahraini companies.

**Table 1: The measurement of variables and descriptive statistics:**

Variable	Description	Descriptive statistics			
		Mean	SD	Minimum	Maximum
<i>Ownership Concentration:</i>					
Ownership first shareholder (%)	Fraction of shares owned by the first largest shareholder.	33.688	19.017	0.000	85.470
Ownership second shareholder (%)	Fraction of shares owned by the second largest shareholder.	14.045	7.687	0.000	32.150
Ownership third shareholder (%)	Fraction of shares owned by the third largest shareholder.	6.586	6.300	0.000	21.330
Ownership fourth shareholder (%)	Fraction of shares owned by the fourth largest shareholder.	2.916	4.219	0.000	13.340
Ownership fifth shareholder (%)	Fraction of shares owned by the fifth largest shareholder.	0.923	2.260	0.000	8.550
Ownership 5sh (%)	Fraction of shares owned by the five largest shareholders together.	55.321	26.165	10.453	94.510
Managerial ownership (%)	Fraction of shares owned by the executive directors.	5.227	11.609	0.000	47.140
Concentrated ownership dummy	Dummy variable that equals one if the controlling shareholder has more than 50% of the shares.	0.231	0.422	0.000	1.000
Multiple blockholders dummy	Dummy variable that equals one if there is another owner with at least 10% of the shares, and zero otherwise.	0.667	0.473	0.000	1.000
Financial ownership dummy	Dummy variable that equals one if the largest controlling ultimate shareholder is a financial institution.	0.718	0.451	0.000	1.000
<i>Corporate performance:</i>					
Return on Assets	The ratio of the net income to the total assets.	3.782	9.749	-45.400	24.340
Simple Tobin's Q	Is the (Market value of equity + Book value of short term liabilities)÷Book value of total assets.	1.024	0.374	0.201	2.336
<i>Control variables:</i>					
Foreign ownership	Fraction of shares owned by the foreign investors.	28.298	27.340	0.000	94.510
Institutional ownership	Fraction of shares owned by the Institutional investors.	49.358	28.249	0.000	94.766
Firm size (Millions)	Logarithm of the company's total assets.	981	2,282	5	12,344
Financial leverage	Total debt divided by total assets.	41.734	29.723	0.000	93.413

Firm Age	The natural log of the number of years that a firm is listed on an exchange.	25.560	12.576	1.000	54.000
Board size	Size of the board of directors.	8.714	2.078	4.000	13.000
Growth	Percentage increase in sales from previous year.	-4.035	32.553	-100.000	122.096
Liquidity ratio	Weight of cash and cash equivalents on total assets.	9.549	12.878	0.000	79.940
Industrial dummy	Dummy variable that equals one for industrial companies.				

### Ownership Concentration, Performance and other Variables: a Preliminary Analysis:

Analysis found in table 2 shows the mean of variables in companies that top five stockholders ownership is concentrated and other companies that top five stock holders ownership is not concentrated.

**Table 2: Difference in means across concentrated and non-concentrated companies:**

Variable	Concentrated companies (Ownership 5sh > 56.08%)	Non-concentrated companies (Ownership 5sh ≤ 56.08%)	P-value diff.
<i>Ownership Concentration:</i>			
Ownership first shareholder (%)	44.778	20.750	0.000
Ownership second shareholder (%)	18.439	8.919	0.000
Ownership third shareholder (%)	8.648	4.180	0.000
Ownership fourth shareholder (%)	3.488	2.249	0.041
Ownership fifth shareholder (%)	0.823	1.039	0.506
Ownership 5sh (%)	76.175	33.424	0.000
Managerial ownership (%)	1.434	9.039	0.000
<i>Corporate performance:</i>			
Return on Assets	2.469	5.042	0.066
Simple Tobin's Q	0.955	1.091	0.011
<i>Control variables:</i>			
Foreign ownership	40.551	16.245	0.000
Institutional ownership	69.004	30.242	0.000
Firm size (Millions)	1289740.949	721888.090	0.082
Financial leverage	43.897	39.400	0.287
Firm Age	29.683	20.950	0.000
Board size	8.619	8.650	0.914
Growth	-0.046	-0.041	0.923
Liquidity ratio	8.250	11.401	0.175

In table 2 it can be noticed that companies with low ownership concentration had better performance indicators (ROA & T'Q). The difference was statistically significant at 10% using ROA and at 5% using T'Q. Companies with high ownership concentration had lower performance indicators. It was noticed also that companies with high ownership concentration had higher foreign and institutional ownership. The difference was statistically significant at 1%. Companies with higher ownership concentration were companies with larger size, higher age, higher leverage and with less liquidity and growth.

### Models and Empirical Study:

Like most empirical corporate finance research, the analysis of the relationship between ownership dimensions and firm performance faces the challenge of endogeneity, which can arise from unobserved heterogeneity, simultaneity, and reverse causality. In the context of the ownership–performance relationship, the problem of unobserved heterogeneity arises when one or more latent variables drive the observed relationship between ownership dimensions and firm performance.

To check the validity of the study models and data, several tests were performed like, normal distribution test, time series stationarity test, autocorrelation and multicollinearity and models were checked for not having homoscedasticity. Errors were corrected and results are believed to be accurate.

This study tries to find the effect of ownership dimensions on company performance. Thus, ownership concentration, managerial ownership, and institutional ownership are considered as independent variables and company performance is considered as the dependent variable. The study also uses two different measurement tools to measure the dependent variable (company performance). The first one is simple Tobin's Q formula and the second one is Return on Assets (ROA) formula. The estimated equations are as follows:

$$Performance_{it} = \alpha + \beta_1 OwnerConce_{it} + \beta_2 ManagOwner_{it} + \beta_3 InstitOwner_{it} + \sum_{k=1}^{n=9} Control_{it} + \ell_{it}$$

The study hypotheses aim at investigating the effect of ownership concentration, managerial ownership and institutional ownership on performance. Company performance was measured by two indicators, Tobin's Q and ROA. Three main independent variables were inserted to represent the study hypotheses (Ownership first-fifth shareholder (%), Ownership 5sh (%), Concentrated ownership dummy, Multiple Blockholders dummy, and Financial ownership dummy), managerial ownership and institutional ownership. Many control variables were added to the model, and they were: managerial ownership, company size, company age, financial leverage, board size, growth, liquidity, sector and year.

To reach precise results about the relation between ownership structure and performance. The study used Two-Stage Least Squares 2SLS to overcome endogeneity. Results are shown in table 3.

### Testing the first hypothesis: the relation between ownership concentration and company performance:

H1: There is a significant negative relationship between ownership concentration and company performance.

Morck et al., (1988), claimed that diffuseness of ownership would weaken the monitoring power on management or it may be an advantage to the management by not letting any block shareholders control the firm in their favor against minority shareholders. The concentrated ownership creates a majority shareholders and minority shareholders with

diverging interests and objectives. In a market environment where laws protecting minority shareholders are absent or weak, a situation of majority shareholders controlling the company will be created and the performance of the company would be affected negatively.

**Table 3: Two-Stage Least Squares 2SLS Results:**

Variable	ROA Model			Tobin's Q Model		
	B	t-Statistic	p-value	$\beta$	t-Statistic	p-value
Constant	19.609	2.520	0.034	2.448	4.737	0.000
<i>Ownership Concentration:</i>						
Ownership first shareholder (%)	-0.172	-2.156	0.034	-0.016	-3.097	0.003
Ownership second shareholder (%)	0.553	2.450	0.017	-0.013	-0.872	0.386
Ownership third shareholder (%)	-0.265	-1.269	0.209	-0.011	-0.820	0.415
Ownership fourth shareholder (%)	0.410	1.740	0.086	0.007	0.464	0.644
Ownership fifth shareholder (%)	-0.175	-0.567	0.573	-0.048	-2.334	0.022
Ownership 5sh (%)	-0.189	-2.002	0.048	-0.012	-0.782	0.771
Concentrated ownership dummy	-3.181	-0.834	0.407	0.042	0.166	0.868
Multiple blockholders dummy	-2.542	-1.042	0.301	0.022	0.135	0.893
Financial ownership dummy	0.355	0.217	0.829	-0.050	-0.459	0.648
Managerial ownership (%)	0.096	1.640	0.105	0.004	1.161	0.250
Institutional ownership	0.108	1.982	0.051	0.010	2.792	0.007
<i>Control variables:</i>						
Foreign ownership	-0.224	-4.000	0.000	-0.012	-3.159	0.002
Firm size (Millions)	0.000	1.772	0.081	0.000	1.474	0.145
Financial leverage	-8.308	-2.300	0.024	0.329	1.372	0.174
Firm Age	0.016	0.225	0.822	-0.001	-0.185	0.854
Board size	-1.402	-1.707	0.092	-0.153	-2.812	0.006
Growth	3.887	1.566	0.122	0.002	0.011	0.991
Liquidity ratio	-0.086	-1.457	0.150	-0.002	-0.396	0.694
R Square	0.543			0.489		
Adjusted R Square	0.434			0.367		
F-Statistic	4.972			3.998		
p-value (F-Statistic)	0.000			0.000		

t-Critical: at df 209, and confidence level of 99% is 2.326 and level of 95% is 1.960 and level of 90% is 1.645.

F-Critical (df for denominator  $n-\beta-1 = 210-10-1 = 199$ ) and (df for numerator  $=\beta = 11$  and confidence level of 99% is 2.34 and confidence level of 95% is 1.84 and confidence level of 10% is 1.6.

Significance at: \*10%; \*\*5% and \*\*\*1% levels.

Many ownership concentration indicators were used in this study. It can be seen from table 3 that the percentage of ownership for the first stockholder has a negative effect on performance with statistical significance using ROA and T'Q. The percentage of ownership for the second, third, fourth and fifth owners did not have an effect on performance with statistical significance, excluding ownership of the second largest owner relation with ROA and relation between fifth largest owner with T'Q. Ownership 5sh (%) which summarizes the top five ownerships and its relation with performance, had a negative relation with performance with statistical significance using ROA and T'Q. Based on that, the first hypothesis may be accepted as it was shown that there is a statistical significant negative relation between ownership concentration and company performance. This result is consistent with (Abuserdaneh, Zureikat & Al- Sheikh, 2010) where they found a negative and statistically significant relation between ownership concentration and performance in the Jordanian market. When ownership of a company is concentrated, this creates a group of controlling shareholders that would protect their interests rather than the interests of the company itself or minority shareholders affecting negatively on the performance of the company.

**Testing the second hypothesis: The relation between managerial ownership and company performance:**

This dimension is related to the agency theory, as it suggests that management should be owning shares in the company to prevent it from working for its own interests. However, when management owns a large proportion of the company, it is also expected to work for its own favor.

*H2: There is a significant relationship between managerial ownership and company performance.*

The relation between managerial ownership and performance was positive but not statistically significant. Thus, the second hypothesis may be rejected. This can be justified by the minimal proportion of managerial ownership that exists in Bahraini market. The results may not reflect the actual situation. It is also consistent with what was found by researchers like (Severin, 2001; Kumar, 2003).

**Testing the third hypothesis: The relation between institutional ownership and performance :**

Fama, (1980), indicated in his study that institutional ownership improves firm performance, many studies like (Shleifer and Vishny, 1986) found that institutional ownership would affect performance in two ways: the first one that it makes outside block shareholders overcome the controlling managers and the second one is: that it would reduce the free rider problem which arise from the lack of shareholders control. Institutional ownership is the most common form of ownership structure in Bahrain Bourse (Khamis et al., 2015).

*H<sub>3</sub>: There is a significant relationship between institutional ownership and company performance.*

2SLS analysis in table (3) shows that there is a positive relationship between institutional ownership and performance using ROA at 5% and T'Q at less than 1%. This result is consistent with what was found in some studies like (Wan, 1990) (Khamis et al., 2015) and partially with what was found by others like (Berger, 2003; Sarac, 2002).

#### **Further Results:**

The results of testing the study models shown in table 3 reveals a negative relationship with statistical significance between foreign ownership and performance in Bahraini companies. Although researchers assume that foreign investors may enhance the performance of a company, as they bring experience and technology. However, this assumption was not proven in Bahraini market, as foreign ownership had a negative effect on performance. The distance and reduced amount of information may weaken the ability of foreign investors to improve performance of Bahraini companies. This is consistent with other studies that found the same relation like (Solung & Nor, 2008).

Company size had a positive relation with performance but was not statistically significant. The results regarding the effect of financial leverage on performance were conflicting. It had a negative effect on performance using ROA and a positive effect using T'Q but it was not statistically significant. Company age did not have any effect with statistical significance on performance using ROA and T'Q. Board size had a negative relation with performance using ROA at less than 10% and less than 1% using T'Q company growth and liquidity did not have any effect with statistical significance on performance in Bahraini companies.

#### **The effect of managerial ownership on the relation between ownership concentration and company performance:**

A question may be raised about the role of managerial ownership in performance when ownership is concentrated and on which level of concentration; managerial ownership could have a positive effect on performance? The study analyzed the relation between concentration, performance and managerial ownership. Results of 2SLS for this relation are shown in table (4). Managerial ownership does not have positive effect on performance except in the situation when ownership concentration declines as on the fourth ownership concentration. This is consistent with what was found by (Perreni et al., 2008) when they found that managerial ownership is beneficial only in non-concentrated firms, suggesting that the controlling owner may use his/her position in the firm to extract private benefits at the expense of the other shareholders by appointing managers that represent its own interest. These results contrasted what was found in the study of (Khamis et al., 2015) where managerial ownership was found to have a negative effect with statistical significance on performance when using T'Q however it found the same result of having positive effect without statistical significance on performance when using ROA. This difference may be explained by the use of different statistical techniques which is 2SLS in this study to reduce the endogeneity effect in this relation, while in the previous study used OLS. 2SLS is considered to be more accurate and reflecting actual relation between the variables of this study.

**Table 4: The effect of managerial ownership on the relation between ownership concentration and performance:**

Variable	ROA Model		Tobin's Q Model	
	$\beta$	<i>t</i> -Statistic ( <i>p</i> -value)	$\beta$	<i>t</i> -Statistic ( <i>p</i> -value)
Constant	0.230	3.982*** (0.000)	0.122	4.032*** (0.000)
Managerial ownership*first shareholder	-0.007	-1.157 (0.249)	0.013	0.336 (0.737)
Managerial ownership*second shareholder	0.051	1.569 (0.119)	0.008	0.036 (0.971)
Managerial ownership*third shareholder	-0.155	-2.921*** (0.004)	-0.022	-5.761*** (0.000)
Managerial ownership*fourth shareholder	0.223	2.205** (0.029)	0.057	7.595*** (0.000)
Managerial ownership*fifth shareholder	0.092	1.402 (0.163)	0.034	1.466*** (0.174)
<i>Control variables:</i>				
Foreign ownership	0.004	0.131 (0.896)	-0.004	-2.510** (0.014)
Firm size (Millions)	0.002	1.841* (0.068)	0.003	1.161 (0.249)
Financial leverage	-17.493	-7.288*** (0.000)	-0.304	-1.092 (0.278)
Firm Age	0.139	2.453** (0.015)	0.008	2.516** (0.014)
Board size	0.710	1.686* (0.094)	0.073	1.844* (0.069)
Growth	11.130	5.778*** (0.000)	0.045	0.334 (0.739)
Liquidity ratio	-0.075	-1.504 (0.136)	0.001	0.431 (0.668)
R Square	0.455		0.576	
Adjusted R Square	0.412		0.515	
<i>F</i> -Statistic	10.629		9.503	
<i>p</i> -value ( <i>F</i> -Statistic)	0.000		0.000	

*t*-Critical: at df 209, and confidence level of 99% is 2.326 and level of 95% is 1.960 and level of 90% is 1.645.

*F*-Critical (df for denominator  $n-\beta-1 = 210-10-1 = 199$ ) and (df for numerator  $=\beta = 11$  and confidence level of 99% is 2.34 and confidence level of 95% is 1.84 and confidence level of 10% is 1.6.

Significance at: \*10%; \*\*5% and \*\*\*1% levels.

Board size had a negative relation with performance using ROA at less than 10% and less than 1% using T'Q company growth and liquidity did not have any effect with statistical significance on performance in Bahraini companies.

**Conclusion, Study Limitations and Recommendation:**

The main objective of this study was investigating the relation between ownership structure and company performance in the Bahraini market. The study investigated the relation between ownership concentration, taking into consideration several dimensions of concentration to analyze the relation intensively on different levels. It also studied the effect of institutional and managerial ownership on company performance. Ownership concentration and managerial ownership are part of agency theory and they are important aspects of corporate governance. Institutional ownership was studied because it was found to be the most common type of ownership that exists in Bahraini market (Khamis et al., 2015). The study found many results regarding the relation between its variables and their effect on company performance.

Ownership concentration was studied using different dimensions; the percentage of ownership for the first stockholder had a negative effect on performance with statistical significance using ROA and T'Q. The percentage of ownership for the second, third, fourth and fifth owners did not have an effect on performance with statistical significance, excluding ownership of the second largest owner relation with ROA and relation between fifth largest owner with T'Q Ownership 5sh (%) which summarizes the top five ownerships and its relation with performance, had a negative relation with performance with statistical significance using ROA and T'Q.

The relation between managerial ownership and performance was positive but not statistically significant. The study also analyzed the relation between concentration, performance and managerial ownership. Managerial ownership does not have positive effect on performance except in the situation when ownership concentration declines as on the fourth ownership concentration. This is consistent with what was found by (Perreni et al., 2008) when they found that managerial ownership is beneficial only in non-concentrated firms, suggesting that the controlling owner may use his/her position in the firm to extract private benefits at the expense of the other shareholders by appointing managers that represent its own interest.

The study found that there is a positive relationship between institutional ownership and performance using ROA at 5% and T'Q at less than 1%. A negative relationship with statistical significance between foreign ownership and performance in Bahraini companies was also found. Company size had a positive relation with performance but not statistically significant. The results regarding the effect of financial leverage on performance were conflicting. It had a negative effect on performance using ROA and a positive effect using T'Q but it was not statistically significant. Company age did not have any effect with statistical significance on performance using ROA and T'Q. Board size had a negative relation with performance using ROA at less than 10% and less than 1% using T'Q. Company growth and liquidity did not have any effect with statistical significance on performance in Bahraini companies.

The study is considered to be limited because it studies performance in companies in a period of five years only (2007-2011). This time series may be unstable because the global financial crisis occurred during this period. Future studies may take longer and different time series. The study was conducted in the Bahraini market and it is considered to be a small sample to be studied in an emerging market. Further studies may be conducted on the whole GCC market, because the GCC economies are considered to have a lot of similarities in laws and the nature of the economies. The study encourages officials to reveal data concerning family ownership. This factor was not studied because data regarding it is not available. However, family ownership exists in the Bahraini market. The most important output of this study was the recommendation for officials to improve the Bahraini market laws to enhance corporate governance to a level that all shareholders would be protected under these laws regardless being from minority or majority shareholders.

### References:

- Abu-Serdaneh, J., Zuriekat, M., & Al-Sheikh, I. (2010). Ownership Structure and Corporate performance in the Jordanian manufacturing companies. *Jordan journal of Business Administration*, 6(3), 426-439.
- Anderson, R., and Reeb, D. (2003). Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301-1327. <http://dx.doi.org/10.1111/1540-6261.00567>
- Berger, A. (2003). Capital Structure and Firm Performance: A New Approach to Testing Agency Theory and an Application to the Banking Industry. Working Paper, *University of South Carolina* <http://papers.ssrn.com>.
- Berle, A. & Means, G. (1932). *The Modern Corporation and Private Property*. New York: Larcourt, Brace and World Inc., (Republished:1968).
- Bjuggren, P., Eklund, J. & Wiberg, D. (2007). Ownership Structure, Control and Firm Performance: The Effects of Vote-differentiated Shares. *Applied Financial Economics*, 17 (16), 1323-1334. <http://dx.doi.org/10.1080/09603100600993737>
- Chung, K. & Pruitt, S. (1994). A Simple Approximation of Tobin's Q, *Financial Management*, 23, 3: 70-74. <http://dx.doi.org/10.2307/3665623>
- Demsetz, H. & Lehn, K. (1985). The Structure of Corporate Ownership: Causes and Consequences. *Journal of Political Economy*, 93(6), 1155-1177. <http://dx.doi.org/10.1086/261354>
- Demsetz, H. & Villalonga, B. (1999). Ownership Structure and Corporate Performance, Working Paper, *University of California*. Demsetz, H. & Villalonga, B. (2001). Ownership Structure and Corporate Performance. *Journal of Corporate Finance*, 7(3), 209-233. [http://dx.doi.org/10.1016/S0929-1199\(01\)00020-7](http://dx.doi.org/10.1016/S0929-1199(01)00020-7)
- Fama, E. & Jensen, M. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, 26(June), 301-325. <http://dx.doi.org/10.1086/467037>

- Fama, E. (1980). Agency Problem and the Theory of the Firm. *Journal of Political Economy*, 88(2), 288-307.  
<http://dx.doi.org/10.1086/260866>
- Hamdan, A., Sartawi, A. (2013). Corporate Governance and Institutional Ownership: evidence from Kuwait's financial sector". *Jordan Journal of Business Administration*, 9(1), 191-203.  
<http://dx.doi.org/10.12816/0002053>
- Himmelberg, C., Hubbard, R., and Palia, D. (1999). Understanding the Determinants of Managerial Ownership and the Link between Ownership and Performance. *Journal of Financial Economics*, 53(1), 353-384.  
[http://dx.doi.org/10.1016/S0304-405X\(99\)00025-2](http://dx.doi.org/10.1016/S0304-405X(99)00025-2)
- Holderness, C. (2003). A Survey of Blockholders and Corporate Control. *Economic Policy Review*, 9(1), 51-64.
- Hussain, S., Mallin, C. (2003). The Dynamics of Corporate Governance in Bahrain: structure, responsibilities and operation of corporate boards. *Corporate Governance: An International Review*, 11(3), 249-261.  
<http://dx.doi.org/10.1111/1467-8683.00322>
- Jaafar, A. & El Shawa, M. (2009). Ownership Concentration, Board Characteristics and Performance: Evidence from Jordan. SSRN:  
<http://ssrn.com/abstract=1392727>  
<http://dx.doi.org/10.2139/ssrn.1392727>
- Joh, S. (2002). Control, Ownership and Firm Performance: The Case of Korea. Working Paper, *Corea Development Institute*.
- Kapopoulos, P., and Lazaretou, S. (2007). Corporate Ownership Structure and Firm Performance: evidence from Greek firms. *Corporate Governance: An International Review*, 15(2), 144-158. <http://dx.doi.org/10.1111/j.1467-8683.2007.00551.x>
- Khamis, R., Elali, W., and Hamdan, A. (2015). Ownership Structure and Corporate Financial Performance in Bahrain Bourse. *Corporate Ownership & Control*, 13(1), 413-434.
- Kumar, J. (2003). Does Ownership Structure Influence Firm Value? Evidence from India. Working Paper, *Indira Gandhi Institute of Development Research*, India.  
<http://dx.doi.org/10.2139/ssrn.464521>
- Lang, L. & So, R. (2002). Bank Ownership Structure and Economic Performance. Working Paper, *Chinese University of Hong Kong*.
- McConnell, J. & Servaes, H. (1990). Additional Evidence on Equity Ownership and Corporate Value. *The Journal of Financial Economics* 27(1), 595-612.  
[http://dx.doi.org/10.1016/0304-405X\(90\)90069-C](http://dx.doi.org/10.1016/0304-405X(90)90069-C)
- McConnell, J. & Servaes, H. (1995). Equity Ownership and the Two Faces of Debt. *Journal of Financial Economics*, 39(1), 131-157.  
[http://dx.doi.org/10.1016/0304-405X\(95\)00824-X](http://dx.doi.org/10.1016/0304-405X(95)00824-X)
- Morck, R., Shleifer, A. & Vishny, R. (1988). Management Ownership and Market

- Valuation: An Empirical Analysis, *Journal of Financial Economics*, 20(1-2), 293-315.  
[http://dx.doi.org/10.1016/0304-405X\(88\)90048-7](http://dx.doi.org/10.1016/0304-405X(88)90048-7)
- Nadia, T. (2004). Ownership Structure, Board Characteristics and Firm Profitability, Master Dissertation, *Hashemite University*, Jordan
- Perrini, F., Rossi, G. & Rovetta, B. (2008). Does Ownership Structure Affect Performance? Evidence from the Italian Market. *Corporate Governance*, 16(4), 312-325. <http://dx.doi.org/10.1111/j.1467-8683.2008.00695.x>
- Pinteris, G. (2002). Ownership Structure, Board Characteristics and Performance of Argentine Banks. Working Paper, *University of Illinois*.
- Pivovarsky, A. (2003). Ownership Concentration and Performance in Ukraine's Privatized Enterprises. *IMF Staff Papers*, 50(1), 10-42.
- Rowe, W. & Davidson, W. (2002). Endogeneity in Financial Performance and Board Composition: The Case of Closed-End Funds. Working Paper, *University of Nebraska*.
- Sanda, A., Mikailu, A., and Garba, T. (2005) Corporate governance mechanism and firm financial performance in Nigeria, AERC research paper 149, Nairobi: African Economic Research Consortium.
- Sarac, M. (2002). An Empirical Analysis of Corporate Ownership Structure in Turkish Manufacturing Sector. Working Paper, *Bogazici University*, Istanbul.
- Severin, E. (2001). Ownership Structure and the Performance of Firms: Evidence from France. *European Journal of Economic and Social Systems*, 15(2), 85-107  
<http://dx.doi.org/10.1051/ejess:2001117>
- Shahid, A., Shahira F. (2003). Does Ownership Structure Affect Firm Value? Evidence from the Egyptian Stock Market. Available at SSRN: <http://ssrn.com/abstract=378580> or <http://dx.doi.org/10.2139/ssrn.378580>  
<http://dx.doi.org/10.2139/ssrn.378580>
- Shleifer, A. & Vishny, R. (1986). Large Shareholders and Corporate Control. *Journal of Political Economy*, 94(3), 461-488.  
<http://dx.doi.org/10.1086/261385>
- Sulong, Z., & Nor, F. (2008). Dividends, ownership structure and board governance on firm value: empirical evidence from Malaysian listed firms. *Malaysian Accounting Review*, 7(2), 55-92.
- Tsegba, I., and Ezi-Herbert, W. (2011). The Relationship between Ownership Structure and Firm Performance: Evidence from Nigerian Listed Companies. *African Journal of Accounting, Economics, Finance and Banking Research*, 17(7), 51-63.

- Wan, K. (1999). Do Ownership and Firm Performance Proxies Matter? An Empirical Study of the Relation of Ownership Structure and Firm. Working paper.
- Xu, X. and Wang, Y. (1997). Ownership Structure, Corporate Governance, and Firm's Performance: The Case of Chinese Stock Companies, Working Paper, Amherst College and the World Bank.