The Effect of Dividends and Institutional Ownership on Performance of Companies Listed in Bahrain Stock Exchange

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ABSTRACT

The study explores the effect of dividends and institutional ownership on performance of companies listed in Bahrain Stock Exchange. The sample of the study included 42 companies (out of 48) in all sectors in Bahrain Stock Exchange in a period of five years from 2007-2011. Two different measurements of performance were used (Returns on Assets ROA and Tobin's Q) to capture the differences in results when using each one of them and to assess the relevance of each one to justify the conflicting results found by previous studies. The results of the study revealed that dividends have positive and significant effect on performance when using both measurements of performance. Institutional ownership had positive and statisticall significant effect on performance when using T'Q while it had negative effect without statistically significance when using ROA. The study also found that ROA measurement is more relevant to performance rather than T'Q but this needs further investigation by future studies. Several recommendations were given to investors and other points needed for future research were cleared out.

Keywords: Dividends, Institutional ownership, Company Performance, Bahrain Stock Exchange.

INTRODUCTION

Factors affecting firm performance have been studied widely in the literature of corporate finance. Ownership structure of the firm and dividends have been two of the most studied factors. Many studies investigate the effect of dividends in improving firm value. Some of these studies indicated that dividends help in reducing agency costs. Jensen (1986), mentioned that dividends may lower chances of incurring agency costs because of free cash flow available in the company. He also mentioned

that dividends may be used as a control mechanism to reduce discretionary management behaviors. This also goes with what (Rozeff, 1982) found that dividends can be one of the company's optimal monitoring devices to watch and eliminate potential agency conflicts, which will reduceagency costs. Thus, we may consider dividends as an important factor in improving firm value and performance.

The relation between ownership structure and firm value and performance has been studied early since 1932, when researchers studied the conflict between owners and management and how it affects corporate value. Berle and Means (1932) indicated that an increase in professionalization of management, companies may operate for managers own benefit, not for the benefit of owners. This what was known later as agency problem, when there is a conflict between the owners of the firm and management of the firm. Managers often have the

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discretion and incentives to pursue strategies and practices that they benefit from at the expense of shareholders (Fama and Jenson, 1983). Different ownership structures affects agency problem differently, so it is crucial to know the firm's ownership structure to determine the nature of agency problem and costs associated with it and how corporate value and performance might be affected by that issue, for example , managers of publicly held firm have different objectives than a manager of a family business and so.

Knowing the firm's ownership structure and determining its effect on corporate value and performance have concerned many researchers around the world from developed to developing countries but few in the Middle East and fewer in GCC countries and this study may be the first one to do so in Bahrain.

This study provides empirical evidence from Bahrain for the effect of dividends and institutional ownership on corporate performance, using different measures of corporate performance to justify the conflicting results found by different researchers.

The study may provide answers to many questions that may be asked by any interested individual or institute. The first question that may arise, do dividends and institutional ownershiphave effect on performance? If yes, how do they affect corporate performance? What are the factors affecting dividend payment in Bahrain? What are the other factors that may affect corporate performance?

Literature Review and Previous Studies:

The relation between dividends, ownership structure and performance has been investigated in many studies around the world. Several studies found a relation between dividends and firm performance and value because they are related to agency costs and free cash flow. Easterbrook (1984) and Rozeff (1982) suggested that when the company pays more dividends, it will

reduce agency costs as it forces management to look for external sources of money to finance the firm's projects. Reducing agency cost is expected to improve firm's performance and value. Jensen (1986) argued that dividends reduce the free cash flow available in the company that may be misused in personal funding or financing unprofitable projects by the management of the firm. Thus, they assume a positive relationship between dividends and firm value. Fama, (1980) claimed that institutional ownership is beneficial to the firm and leads to improving its performance and value. Shleifer and Vishny, (1986) explained that possible relation in two points: The first one is that outside block owners have the ability to overcome the problem of controlling managers. The second one is that large block shareholders may also improve the effectiveness of takeover mechanism by overcoming the problem of free rider which rises from the lack of control by shareholders. (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.

The study of Severin (2001) investigated the relationship between ownership structure, other variables and the economic performance in a sample of French companies. The results of his study indicated that there is a nonlinear relation between ownership structure and performance. He also found that debt level has a negative effect on performance and a company size had a positive effect on performance. The study of Pinteris (2002) explored the relationship between ownership structure, board composition and performance. Results showed that there is statistically negative relation between the proportion of insider directors and performance. In Turkey, Sarac (2002) conducted a study on a sample of 138 Turkish manufacturing companies.

The results showed that there is a relation between ownership structure and net profit. It also proved that there is a positive relation between institutional ownership and profitability. Kumar (2003) investigated the relation between ownership structure and performance using ROA measurement on a sample of 5224 Indian companies from 1994 to 2000. He found an evidence that institutional ownership and managerial ownership are related to performance. But the study of 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 it didn't affect performance which was measured using the accounting measurement Returns on Assets (ROA). Bjuggren, Eklund and Wiberg (2007) explored the relationship between ownership structure and performance on 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 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 in concentrated 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. The study found that dividend has a positive significant relationship with firm value. It also showed that concentrated ownership and managerial ownership have insignificant effect on firm value which was unexpected. Another study which was conducted in Jordan by Jaafar & El-Shawwa (2009) on a sample of

132 Jordanian companies listed in 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. A study by Tsegba (2011) was conducted on a sample of 73 companies listed in 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. Uwuigbe, Jafaru and Ajayi (2012) conducted a study over 5 years from 2006 to 2010 on 50 listed Nigerian companies. It investigated the relation between dividend payout and financial performance of the company. It found that there is a significant positive relation between dividends and company performance. A study conducted by Reyana & Valdes (2012) in Mexico on a sample of 90 companies listed in Mexico Stock exchange over five years, explored the relationship between corporate governance, ownership structure and performance. Results indicated that there is a negative relation between CEO ownership and performance. There was a positive relationship between governance mechanisms and performance. From Kuwait the study of Almutairi and Alyousef, (2015) Found that family firms have lower cash dividends than nonfamily firms. This evidence suggests that majority shareholders, i.e., families, tend to extract minority shareholders' wealth, which provides support for the entrenchment hypothesis. Furthermore, results show that older, highly leveraged, and less profitable family firms distribute less cash dividends than younger,

lowly leveraged and more profitable family firms.

Research Methodology:

This part will include three sections. Study sample and resources of data, second section will be measuring of variables and statistical tools and the last one will be study models.

Study Population, Sample and Resources of Data:

This study will be conducted in Bahraini Stock Exchange which is an emerging market because most previous studies were conducted in developed ones like US, UK and European markets or other developing markets such as Nigeria, Pakistan, Malaysia and other developing Asian economies but fewer studies were conducted in the region specially in the GCC markets. Bahrain Stock exchange 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 emerged with any other company during the study period.

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 population.

Data was obtained from Bahrain Stock exchange database. The datais considered panel data which resembles time series (2007 to 2011) and cross sectional data that resemble a group of companies. Panel data is considered as one of the best types of data because it contains two types of data. The procedure of selecting the sample is summarized in table 1.

Table 1. Sample Selection

#	Sector	Listed Companies (Study population)	Excluded Companies	Study Sample
1	Commercial Banks	8	0	8
2	Investment Sector	12	0	12
3	Insurance Sector	5	0	5
4	Service Sector	9	0	9
5	Industrial Sector	3	0	3
6	Hotel-Tourism	5	0	5
7	Closed Companies	2	2	0
8	Non Bahraini Companies	4	4	0
Total		48	6	42

Hypothesis Development:

This study will find the effect of two independent variables which are dividends and institutional ownership on one dependent variable which is company performance. Thus, the study hypothesis may be divided into two main hypothesis, the first one is concerned with dividends and the second one is concerned with

institutional ownershipas follows:

Dividends and Performance:

La Porta et al. (2000a) mentioned in their study what may be considered an evidence that dividends were paid due to the pressure presented by minority shareholder on the company's management to disgorge available cash. These conclusions go side by side with agency theory

which indicates that, if cash is not paid as dividends to shareholders, it may be abused by the firm management or leading the company to invest in unprofitable projects.

Other studies conducted by Easterbrook (1984) and Rozeff (1982), indicated that dividends are used as monitoring tool as it eliminates agency costs because it forces management to look for external sources of financing.

A study like Jensen (1986) claimed that dividends reduce the free cash flow preventing management from going through over investment using the free cash flow available to the company.

Based on what was mentioned in the previous arguments from different studies, the first hypothesis may be formed as follows:

H_1: There is a positive significant relationship between dividends and performance among Bahraini companies.

Institutional ownership and Performance:

Reviewed previous studies concerning the relation between institutional ownership and company performance indicated a positive, significant statistical relationship between the two variables like (Wan, 1999). Other studies like (Berger, 2003 and Sarac, 2002) found a relationship between the two variables but in a moderate statistic effect. Thus the second hypothesis may be formed as follows:

H_2: There is a significant relationship between institutional ownership and performance among Bahraini companies.

Study Models:

This study tries to find the effect of dividends and institutional ownership on company performance. Thus, dividends 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. Based on that two study models may be developed as follows:

First Model:

The first model was developed using Tobin's Q as measurement tool to measure the dependent variable (company performance)

$$
\begin{aligned}
Tobin'sQ_{i,t} = {} & \beta_0 + \beta_1 DYLD_{i,t} + \beta_2 Institutional_{i,t} + \\
& \beta_3 Size_{i,t} + \beta_4 Leverage_{i,t} + \beta_5 FirmAge_{i,t} + \\
& \beta_6 Income_{i,t} + \beta_7 EPS_{i,t} + \beta_8 Industry_{i,t} + \varepsilon_{i,t}
\end{aligned}
$$

Where:

Tobin's $Q_{i,t}$: is a continuous variable: dependent variable: is the firm value measured by Tobin's Q model, for the company (i) and the year of (t).

β_0: is the constant.

$\beta_{1..8}$: is the slope of the independent and controls variables.

$DYLD_{i,t}$: is the dividend yield, for the company (i) and the year of (t).

$Institutional_{i,t}$: is the percentage , for the company (i) and the year of (t).

$Size_{i,t}$: is a continuous variable: company size, for the company (i) and the year of (t).

$Leverage_{i,t}$: is a continuous variable: Financial Leverage is the ratio of total debt to the book value of total assets, for the company (i) and the year of (t).

$FirmAge_{i,t}$: is a continuous variable: is the number of years since the firm first appeared in the BSE database, for the company (i) and the year of (t).

$Netincome_{i,t}$: is a net income for the company (i) and the year of (t).

$EPS_{i,t}$: are earnings per share for the company (i) and the year of (t).

Industry$_{i,t}$: is a type of sector for the company (i) and the year of (t).

ε_i: random error.

Second Model:

The second model was developed using Return on Assets (ROA) as a measurement tool of the independent variable (company performance).

$$ROA_{i,t} = \beta_0 + \beta_1 DYLD_{i,t} + \beta_2 Institutio\,nal_{i,t} +$$
$$\beta_3 Size_{i,t} + \beta_4 Leverage_{i,t} +$$
$$\beta_5 FirmAge_{i,t} + \beta_6 Income_{i,t} +$$
$$\beta_7 EPS_{i,t} + \beta_8 Industry_{i,t} + \varepsilon_{i,t}$$

Where:

ROA$_{i,t}$: is a continuous variable: dependent variable: is the firm value measured by return on assets, for the company (i) and the year of (t).

β_0: is the constant.

$\beta_{1..8}$: is the slope of the independent and controls variables.

DYLD$_{i,t}$: is the dividend yield, for the company (i) and the year of (t).

Institutional$_{i,t}$: is the percentage , for the company (i) and the year of (t).

Size$_{i,t}$: is a continuous variable: company size, for the company (i) and the year of (t).

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FirmAge$_{i,t}$: is a continuous variable: is the number of years since the firm first appeared in the BSE database, for the company (i) and the year of (t).

Income$_{i,t}$: is a net income for the company (i) and the year of (t).

EPS$_{i,t}$: are earnings per share for the company (i) and the year of (t).

Industry$_{i,t}$: is a type of sector for the company (i) and

the year of (t).

ε_i: random error.

Measuring of Variables:

The main purpose of the study is to investigate the effect of dividends, institutional ownership and other control variables on firm value in Bahrain stock exchange. Which means that firm performance will be considered as dependent variable.

Measuring Corporate Performance:

To measure firm performance three major ways were found in the literature:

- Financial ratios: Studies that were reviewed and used this method are (Long and So, 2002; Pinteris, 2002; Kumar, 2003; Shahid, 2003).
- Tobin's Q (e.g. Severin, 2001).
- Combined method which uses both measures combined together, financial ratios and Tobin's Q (e.g. Abu Serdaneh et al., 2010 and Demset and Villalonga, 1999 and Wan, 1999)

Demset and Villalonga (1999; 2001) compared between using financial ratios and Tobin's Q. They claimed that accounting ratios are used widely due to their simplicity but they may be affected by accounting practices. On the other side Tobin's Q which measures market value of the firm by using replacement cost and market value of equity may generate incorrect data regarding companies that depend on intangible capital. But on the other hand; using Tobin's Q captures the expected future performance of firm in addition to the past and current performance (Wan, 1999). The original Tobin's Q formula requires some figures that may not be obtainable because the data is not available, thus researchers usually use a simplified formula for Tobin's Q, the correlation between the two formulas was found to be very high (0.97) as calculated by Chung and Pruitt (1994), which means that it is reliable to use it instead of

the original Tobin's Q formula.

In this study both measures will be used as using each measure individually may generate conflicting results concerning the same variables so combined measures will be used to capture features of each measure and the possibility of changing the results (Abu Serdaneh, Zriekat and Al- Shaikh, 2010)

$$ROA = \frac{Net\ Income}{Total\ Asses}$$

$$Tobin's\ Q = \frac{PS + MVE + LTD + CL - STASST}{TASST - BVCAP + NETCAP}$$

Where:

PS= liquidating value of company's preferred stock.

MVE= Market value of equity at the end of the year.

LTD= Long term debt adjusted for age structure.

CL= Book value of current liabilities.

STASST= Net short term assets.

BVCAP= Book value of net capital stock.

NETCAP= inflation adjusted net capital stock.

$$Simple\ Tobin's\ Q = \frac{MVE + TDEBT}{TOTASST}$$

Where, MVE is market value of equity, TDEBT is book value of short-term liabilities net of short-term assets, plus book value of long-term debt, and TOTASST is book value of total assets (Sulong & Nor, 2008).

Measuring Dividends Variable:

Two different ways are used to measure dividends. The first one is payout ratio, which is dividends per share on earnings per share.

And the other one is dividend yield which is (dividend to price ratio). In this study, dividends will be measured by dividend yield which is the dividend per share (DPS) divided by closing market price per share (MPS).

Dividend yield will be used in this study rather than payout ratio which is dividends to earnings because of two reasons: the first one that share price which is the dominator in dividend yield is a market measure which is more favorable in finance literature than net income which is used in payout ratio because it is an accounting measure. The second reason is to avoid problems of negative payout ratios that result when earnings are negative or very high payout ratios when net income value is close to zero (Schooley and Barney, 1994).

Measuring Institutional Ownership:

This dimension is related to the proportion of equity owned by institutional investors to the total number of shares.

Measuring Control Variables:

The main objective of the study is to measure the effect of dividends and Institutional ownership on corporate value. It is expected that corporate value is not only affected by dividends and ownership structure dimensions but also other variables that will be controlled in the study.

These control variables were chosen according to previous studies and they were used extensively (e.g. Kumar, 2003; Berger, 2003; Nadia, 2004; Khamis et al., 2015).

Firm Size:

This variable was studied widely in previous studies and it was found that larger firms mostly has higher value and this may be explained to their experience and they may be more efficient due to economies of scales, the ability to employ skilled managers, ability to reach wider range of customers and diversify their operations. Size is measured by finding the natural logarithm of total assets.

Leverage Ratio:

The firm's debt-to-assets ratio is the leverage ratio. It affects the firm's ability to borrow money and the cost of

doing so which affects the firm's profitability and value due to the increase of interest rate and financial obligations of the company,

Earnings per Share (EPS):

It indicates profitability of the firm and some researchers consider it as a performance measure. The EPS equal net income minus dividends on preferred shares divided by number of outstanding shares.

Firm Age:

The firm age is related to the shareholders distribution as companies with older ages entered many business cycles and they have more shareholder distribution. The age of incorporation is taken rather than the age of listing the stock in the market.

Net Income:

Information regarding net income of the company can be taken from the income statement of the company.

Industry Sectors:

Companies who belong to different sectors differ in their free cash issues and as a consequence in their dividends. In our study, Bahrain Stock Exchange contains 6 sectors. They were resembles by a dummy variable from 1 to 6 . e.g. bank sector =1 , Investment =2, …etc.

DESCRIPTIVE STATISTICS:

The descriptive statistics for the study variables as mentioned in table (2). After that in tables (3) and (4) we divided the firm performance into firms with high performance and the other with low performance based on the value of the median to compare between firms according to performance. In table (3) firms were divided to firms with high T'Q (high performance) and firms with low T'Q (low performance) which their T'Q value is less than the median. When doing so we end up with two samples and then we find the Mean and Standard deviation for the characteristics of the firm (dividends, institutional ownership) and other control variables (company size, financial leverage, company age, net income, EPS). To identify the significance in the variance between the means of the two samples t-statistic test and z-statistic tests were used. The same can be said about table (4) where performance was divided based on ROA measurement. In table (5), we looked at the other side, where we divided the characteristics of the firm (dividends, institutional ownership) into two parts according to the median value and in each part the mean and standard deviation was found to T'Q and ROA values one at a time. Based on that we can describe the study variables as follows:

Company Performance:

Company performance was measured using T'Q and ROA measurements. The Mean for T'Q was more than (1) which gives a positive indication about the value of companies listed in Bahrain Stock Exchange as this means that it achieved a market value that is higher than its book value. The lowest value of T'Q was (0.201). The highest value was (2.336).

Table 2. Descriptive statistics of study variables

Variables	Label	Mean	Std. Deviation	Minimum	Maximum
Dependent variables:					
Tobin's Q	Tobin's Q	1.024	0.374	0.201	2.336
Return on Assets	ROA	3.713	31.357	-300.030	38.670
Independent variables:					

Dividend Yield	DYLD				
Institutional ownership	Institutional	51.049	27.342	0.000	94.510
Control variables:					
Company Size BD'000	Size	980,703	2,281,899	4,518	12,344,488
Financial Leverage	Leverage	0.428	0.293	0.001	0.934
Company Age	FirmAge	25.560	12.576	1.000	54.000
Net Income BD'000	Income	11,043	53,952	-315,172	211,903
Earnings per Share	EPS	-1.300	30.371	-422.240	79.924

The highest T'Q was achieved by service sector while the lowest value was achieved by industrial sector. Regarding the second measurement (ROA), it had a mean of 3.782% during the study period and the standard deviation was very high which means there is huge difference between companies in achieving returns on their assets. Lowest (-45.4%) – highest (24.34%). The highest ROA was achieved by service sector and the lowest value was achieved by investment sector. All these results may be found in table (7).

Dividends:

From table (3) we notice that the mean for dividend yield in companies with high performance is (4.446%) whereas in companies with low performance it is (3.679%). This difference was found to be significant at 10% according to t-statistic test and at 1% according to z-statistic test. The relation between dividends and company performance was found to be positive, as whenever company performance increases, dividends paid to investors in BSE increases.

Regarding dividends difference between companies with high performance and low performance using ROA measurement. As noticed in table (4) this difference was in favor of companies with high performance as they paid dividends that reached 5.959% and companies with low performance paid 2.064% and that difference was statistically significant at less than 1% according to t- and z-test, and these results confirm what was previously mentioned before that dividends have positive relation with performance. But the question here, is that relation is in both sides? Which means, does performance affect dividends? This is what table (5) gives answers to. In table (5), dividends were divided into two parts. Companies with low dividends and companies with high dividends according to the median value and then performance was measured using T'Q and ROA for each part. We notice that the mean value for performance using both measures (T'Q and ROA) was higher in companies that paid higher dividends than companies that paid lower dividends yield and that relation was statistically significant. Which means that companies with high performance pay high dividend yields. The highest dividend yield achieved by the industrial sector investors and the lowest was for the investors in investment sector as seen in table (7).

Table 3. The company characteristics depending on the level of performance measured by Tobin's Q :

Variables	Companies with high Performance			Companies with low Performance			Difference Tests	
	No. Obs.	Mean	Std. Deviation	No. Obs.	Mean	Std. Deviation	t-statistic	z-statistic
Independent variables:								
Dividend Yield	105	4.446	3.022	105	3.679	3.788	1.578[*]	1.592[***]
							(0.058)	(0.006)
Institutional ownership	105	48.949	29.418	105	51.486	24.936	-0.655	1.233[**]
							(0.256)	(0.048)
Control variables:								
Company Size BHD'000'000	105	506	1,082	105	1,455	2,973	-3.028[***]	1.890[***]
							(0.001)	(0.001)
Financial Leverage	105	0.463	0.286	105	0.393	0.298	1.714[**]	1.050
							(0.044)	(0.110)
Company Age	105	28.520	12.704	105	22.176	11.799	3.695[***]	1.540[***]
							(0.000)	(0.009)
Net Income BD'000'000	105	14.338	56.856	105	7.748	50.951	0.872	2.030[***]
							(0.192)	(0.000)
Earnings per Share	105	-3.084	42.716	105	0.485	4.777	-0.839	2.591[***]
							(0.201)	(0.000)

t-test and z-test top, p-value (bottom), one-tailed.

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

Table 4. The company characteristics depending on the level of performance measured by ROA :

Variables	Companies with high Performance			Companies with low Performance			Difference Tests	
	No. Obs.	Mean	Std. Deviation	No. Obs.	Mean	Std. Deviation	t-statistic	z-statistic
Independent variables:								
Dividend Yield	105	5.959	2.685	105	2.064	2.977	9.675[***]	4.033[***]
							(0.000)	(0.000)
Institutional ownership	105	45.193	28.681	105	55.462	24.760	-2.698[***]	1.613[**]
							(0.004)	(0.006)
Control variables:								
Company Size BD'000'000	105	177	309	105	1,785	3,011	-5.365[***]	3.221[***]
							(0.000)	(0.000)

Financial Leverage	105	0.289	0.232	105	0.566	0.284	-7.618***	3.361***
							(0.000)	(0.000)
Company Age	105	26.363	12.436	105	24.333	12.814	1.148	0.770
							(0.126)	(0.297)
Net Income BD'000'000	105	18.203	36.065	105	3.883	66.680	1.908**	3.221***
							(0.029)	(0.000)
Earnings per Share	105	0.533	4.772	105	-3.132	42.712	0.861	3.711***
							(0.195)	(0.000)

t-test and z-test top, *p*-value (bottom), one-tailed.

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

Table 5. Company performance measured by Tobin's Q and ROA depending on characteristics of the company:

Statistics	Dividend Yield				Institutional ownership			
	Tobin's Q		ROA		Tobin's Q		ROA	
	High Level	Low Level	High Level	Low Level	High Level	Low Level	High Level	Low Level
Descriptive								
No. Obs.	99	99	99	99	99	100	99	100
Mean	1.073	0.980	8.475	-0.676	1.062	0.989	2.997	4.768
Std. Deviation	0.334	0.414	5.406	11.135	0.421	0.329	9.861	9.796
Difference								
t-statistic	1.753**		7.356***		1.362*		-1.271	
p-value (t-test)	(0.041)		(0.000)		(0.087)		(0.103)	
z-statistic	0.995		4.122***		1.311**		1.463**	
p-value (*z*-test)	(0.138)		(0.000)		(0.032)		(0.014)	

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

t-test and z-test top, *p*-value (bottom), one-tailed.

Table 6. Company performance depending on company characteristics:

Statistics	Company Size	Financial Leverage	Company Age	Net Income	Earnings per Share
Part (A): Tobin's Q depending on company characteristics:					
Mean (High)	0.920	1.080	1.040	1.100	1.110
Mean (Low)	1.130	0.970	1.010	0.950	0.940
Mean Difference	-0.210	0.110	0.030	0.150	0.170
t-statistic	-4.130***	2.270**	0.540	2.770***	3.440***

p-value (t-test)	0.000	0.010	0.290	0.000	0.000
z-statistic	2.100***	2.520***	1.270**	1.330**	2.380***
p-value (z-test)	0.000	0.000	0.040	0.030	0.000
Part (B): ROA depending on company characteristics:					
Mean (High)	1.040	0.750	4.550	7.340	8.630
Mean (Low)	6.530	6.810	2.940	0.230	-1.160
Mean Difference	-5.490	-6.060	1.610	7.110	9.790
t-statistic	-4.180***	-4.660***	1.180	5.580***	8.280***
p-value (t-test)	0.000	0.000	0.120	0.000	0.000
z-statistic	3.290***	3.220***	1.360**	2.870***	3.720***
p-value (z-test)	0.000	0.000	0.030	0.000	0.000

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

Table 7. Company performance depending on industry sector:

Variables	Banks	Investment	Insurance	Service	Industrial	Hotel-Tourism	F-statistic	Chi-Square
Dependent variables:								
Tobin's Q	0.858	1.003	1.141	1.191	0.709	1.079	6.599***	36.707***
Return on Assets	0.804	-2.147	3.211	11.299	6.100	7.778	15.272***	86.734***
Independent variables:								
Dividend Yield	2.760	2.578	4.516	6.347	6.867	3.372	11.357***	50.626***
							(0.000)	(0.000)
Concentration ownership	41.981	62.911	49.926	48.676	65.023	70.011	7.657***	31.859***
							(0.000)	(0.000)
Foreign ownership	20.126	46.012	42.272	15.579	16.020	16.248	14.054***	49.056***
							(0.000)	(0.000)
Institutional ownership	53.974	56.419	52.302	33.731	68.950	53.240	6.178***	23.201***
							(0.000)	(0.000)
Managerial ownership	0.000	4.022	5.320	11.493	0.000	1.448	6.407***	29.208***
							(0.000)	(0.000)
No. Obs.	40	60	25	45	15	25		

Continue … Table 7. Company characteristics depending on industry sector:

Variables	Banks	Investment	Insurance	Service	Industrial	Hotel-Tourism	F-statistic	Chi-Square
Control variables:								
Company Size BD'000	2,336,608	1,672,556	122,886	121,782	322,827	34,036	8.052***	106.699***
	(2,890,542)	(3,146,748)	(144,285)	(205,113)	(580,612)	(25,614)	(0.000)	(0.000)
Financial Leverage	0.662	0.543	0.622	0.217	0.208	0.097	43.925***	106.832***
	(0.280)	(0.244)	(0.120)	(0.164)	(0.174)	(0.056)	(0.000)	(0.000)
Company Age	24.026	23.000	25.400	26.556	35.667	26.400	2.741**	18.872***
	(16.124)	(9.699)	(9.028)	(13.290)	(5.367)	(14.799)	(0.020)	(0.002)
Net Income BD'000	24,114	3,076	2,355	15,900	21,321	3,417	1.106	13.649**
	(46,728)	(83,027)	(4,841)	(30,166)	(73,566)	(3,420)	(0.358)	(0.018)
Earnings per Share	0.015	-4.750	0.029	0.067	0.042	0.030	0.200	30.552***
	(0.027)	(57.678)	(0.034)	(0.054)	(0.046)	(0.034)	(0.962)	(0.000)
No. Obs.	40	60	25	45	15	25		

Institutional ownership:

Institutional ownership was the most form of ownership presented in the Bahraini market. As 51% of companies' shares were owned by institutional investors. In some companies, the percentage of institutional ownership reached 94.5%. The relation between institutional ownership and performance was cleared out in table (3, 4) as we notice that institutional ownership decreases in companies with high performance and it increases in companies with low performance and that difference was statistically significant. Also it was found that companies with high institutional ownership have lower dividend yields with statistical significance while company performance measured by T'Q increased when institutional ownership increased. Institutional ownership was the highest in industrial sector and the lowest in service sector as seen in table (7).

Control Variables:

Company Size:

In table (2) we notice huge difference in the company sizes in Bahrain Stock Exchange. In table (3, 4) we notice that companies who achieved high performance (using T'Q and ROA) are the small size companies in a statistically significant relation at 1%. While in table (6), companies were divided into small companies and big companies, and it was clear that small companies has better performance than big companies and that relation is statistically significant, which means that performance and company size are negatively related in both directions.

The second section in table (7) clears out that bank sector is the biggest in size among all sectors found in BSE followed by investment sector. The difference between the sector sizes was statistically significant at less than 1% using (F-test) or (Chi²) test.

Financial Leverage:

Financial leverage percentage clears out how much companies rely on debt to finance their is assets. Financial leverage affect too many aspects of performance, that's why it is been used as a control

variable in so many studies related to our topic. In Bahrain Stock Exchange, table (2) clears out that the mean percentage of financial leverage is 42.8%. It was also found that banks as expected is the most relying sector on debt followed by insurance sector as can be seen in table (7). In table (3), it can be noticed that companies with high performance (using T'Q) are the most relying companies on debt (highest financial leverage). While in table (4), we can see that companies with low performance using (ROA) has high financial leverage. Which means that companies who relied more on debt achieved higher performance using T'Q and vice versa. While using ROA, companies who relied more on debt achieved lower performance and vice versa.

Company Age:

It can be noticed in table (2) that the mean age for Bahraini companies is 26 years, the longest age reached 54 years. The industrial sector had the longest age which reached almost 36 years, followed by the service sector has been shown in table (7). The relation between company age and performance is cleared out in table (6) where we notice that companies which had longer ages achieved performance (using T'Q) of 1.04 while companies with shorter ages achieved performance of 1.01 using the same measurement. That difference was statistically significant at 5% using z-test. These results were confirmed when using ROA measurement as can be seen in table (6) that companies with longer ages achieved higher ROA than companies with shorter ages. That difference is statistically significant at less than 5% using z-test.

Net Income:

It can be seen in table (2) that there is dispersion in the net income achieved by Bahraini companies. Bank

sector may be considered to be the most profitable sector in Bahrain Stock Exchange as can be seen in table (7). Regarding the relation between net income and performance, as expected, companies that achieved high net income also achieved high performance and achieving high performance lead companies to keep achieving high net income.

Earnings Per Share (EPS)

Bahraini companies during the study period achieved mean EPS of (-1.3) with high standard deviation and huge difference between companies. Service sector achieved the highest EPS comparing to other sectors as can be seen in table (7). Relation between EPS and performance is cleared out in table (3), where we can see that companies with high performance (using T'Q) achieved low EPS that reached (-3.1) while companies with low performance achieved EPS reached 0.485 and that relation was statistically significant at less than 1%.

While performance (using ROA) as cleared out in table (4) reveals the opposite. As companies that achieved high ROA achieved also higher EPS than companies with low ROA and that difference was statistically significant at 1%.

Testing of Study Hypothesis:

After validating the data used in our study using statistical tests to ensure that this data goes with the conditions of applying General Linear Model and Ordinary Least Squares (OLS) has been cleared in the first section of this chapter. Data is considered as panel data that combine time series (2007-2011) and cross sectional data (42 companies). Based on that Pooled Regression and the results of this test can be found in table (8). The study hypothesis may be tested as follow:

<div align="center">**Table 8. Pooled Least Squares Regression Results:**</div>

Variables	Pooled Least Squares			
	Model 1: Tobin's Q		Model 2: ROA	
	t-Statistic	*p*-value	*t*-Statistic	*p*-value
Independent variables:				
Constant	-0.174	0.863	0.190	0.850
Dividend Yield	4.123***	0.000	4.135***	0.000
Institutional ownership	2.518**	0.016	-0.273	0.786
Control variables:				
Company Size	-1.833*	0.074	0.973	0.332
Financial Leverage	5.322***	0.000	-2.490**	0.014
Company Age	0.327	0.745	1.137	0.257
Net Income	1.762*	0.080	5.568***	0.000
Earnings per Share	1.295	0.203	-0.263	0.793
Industry Dummy	5.284***	0.000	2.863***	0.005
R-squared	0.391		0.482	
Adjusted R-squared	0.239		0.451	
F-statistics	2.573**		15.320***	
p-value (*F*-statistics)	0.017		0.000	
No. of Observations	210		210	

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

F-Critical (df for denominator n-β-1 = 210-8-1 = 201) and (df for numerator =β =8 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.

Testing the First Hypothesis

H₁: There is a positive significant relationship between dividends and performance among Bahraini companies.

This hypothesis was formed based on what was found in previous studies regarding the relation between dividends and company performance and value. As many studies like La Porta et al.(2000) indicated that paying extra cash available in the company would prevent the company from going through unprofitable projects. Others like Easterbrook (1984) and Rozeff

(1982) pointed out that paying dividends reduce the agency costs thus may affect the company performance positively.

After testing our hypothesis, the results are summarized in table (8), we notice that t-statistic of dividend yield variable was positive and statistically significant at less than 1% using T'Q and ROA models. That indicates that there is a positive relation between dividends and company performance thus we may accept our first hypothesis regarding the presence of positive relationship between dividends and company performance.

This result is consistent with what was found in previous studies that were reviewed. Sulong and Nor (2008) conducted a study on the Malaysian firms and found a positive significant relation between dividends and company performance and value. Another study conducted by Uwuigbe, Jafaru and Ajayi (2012) on the Nigerian listed companies also found a positive significant relation between the two variables.

Testing the Second Hypothesis:

H_2: *There is a significant relationship between institutional ownership and performance among Bahraini companies.*

Fama (1980), indicated in his study that institutional ownership improves firm performance, many studies like (Shleifer and Vishny, 1986) mentioned 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.

After testing our hypothesis, the following results were observed:

Institutional ownership is the most common form of ownership structure in Bahrain Stock Exchange as mentioned in the descriptive statistics section as they own over 51% of the companies' shares, but the question here is does this type of ownership affects performance? In table (8), we may see the regression results where we can see the effect of institutional ownership on performance using T'Q model, we notice that it was a positive effect and statistically significant at less than 5%. This result is consistent with what was found in some studies like (Wan, 1990) and partially with what was found by others like (Berger, 2003 and Sarac, 2002) where they found a positive relation but with moderate statistic effect between the two variable. Using ROA model, the effect was negative and without any

statistical significance between institutional ownership and performance. This result contrast what was mentioned in the study of (Abuserdaneh, Zureikat and Al- Sheikh, 2010) where the effect of institutional ownership on performance was positive when using ROA model.

Testing the Effect of Control Variables on Performance:

Company Size and Performance:

The findings of the study were conflicting regarding the effect of company size on performance. We can see in table (8) that company size has a negative effect that is statistically significant at less than 1% on performance using T'Q model. We can see also in the same table that it has a positive effect that is not statistically significant on performance using ROA model.

Financial Leverage and Performance:

The results were conflicting again. We noticed that financial leverage has a positive effect with statistical significance at less than 1% on performance using T'Q model and a negative effect with statistical significance at less than 5% on performance using ROA.

Company Age and Performance:

Although company age has a positive relation with performance as seen in table (8) but it was not a statistical significant effect on performance.

Net Income and Performance:

The study proved that net income has a positive significant effect on performance using T'Q and ROA models.

EPS and Performance:

In table (8), we can see that EPS has a positive insignificant effect on performance using T'Q model and a negative insignificant effect on performance using ROA model.

Company Sector and Performance:

Our results confirmed that the sector that the

company belong to has a positive significant effect at less than 1% on performance. This is consistent with what was mentioned previously in the descriptive statistics which indicated that the performance of the company is different according to the sector it belongs to.

To know which of the study models represents the relation between the study independent variables (institutional ownership& dividends) and the dependent variable (company performance), Adjusted R- Squared was measured, as seen in table (8), which is used to compare between the models of the study. Whenever Adj. R^2 increases this means that the model represents the relation more. From table (8), we notice that Adj. R^2 for ROA model= 45.1% and for T'Q= 23.9%. based on that we may consider ROA model represents the relation between variables more. This is consistent with what was found by previous studies such as Abu Serdaneh et. *al. (2010)* , where they used both models to measure performance and they found that ROA model represents the relation more but they indicated that this needs to be confirmed by other studies that follow the same methodology.

Conclusion, Study Limitation and Future Studies:

The main objective of the study was; knowing what really affects company performance. Two factors were chosen and believed to be from the most important factors that affect performance. These factors were dividends and institutional ownership. Dividends were from the earliest factors to be studied as (Miller and Modigliani, 1958 & 1961) were from the first researchers to study the effect of dividends on performance and (Berle and Means, 1932) were from the first researchers to study the effect of ownership structure on performance. Few studies were conducted in the Middle East and very few or no studies were

conducted about this topic in the GCC area. In Bahrain, this is the first time that this topic has been studied. So, this study is considered to be the first study to cover this gap.

It is beneficial to know what really affects company performance in this area and whether dividends and institutional ownership really affect performance. It also consider giving investors some hints about what may be the best choice of companies to invest in that achieve the best performance according to the statistical analysis conducted by the study.

To conduct this study, the sample was chosen to be the whole Bahraini market which include all the listed companies in Bahrain Stock Exchange during a period of 5 years from 2007 to 2011. Six companies were excluded because they were either non-Bahraini or closed during the study period.

The study built two different regression models to study the effect of dividends and institutional ownership. The first model used simplified Tobin's Q formula as an indicator of performance and the second model used Return on Assets as an indicator of performance. The two models were used to capture the differences between them and justify the conflicting results found by different previous studies and then we compared between them using statistical tools to determine which indicator is better to be used as an indicator of company performance.

Different validity tests were conducted on data and the models to validate them before testing them. The data and the models were valid and any errors that were found were overcome using statistical tools. Two hypothesis were developed regarding the relation between each independent variable (dividends, institutional ownership) and company performance. The models after that were tested and some descriptive statistics were defined, the following results were

obtained:

1. The results of testing regression models were conflicting depending on the performance indicator that was used (T'Q or ROA).

2. Dividends were found to be having positive effect with statistical significance on performance using both indicators (T'Q and ROA).

3. Institutional ownership was found to be having positive and statistically significant effect on performance using T'Q indicator. And using ROA indicator, the effect was negative with no statistical significance.

4. The effect of company size on performance was found to be negative with statistical significance using T'Q and a positive effect that is not statistically significant using ROA indicator.

5. The effect of financial leverage on performance was found to be positive and statistically significant using T'Q and a negative effect that is statistically significant using ROA indicator.

6. Company age was found to be having positive effect with no statistical significance on performance.

7. Net income was found to be having positive significant effect on performance using ROA and T'Q indicators.

8. EPS was found to be having positive effect on performance using T'Q and a negative effect on performance using ROA. Both effects were not statistically significant.

9. Company sector was found to be having a positive statistically significant effect on performance.

10. The best indicator of performance that was used by the study was ROA over T'Q. As it was found to be more related and it reflects the truth about performance more than the other indicator as was proved by statistical tests when the hypothesis of the study were tested.

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 un stable because the global financial crisis occurred during this period. Future studies may take longer and different time series. The study was conducted in Bahraini market and it is considered to be a small sample to be studied and it is considered to be an emerging market. Further studies may be conducted on the whole GCC market, because the GCC economies are considered to be having a lot of similarities in laws and nature of economy. The study found that ROA indicator is more representative and related to performance. This needs to be confirmed by other studies following the same methodology to confirm what was found in our study or other data needed to be known when applying the T'Q indicator to correctly assess its relevance to performance.

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أثر التوزيعات والملكية المؤسسية في أداء الشركات المدرجة في سوق البحرين للأوراق المالية

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ملخص

تهدف هذه الدراسة إلى تحديد أثر كل من توزيعات الأرباح، والملكية المؤسسية على أداء الشركات المدرجة في سوق البحرين المالي. تتكون عينة الدراسة من (42) شركة من أصل (48) شركة من كل القطاعات المتواجدة في سوق البحرين المالي على مدى خمسة سنوات في الفترة من (2007–2011).تم استخدام مؤشرين مختلفين لقياس الأداء؛هما: معدل العائد على الأصول (ROA)، ومؤشر "توبن" (Tobin's Q)للتحقق من الاختلافات بينهما، وتبرير النتائج المتضاربة للدراسات السابقة في هذا الشأن، ولتحديد مدى ارتباطهما كمؤشران للأداء.خلصت الدراسة إلى وجود تأثير إيجابي لتوزيعات الأرباح ذو دلالة إحصائية على الأداء باستخدام كلا المؤشرين. أما فيما يتعلق بالملكية المؤسسية فقد وجدت الدراسة أن لها تأثيرا إيجابيافي الأداء باستخدام مؤشر "توبن"، بينما كان هناك أثر سلبي –غير دال إحصائيا–في الأداء باستخدام معدل العائد على الأصول.كما خلصت الدراسة إلى أن معدل العائد على الأصول له ارتباط أكبر من "توبن" كمؤشر للأداء، ولكن ذلك يتطلب مزيداً من التحقق في الدراسات المستقبلية. كما أن الدراسة أعطت جملة من التوصيات للمستثمرين في سوق البحرين المالي، وبينت العديد من النقاط التي بحاجة إلى مزيد من التوضيحات في الدراسات المستقبلية.

الكلمات الدالة: توزيعات الأرباح؛ الملكية المؤسسية؛ أداء الشركات؛ سوق البحرين للأوراق المالية.

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