European Journal of Business and Management
ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)
Vol.8, No.23, 2016

The Impact of Corporate Governance on the Profitability of the Listed Companies in Jordan over the period from 2010 to 2014

Elham Mohammad Haj Yousef [1*]

1. Master's degree in accounting Currently Involved in Ph.D. Program in Business Economics in the University Of Jordan P.O. Box: 13221 Postal Code: 11942 Amman-Jordan

Abstract

This study aimed to provide evidence of whether or not the corporate performance indicators of the Jordanian companies listed at Amman Stock Exchange are affected by corporate governance variables that were proposed, and to provide important indicator of the relationship of corporate governance dimensions (Board size and ownership structure) and performance that can be used by the Jordanian firms to solve the agency problem. The study sample consists of 90 listed Jordanian firms over the period from 2010 to 2014, the first 30 firms are from industrial sector, the second 30 are from financial sector ,and the last 30 firms are from services sector, the characteristic of the sample is cross-sectional and of time series. Multi regression analyses were applied for each sector and for all sectors together. The study found that all listed Jordanian companies together and industrial sector have a significant positive relationship between corporate governance variables on one side, and return on assets, return on equity on the other side, but price on earnings ratio is not affected by corporate governance variables in all listed companies and in each sector. Return on assets in finance and services sectors is the only performance variable that is affected by corporate governance variables.
Keywords: corporate governance, corporate performance, board size, ownership structure

1. Introduction

The term *"*corporate governance*"* is relatively new terminology used in both public and academic debates, although the issues it addresses have been around for much longer. In the last two decades, however, corporate governance issues have become important not only in the academic literature, but also in public policy debates. Corporate Governance is concerned with ways in which all parties interested in the well-being of the firm (the stakeholders) attempt to ensure that managers and other insiders are always taking appropriate measures or adopt mechanisms that safeguard the interests of the stakeholders (Jensen & Meckling, 1976), Such measures are important because of the separation of ownership from management, an increasingly vital feature of the modern corporations. A typical firm is characterized by numerous owners having no management role, and with managers with no equity interest in the firm. Shareholders are often large in number, and an average shareholder controls a very small proportion of the shares of the firm. This gives rise to the tendency for such a shareholder to take no interest in the monitoring of managers who may pursue interests different from those of the owners of equity. The compatibility of corporate governance practices with global standards has also become an important part of corporate success. The practices of good corporate governance have therefore become a necessary prerequisite for any corporation to be managed effectively in the global market, also it helps the corporation to use the scarce resources efficiently and comply with the rules, regulations and prospects of society which could improve its performance and benefit the society as Al Manaseer, et al. (2012) mentioned.

During this period, corporate governance has been identified with takeovers, financial restructuring, and institutional investors' activism, corporate governance deals with the ways in which providers of capital to corporations assure themselves of getting a return on their investment. Corporate-governance mechanisms assure investors in corporations that they will receive adequate returns on their investments, if these mechanisms did not exist or did not function properly, outside investors would not lend firms or buy their equity securities, then businesses would be forced to rely entirely on their own internally generated cash flows and accumulated financial resources to finance ongoing operations as well as profitable investment opportunities. Therefore the overall economic performance likely would suffer because many good business opportunities would be missed and financial distress at individual firms would spread quickly to other firms, employees, and consumers.

Many studies examined corporate governance in emerging markets,(e.g ., Al-halabi, 2009; Al manaseer, 2013; Qabaja, 2008), researchers have studied the implications of the concentrated corporate ownership which is common in many emerging and developing markets, thus they concluded that the principal agency problem in large corporations (in any country) represented by the restricting expropriation of minority shareholders by the controlling shareholders.

This study is interested in finding some factors of governance that affect the Jordanian firms' performance (profitability), also to examine whether or not the corporate performance indicators of the Jordanian listed companies are affected by corporate governance factors such as ownership structure and size of board of directors to enhance the role of corporate governance and make it more effective, this could help to solve the agency problem. Also this study will provide a theoretical background in corporate governance and corporate performance.

2.1 Literature review

There has been an explosion in empirical research in corporate governance following the accounting scandals of Enron and WorldCom in 2002. Some researchers empirically found that good corporate governance positively affects firm performance and market value (e.g., Brown & Caylor, 2006 ,2009; Dittmar & Mahrt-Smith, 2007; Gompers, Ishii & Metrick, 2003). Most of these studies focus on corporate governance in developed markets, especially the US equity markets, The purpose of corporate governance is to achieve the best overall welfare of all stakeholders and promote economic efficiency both internally and externally, empirical research on corporate governance is based on the theoretical framework of agency theory advanced by Jensen and Meckling (1976), agency theory considers separate leadership structure, outside directors and board committees as optimal monitoring devices that will maximize the value of firms. Stewardship theory views managers as stewards of the corporation and considers that a combined leadership structure and insider dominated boards are likely to maximize shareholder wealth, the adoption of corporate governance was also stimulated by the belief that the economic crisis that hit the South East Asian stock markets in 1997-1998 was partly due to weak corporate governance in the region.

One key element of improving microeconomic efficiency is corporate governance (Maher & Andersson, 1999). Corporate governance affects the development and functioning of capital markets and exerts a strong influence on resource allocation. It impacts upon the behaviour and performance of firms, innovative activity, entrepreneurship, and the development of an active SME sector (small and medium sized enterprises). Because of increasing capital mobility and globalisation, corporate governance has become an important framework condition affecting the industrial competitiveness. Meanwhile, in transition economies, privatisation has raised questions about the way in which private enterprises should be governed, it is thought that poor corporate governance mechanisms in these countries have proved, in part, to be a major impediment to improve the competitiveness of firms. Better corporate governance, should manifest itself in enhanced corporate performance and can lead to higher economic growth. The fundamental of corporate governance is to promote fairness, transparency, accountability as well as guide corporate bodies in their action and deed (Emmanuel & Hodo, 2012).

However, there is no single model of corporate governance. Governance practices vary not only across countries but also across firms and sectors. However, one of the most striking differences between countries' corporate governance systems is in the ownership and control of firms that exists across countries. Systems of corporate governance can be distinguished according to the degree of ownership and control and the identity of controlling shareholders. While some systems are characterised by wide dispersed ownership (outsider systems), others tend to be characterised by concentrated ownership or control (insider systems). In outsider systems of corporate governance (notably the US and UK) the basic conflict of interest is between strong managers and widely-dispersed weak shareholders. In insider systems (notably Continental Europe and Japan), on the other hand, the basic conflict is between controlling shareholders and weak minority shareholders. However, these differences are also rooted in variations in countries' legal, regulatory, and institutional environments, as well as historical and cultural factors. Therefore, policies that promote the adoption of specific forms of governance should attempt to account for the product and factor market contexts, and other institutional factors, within which they are being contemplated.

Corporate governance comprises two mechanisms (as in many studies), internal and external corporate governance. Internal corporate governance, giving priority to shareholders' interest, operates on the board of directors to monitor top management. On the other hand, external corporate governance monitors and controls managers' behaviours by means of external regulations and force, in which many parties involved, such as suppliers, debtors, accountants, lawyers, providers of credit ratings and investment bank.

2.2 Other previous studies

Maher, M., and Andersson, T. (1999): This document examined the effect of corporate governance on corporate performance and economic performance. It first recapitulated and built on previous work undertaken by DSTI, it gave a more explicit exposition of the shareholder and stakeholder models of corporate governance. It then addressed some of the underlying factors that promote efficient corporate governance, and examined some of the strengths, weaknesses, and economic implications associated with various corporate governance systems. In addition to providing data not presented in the previous work, it also provided newly available information on ownership concentration and voting rights in a number of OECD countries. The document also provided a survey of empirical evidence on the link between corporate governance, firm performance and economic growth.

Black, B., et al. (2010): They confirmed the association between governance and value using panel data on Korean public companies over 1998-2004. Firms with higher scores on an overall Korean corporate governance index (KCGI) have higher Tobin's *q*. Shareholder rights and board procedure subindices are not significant. For firms with higher KCGI scores: (i) related party transactions are less adverse to firm value; (ii) firm profitability is more sensitive to shocks to industry profitability; (iii) capital expenditures are lower, but investment is more sensitive to profitability and growth opportunities; (iv) sales growth is lower; (v) profitability is more sensitive to growth opportunities; (vi) lagged board structure is associated with higher firm profitability; and (vii) dividends are higher, controlling for profits, and are more sensitive to profits. Board structure is associated with the first six channels; parity with the third, fourth, and sixth, and disclosure with the fifth. A *2SLS* analysis (using 1999 legal rules which apply to large firms to instrument for board structure) offers evidence that the link between board structure and firm value, and between board structure and these channels, is likely to be causal.

Qabaja, A. (2008): He studied the impact of corporate governance effectiveness on the financial performance of the listed companies on the Palestine Securities Exchange (PSE). A Stratified random sample of 20 companies was selected which represented 71.4% of the population that is 28 companies listed on the PSE in 2005, a simple and multiple regression was used to determine the impact of the independent variable that represented the corporate governance effectiveness on the dependent variable which represented financial performance measured by return on equity, return on investment, price earnings ratio, market to book value, Tobin's q and daily stock volatility. The most important result was the existence of a statistical significant positive relationship between the corporate governance effectiveness on one side and the return on equity, return on investment, price earnings ratio, market to book value on the other side. A negative statistical significant relationship between corporate governance effectiveness and daily stock volatility was found.

Rogers, M. (2008): This paper aims at establishing the relationship between the core principles of corporate governance and financial performance in commercial banks of Uganda. Findings indicated that corporate governance predicts 34.5 % of the variance in the general financial performance of commercial banks in Uganda. However the significant contributors to financial performance include openness and reliability that are measures of trust. On the other hand credit risk as a measure of disclosure has a negative relationship with financial performance. The data was analyzed using descriptive analysis options of SPSS, Pearson's correlation's statistical techniques were used to test and establish whether there exists a relationship between transparency, disclosure, trust and financial performance while multiple regression analysis was used to test the potential predictors of the dependent variable. Pearson correlation technique was adopted given that the dependent variable was converted to interval data in five scales in order to correlate it with the independent variables that were ranked on a five point likert scale.

Al-halabi, N. (2009): He studied the role of governance in increasing profitability of industrial private firms in Syria by examining two variables: 1- The level of reliance on organizational structure of firms to make the economic decisions and increase the profitability, 2- The extent of ISO 9001 system's contribution in establishing administrative and financial basics that can limit the informal activities and increase the productive efficiency and performance level.

Sami, H., et al. (2011): They investigated the impact of corporate governance on firm performance and valuation in China. It was the first study to use a composite measure of corporate governance to examine the impact of corporate governance on Chinese firms' performance and valuation. They found that the composite measure of corporate governance is positively and significantly associated with firm performance and valuation. Ownership concentration and board independence have a positive impact on firm performance and valuation. They also found that firm value increases with foreign ownership and firm performance decreases with state ownership.

Heenetigala, K., and Armstrong, A. (2011): This study tested the relationship between corporate governance practices and firm performance. Data were obtained from the annual reports of a sample of 37 companies selected from the top 50 listed companies in The Lanka Monthly Digest 50 (LMD) for the years 2003 and 2007. The data were analysed using Spearman correlations and analysis of variance. They confirmed a positive relationship between governance practices (separate leadership, board composition, board committee) and firm performance. These relationships indicate that firms have implemented corporate governance strategies, which have resulted in higher profitability and share price.

Amba, S. (2012): This paper examined the impact of corporate governance variables on firms' financial performance. Influence of corporate governance variables CEO duality, Chairman of Audit Committee, Proportion of Non-executive Directors, Concentrated Ownership structure, Institutional Investors, Gearing Ratio on firms' financial performance "Return on Assets" is researched using the firms traded in Bahrain bourse. He found that corporate governance variables do influence firms' performance. CEO duality, proportion of non-executive directors and leverage has negative influence, and board member as chair of audit committee, proportion of institutional ownership has positive influence on firms' financial performance.

Emmanuel S, A., and Hodo B, R. (2012): This study examined the relationship between corporate governance and banks profitability in Nigeria. The study discovered that good corporate governance and not assets value determined the profitability of banks in Nigeria, it identified that a unit change in the size of the board of directors of the bank and the size of shareholders (Corporate Governance) increases return on assets and return on equity between 2 percent and 18 percent within the study period. It also showed that it is not the quantum of total assets or equity that determines bank performance in Nigeria. Rather the quality of the asset, equity providers and managers that actually influences bank performance.

3. The importance of the study

1- The study may provide additional empirical evidence on the influence of corporate governance on the financial performance (profitability) of the listed companies in Jordan.
2- It will help the investors in capital market to predict the future performance of listed companies and their ability to continue in operations (going concern) to make better investment decisions.
3- It could reveal the relationship of corporate governance and firms' performance that can be used by the Jordanian firms to solve the agency problem.

4. The problem of the study

The main question of this research: does corporate governance (measured by ownership structure and number of board of directors) have impact on the profitability of the companies (measured by return on assets, return on equity and price on earnings ratio) in each sector and in all sectors together?

5. The limitation of the study

The first limitation of this study is taking only two corporate governance factors, and that because of my limited time available to conduct and accomplish this study, although I took sufficient sample from the total listed companies in Jordan over 2010-2014, I would prefer to study other governance dimensions. The second limitation is that employing proxies for actual corporate governance mechanisms and banks' performance outcomes may not accurately capture the actual mechanisms or outcomes experienced by banks in the financial marketplace.

6. The objectives of the study

The objectives of this research is to study the impact of corporate governance variables (Ownership structure, and number of board of directors) on firm's profitability ratios(Return on Assets, Return on Equity and Price on Earnings ratio) in each sector and in all sectors together.

7. Methodology

7.1 The variables of the study

This research followed most previous studies in selecting the most variables (Al Manaseer, et al., 2012; Berger, et al. ,2004; Emmanuel & Hodo, 2012; Rogers, 2008; Sami, et al., 2011), but Al manaseer (2013) and Qabaja (2008) chose P/E ratio as additional indicator for profitability.
The independent variables (corporate governance measures):
1- The ownership structure: sum of the shares (% of total) that are owned by those who own 5% or more.
2- The number of board of directors.

The control variables:
These variables are used to investigate if there are other than corporate governance variables that may affect the dependent variable (performance), therefore I used:
1- The natural logarithm of total asset (firm size).
The dependent variables (profitability measures):
1- ROA: return on asset which equals after tax net income divided by the average of total assets of the company.
2- ROE: return on equity which equals after tax net income divided by total equity of the company.
3- P/E: price on earnings ratio which equals market price per share divided by earning per share.

7.2 Conceptual framework

Figure 1 illustrates the conceptual frame work, the independent, dependent and control variables.

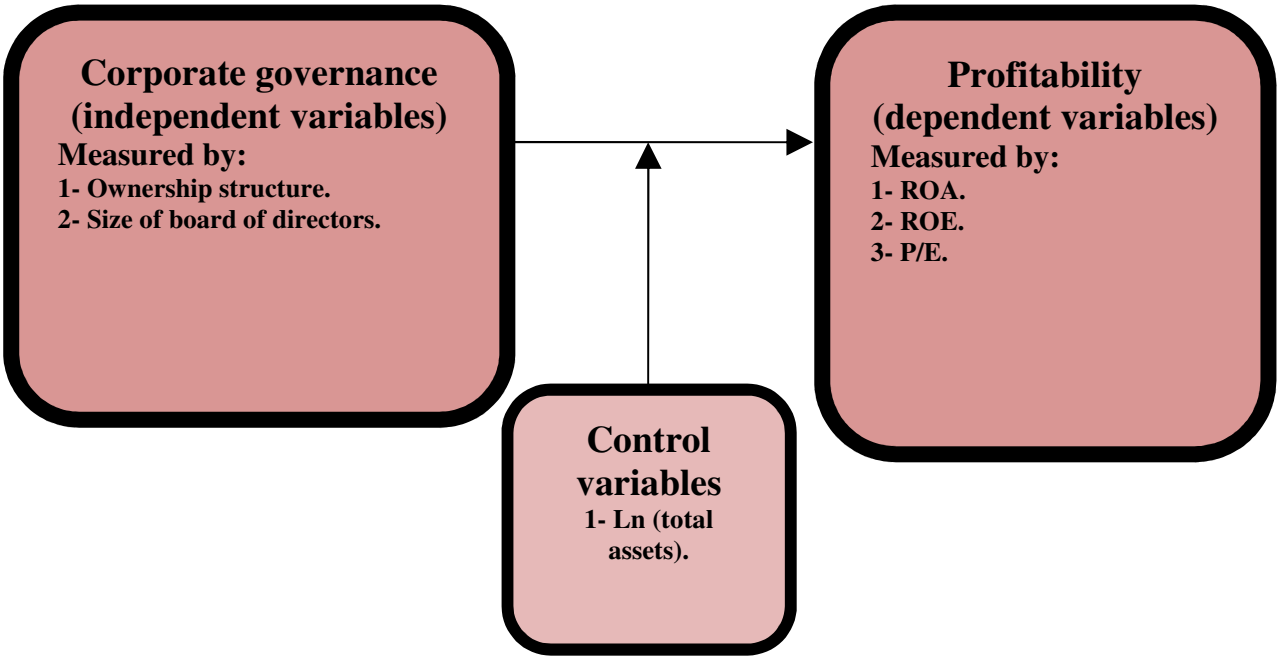

Figure 1: The conceptual frame work.

7.3 The hypotheses

Corporate governance affects the development and functioning of capital markets and exerts a strong influence on resource allocation. In an era of increasing capital mobility and globalisation, it has also become an important framework condition affecting the industrial competitiveness, in addition it is important variable that affect the financial performance of companies according to many previous studies. Based on the agency theory (Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976) we are interested in examining how corporate governance affects firm performance. Boards of directors may have a difficulty communicating with each other in a large size board, which causes great detriment to firm performance. Eisenberg et al. (1998), Singh and Davidson (2003) and Yermack (1996) proved that board size has a negative relation with firm performance, implying that, in a large size board, the diversity of insiders' opinion has a negative impact on making decisions, which is detrimental to firm performance, also they found that insider ownership has a positive and significant relation with firm performance, suggesting that higher insider ownership may reconcile authorities' and outside shareholders' interests, consequently making firm performance better. This research followed most previous studies in selecting the hypotheses (Berger, et al., 2004; Emmanuel & Hodo, 2012; Rogers, 2008; Sami et al., 2011); on the other hand, Al manaseer (2013) and Qabaja (2008) chose P/E ratio as indicator for profitability. This paper proposes the hypotheses as follows:

1- Hypothesis H_0 1: There is no significant relationship between the corporate governance and return on assets (test it for the all 90 listed companies and for specific sector in Jordan).

$ROA_{it} = \alpha + \beta_1 BS_{it} + \beta_2 OS_{it} + \beta_3 TA_{it} + e_{it}$
ROA_{it} : return on assets for firm i at year t.
BS_{it} : board size for firm i at year t.
OS_{it} : ownership structure for firm i at year t.
TA_{it} : Ln(total asset) for firm i at year t.
e_{it} : error term for firm i at year t.

2- Hypothesis H_0 2: There is no significant relationship between the corporate governance and return on equity (test it for the all 90 listed companies and for specific sector in Jordan).

$ROE_{it} = \alpha + \beta_1 BS_{it} + \beta_2 OS_{it} + \beta_3 TA_{it} + e_{it}$
ROE_{it} : return on equity for firm i at year t.

3- Hypothesis H_0 3: There is no significant relationship between the corporate governance and price on earnings ratio (test it for the all 90 listed companies and for specific sector in Jordan).

$P/E_{it} = \alpha + \beta_1 BS_{it} + \beta_2 OS_{it} + \beta_3 TA_{it} + e_{it}$
P/E_{it} : price on earnings ratio for firm i at year t.

7.4 Data sample and data collection method
The study sample consists of 90 listed Jordanian firms over the period from 2010 to 2014 (90*5 years= 450 observations), the first 30 firms (first 150 observations) are from industrial sector, the second 30 (second 150 observations)are from financial sector ,and the last 30 firms (last 150 observations)are from services sector, the 90 companies were chosen randomly due to their available annual reports from 2010 to 2014, I calculated ROA and ROE for all companies because they are missing in some companies' annual reports and because some of them were overestimated (after rounding), also they were computed in different ways across companies and in the same company across time (E.g., ROA= net income/Total assets or ROA=net income/ average of total assets). Panel data is used to generate more informative data, more variability, less collinearity among variables, more degrees of freedom, and more efficiency. Furthermore, panel data is used to eliminate the autocorrelation of variables in time series and heteroskedasticity of individuals in cross section.

The data were collected from the Jordanian shareholding companies guide, the annual reports of all listed companies which published in Amman Stock Exchange's website**,** more details were collected from Securities Depository Center's Website.

7.5 Statistic analysis tools
A range of data analysis techniques were used:
The data was analyzed using descriptive analysis options of SPSS.
Thereafter, multiple regression analysis was used to test the potential predictors of the dependent variable, finally F- test was used to test the acceptance or rejection of the null hypotheses.

8. The statistical analysis, conclusions and implications

8.1 Descriptive Analysis
Table 1: Mean, standard deviation , minimum and maximum are used to describe the variables for the 90 companies.

	Mean	Standard Deviation	Max	Min
ROA %	.92	9.22	39.9	-55.8
ROE %	1.75	28.14	297.7	-198.6
P/E	33.51	286.88	5690	-296.9
TOTAL ASSETS	275117702	623383882	3554739368	1511192
OWNERSHIP STRUCTURE	.582	.21	.986	.067
BOARD SIZE	8.84	2.41	14	4

From table 1 you can see the following:
ROA has mean of .92%, standard deviation of 9.22, maximum value of 39.9 (for Jordanian Duty Free Shops in services sector in 2010), and minimum value of -55.8 (for Jordan Ceramic Industries in industry sector in 2013).
ROE has mean of 1.75%, standard deviation of 28.14, maximum value of 297.7 (for The Holy Land Insurance in finance sector in 2012), and minimum value of -198.6 (for Royal Jordanian Air Lines in services sector in 2013).
P/E has mean of 33.51, standard deviation of 286.88, maximum value of 5690 (for Union Tobacco Industries in industry sector in 2014), and minimum value of -296.9 (for Jordan Cement Factories in industry sector in 2010).
Total assets has mean of 275117702, standard deviation of 623383882, maximum value of 3554739368 (for Jordan Islamic Bank in finance sector in 2014), and minimum value of 1511192 (for Pearl Sanitary Paper Converting in industry sector in 2013).
Ownership structure has mean of .582, standard deviation of .21, maximum value of .986 (for Jordan Phosphate Mines in industry sector in 2012), and minimum value of .067 (for Jordan Steel Group in industry sector).
Board size has mean of 8.84, standard deviation of 2.41, maximum value of 14 (for Jordan Worsted Mills in industry sector), and minimum value of 4 (for Al-Arabiya For Investment Projects in industry sector in 2013).

8.2 Multicollinearity test

VIF test is used to test Multicollinearity between the independent variables , it is found that VIF is less than 10, that means there is no Multicollinearity between the variables, as shown in the table 2.

Table 2: Collinearity table.

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Board.s	.743	1.346
	O.S	.929	1.077
	Ln Assets	.745	1.343

Autocorrelation test

D.W. test is used to the autocorrelation of the data, it is found that D.W. values for each hypothesis is less than 4 that means there is no autocorrletation.

8.3 Hypotheses testing

Hypothesis H_0 1: There is no significant relationship between the corporate governance and return on assets in the listed companies in Jordan.

Tables of R1: Model summary & Coefficients for regression1.

Model Summary[b]

Model	R	R Square	F	Sig.	Durbin-Watson
1	.330[a]	.109	18.142	.000[a]	1.136

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-24.602-	3.972		-6.193-	.000
	Board.s	.120	.198	.031	.604	.546
	O.S	8.835	2.001	.205	4.415	.000
	Ln Assets	1.102	.258	.222	4.278	.000

a. Dependent Variable: ROA %

From the tables of R1 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.33 is significant at 0.05 level that means there is a medium relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 10.9% of the variance in the dependent variable since $r^2 = 0.109$.

Also above tables show that F value= 18.142 is significant at 0.05 level that means the independent variables have an effect on dependent variable. As well as the coefficients table shows that t value for O.S and Ln assets variables are significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has an effect on the dependent variable
- Assets have an effect on the dependent variable.

Hypothesis H_0 2: There is no significant relationship between the corporate governance and return on equity in the listed companies in Jordan.

Tables of R2: Model summary & Coefficients for regression2.

Model Summary[b]

Model	R	R Square	F	Sig.	Durbin-Watson
1	.227[a]	.051	8.050	.000[a]	2.174

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-57.621-	12.513		-4.605-	.000
	Board.s	.371	.625	.032	.594	.553
	O.S	10.454	6.304	.079	1.658	.098
	Ln Assets	2.850	.811	.188	3.514	.000

a. Dependent Variable: ROE %

From the tables of R2 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.227 is significant at 0.05 level that means there is a weak relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 5.1% of the variance in the dependent variable since r^2 = 0.051.

Also above tables show that F value= 8.05 is significant at 0.05 level that means the independent variables have an effect on dependent variable. As well as the coefficients table shows that t value for Ln assets variable is significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have an effect on the dependent variable.

Hypothesis H_0 3: There is no significant relationship between the corporate governance and price on earnings ratio in the listed companies in Jordan.

Tables of R3: Model summary & Coefficients for regression 3.

Model Summary[b]

Model	R	R Square	F	Sig.	Durbin-Watson
1	.045[a]	.002	.301	.824[a]	1.959

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-31.280-	130.861		-.239-	.811
	Board.s	1.514	6.532	.013	.232	.817
	O.S	57.264	65.927	.043	.869	.386
	Ln Assets	1.031	8.483	.007	.122	.903

a. Dependent Variable: P/E

From the tables of R3 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.045 is not significant at 0.05 level that means there is no relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 0.2% of the variance in the dependent variable since $r^2 = 0.002$.

Also above tables show that F value= 0.301 is not significant at 0.05 level that means the independent variables have no effect on dependent variable. As well as the coefficients table shows that t value for each variable is not significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have no effect on the dependent variable.

Hypothesis H_0 1: There is no significant relationship between the corporate governance and return on assets in industrial sector in Jordan.

Tables of R4: Model summary & Coefficients for regression 4.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.449[a]	.202	12.319	.000[a]

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-43.534-	7.530		-5.781-	.000
	Board.s	.017	.318	.005	.053	.958
	O.S	5.237	2.918	.138	1.795	.075
	Ln Assets	2.409	.515	.404	4.680	.000

a. sector = industrial b. Dependent Variable: ROA %

From the tables of R4 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.449 is significant at 0.05 level that means there is a medium relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 20.2% of the variance in the dependent variable since r^2 = 0.202.

Also above tables show that F value= 12.319 is significant at 0.05 level that means the independent variables have an effect on dependent variable. As well as the coefficients table shows that t value for Ln (assets) variable is significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have an effect on the dependent variable.

Hypothesis H_0 1: There is no significant relationship between the corporate governance and return on assets in finance sector in Jordan.

Tables of R5: Model summary & Coefficients for regression 5.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.349[a]	.122	6.764	.000[a]

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-17.886-	5.128		-3.488-	.001
	Board.s	.353	.395	.092	.893	.373
	O.S	12.985	3.972	.301	3.270	.001
	Ln Assets	.382	.361	.108	1.056	.293

a. sector = finance b. Dependent Variable: ROA %

From the tables of R5 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.349 is significant at 0.05 level that means there is a medium relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 12.2% of the variance in the dependent variable since r^2 = 0.122.

Also above tables show that F value= 6.764 is significant at 0.05 level that means the independent variables have an effect on dependent variable. As well as the coefficients table shows that t value for O.S variable is significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has an effect on the dependent variable
- Assets have no effect on the dependent variable.

Hypothesis H_0 1: There is no significant relationship between the corporate governance and return on assets in services sector in Jordan.

Tables of R6: Model summary & Coefficients for regression 6.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.261[a]	.068	3.567	.016[a]

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-29.556-	10.812		-2.734-	.007
	Board.s	.007	.342	.002	.021	.984
	O.S	8.958	4.083	.178	2.194	.030
	Ln Assets	1.530	.624	.219	2.452	.015

a. sector = services b. Dependent Variable: ROA %

From the tables of R6 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.261 is significant at 0.05 level that means there is a weak relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 6.8% of the variance in the dependent variable since r^2 = 0.068.

Also above tables show that F value= 3.567 is significant at 0.05 level that means the independent variables have an effect on dependent variable. As well as the coefficients table shows that t value for O.S and Ln assets variables are significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has an effect on the dependent variable
- Assets have an effect on the dependent variable.

Hypothesis H_0 2: There is no significant relationship between the corporate governance and return on equity in industrial sector in Jordan.

Tables of R7: Model summary & Coefficients for regression7.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.347[a]	.120	6.657	.000[a]

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-72.755-	17.677		-4.116-	.000
	Board.s	.296	.746	.036	.397	.692
	O.S	13.591	6.849	.160	1.984	.049
	Ln Assets	3.569	1.208	.267	2.954	.004

a. sector = industrial b. Dependent Variable: ROE %

From the tables of R7 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.347 is significant at 0.05 level that means there is a medium relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 12% of the variance in the dependent variable since r^2 = 0.12.

Also above tables show that F value= 6.657 is significant at 0.05 level that means the independent variables have an effect on dependent variable. As well as the coefficients table shows that t value for O.S and Ln assets variables are significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has an effect on the dependent variable
- Assets have an effect on the dependent variable.

Hypothesis H_0 2: There is no significant relationship between the corporate governance and return on equity in finance sector in Jordan.

Tables of R8: Model summary & Coefficients for regression 8.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.141[a]	.020	.986	.401[a]

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-30.093-	20.871		-1.442-	.151
	Board.s	.766	1.609	.052	.476	.635
	O.S	10.536	16.165	.063	.652	.516
	Ln Assets	1.192	1.471	.087	.810	.419

a. sector = finance b. Dependent Variable: ROE %

From the tables of R8 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.141 is not significant at 0.05 level that means there is no relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 2% of the variance in the dependent variable since $r^2 = 0.02$.

Also above tables show that F value= 0.986 is not significant at 0.05 level that means the independent variables have no effect on dependent variable. As well as the coefficients table shows that t value for each variable is not significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have no effect on the dependent variable.

Hypothesis H_0 2: There is no significant relationship between the corporate governance and return on equity in services sector in Jordan.

Tables of R9: Model summary & Coefficients for regression 9.

Variables Entered/Removed[b,c]

Model	Variables Entered	Variables Removed	Method
1	Ln Assets, O.S, Board.s	.	Enter

a. All requested variables entered. b. sector = services

c. Dependent Variable: ROE %

Model Summary[b]

Model	R	R Square	F	Sig.
1	.191[a]	.037	1.848	.141[a]

a. Predictors: (Constant), Ln Assets, O.S, Board.s. b. sector = services

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-77.686-	35.468		-2.190-	.030
	Board.s	.006	1.123	.000	.005	.996
	O.S	7.035	13.393	.043	.525	.600
	Ln Assets	4.344	2.047	.193	2.122	.036

a. sector = services b. Dependent Variable: ROE %

From the tables of R9 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.191 is not significant at 0.05 level that means there is no relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 3.7% of the variance in the dependent variable since $r^2 = 0.037$.

Also above tables show that F value= 1.848 is not significant at 0.05 level that means the independent variables have no effect on dependent variable. As well as the coefficients table shows that t value for Ln assets variable is significant at 0.05 level that means:

- Board size has no effect on the dependent variable.

- O.S has no effect on the dependent variable
- Assets have an effect on the dependent variable.

Hypothesis H_0 3: There is no significant relationship between the corporate governance and price on earnings ratio in industrial sector in Jordan.

Tables of R10: Model summary & Coefficients for regression10.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.120[a]	.014	.708	.548[a]

a. Predictors: (Constant), Ln Assets, O.S, Board.s. b. sector = industrial

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-443.452-	419.665		-1.057-	.292
	Board.s	1.338	17.719	.007	.075	.940
	O.S	131.794	162.606	.069	.811	.419
	Ln Assets	25.242	28.687	.084	.880	.380

a. sector = industrial b. Dependent Variable: P/E

From the tables of R10 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.12 is not significant at 0.05 level that means there is no relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 1.4% of the variance in the dependent variable since $r^2 = 0.014$.

Also above tables show that F value= 0.708 is not significant at 0.05 level that means the independent variables have no effect on dependent variable. As well as the coefficients table shows that t value for each variable is not significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have no effect on the dependent variable.

Hypothesis H_0 3: There is no significant relationship between the corporate governance and price on earnings ratio in finance sector in Jordan.

Tables of R11: Model summary & Coefficients for regression11.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.043[a]	.002	.089	.966[a]

a. Predictors: (Constant), Ln Assets, O.S, Board.s. b. sector = finance

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	26.107	58.912		.443	.658
	Board.s	1.538	4.541	.037	.339	.735
	O.S	-6.126-	45.630	-.013-	-.134-	.893
	Ln Assets	-1.147-	4.151	-.030-	-.276-	.783

a. sector = finance b. Dependent Variable: P/E

From the tables of R11 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.043 is not significant at 0.05 level that means there is no relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 0.2% of the variance in the dependent variable since $r^2 = 0.002$.

Also above tables show that F value= 0.089 is not significant at 0.05 level that means the independent variables have no effect on dependent variable. As well as the coefficients table shows that t value for each variable is not significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have no effect on the dependent variable.

Hypothesis H_0 3: There is no significant relationship between the corporate governance and price on earnings ratio in services sector in Jordan.

Tables of R12: Model summary & Coefficients for regression12.

Model Summary[b]

Model	R	R Square	F	Sig.
1	.063[a]	.004	.193	.901[a]

a. Predictors: (Constant), Ln Assets, O.S, Board.s. b. sector = services

Coefficients[a,b]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	93.110	120.847		.770	.442
	Board.s	-1.521-	3.825	-.037-	-.398-	.691
	O.S	-10.068-	45.633	-.018-	-.221-	.826
	Ln Assets	-2.866-	6.976	-.038-	-.411-	.682

a. sector = services b. Dependent Variable: P/E

From the tables of R12 you find:

Multiple regression is used to test above hypothesis, it is found that r= 0.063 is not significant at 0.05 level that means there is no relationship between the independent variables and the dependent variable, also , above tables show that the independent variables explain 0.4% of the variance in the dependent variable since $r^2 = 0.004$.

Also above tables show that F value= 0.193 is not significant at 0.05 level that means the independent variables have no effect on dependent variable. As well as the coefficients table shows that t value for each variable is not significant at 0.05 level that means:

- Board size has no effect on the dependent variable.
- O.S has no effect on the dependent variable
- Assets have no effect on the dependent variable.

The results of this study are consistent with the most previous studies' results, most of them found positive relationship between the corporate governance variables on one side and ROA and ROE on the other side, The significant positive relationships that were found indicate that some firms have implemented an effective corporate governance strategies which have resulted in higher profitability, but share price or P/E variable is not affected at all by corporate governance indicators which implies that Amman Stock Exchange is inefficient at the weak form level, i.e. it has improper and inefficient pricing and this is confirmed by many studies (e.g., Alhabashneh, 2015; Ananzeh, 2016; Jaradat & Al-Zeaud, 2011; Mohamad, 2014; and others).

Some weak relationships were found because of the lack of corporate governance practices, their ineffectiveness, or because of the lack of awareness of the importance of the governance impact on the corporate performance.

The fact of the bad economic reality in Jordan, the bad management and an ineffective governance practices may give a strong explanation of these results.

8.4 Recommendation

1- Conduct further studies taking into consideration other firms or other variables haven't been taken by this study, or trying other time period.
2- The Jordanian companies have to focus on improving their corporate governance practices, which will lead to enhance their firm's value by: a- Excessive efforts should be exerted by Jordanian firm in cooperation with Jordanian Securities Commission (JSC) and other regulatory bodies to adopt standard classification of items in the financial statements by assigning each element a uniform code to be used always in entering, processing data. b- Providing shareholders with periodic reports on changes affecting the shareholders in the company. c- Companies have to implement the corporate governance rules related to shareholder equity due to their impact on ROA and P/E. d- Compliance with corporate governance rules pertaining to the nomination and remuneration committee to ensure that the current needs of the companies and their boards are met. e- The system for granting rewards to employees should base on performance and that the remuneration arrangements support the strategic objectives of the corporate entity. f- Corporate governance rules and regulations should be effective to provide a tool of choosing the best executives to control the scarce resources and improve the performance and the value of the firm.

References

Alhabashneh, A. (2015). Evolving Efficiency of Amman Stock Exchange. *Interdisciplinary Journal Of Contemporary Research In Business, 6*(10), 36-46.

Al-halabi, N. (2009). The role of governance in increasing profitability of industrial private firms in Syria. *Damascus university magazine , 25*(2), 201-238.

Al Manaseer, M., et al. (2012). The Impact of Corporate Governance on the Performance of Jordanian Banks. *European Journal of Scientific Research, 67* (3), 349-359.

Al Manaseer, O. (2013). The effect of application of corporate governance rules on the performance of services Jordanian shareholding companies. Unpublished manuscript, 1-97.

Amba, S. (2012). Corporate governance and firms' financial performance. *Journal of Academic and Business Ethics*, 1-11.

Ananzeh, I. (2016). Weak Form Efficiency of the Amman Stock Exchange: An Empirical Analysis (2000-2013). *International Journal of Business and Management, 11*(1), 173-180.

Berger, A., et al. (2004). Corporate governance and bank performance: A joint analysis of the static, selection and dynamic effects of domestic, foreign, and state ownership. World Bank Conference on Bank privatization for helpful suggestions, 1-42.

Black, B., et al. (2010). How Corporate Governance Affects Firm Value: Evidence on Channels from Korea. *Social Science Research network*, 1-53.

Brown, L., and Caylor, M. (2009). Corporate governance and firm operating performance. *Review of Quantitative Finance and Accounting, 32*(2), 129-144.

Brown, L., and Caylor, M. (2006). Corporate governance and firm valuation. *Journal of Accounting and Public Policy, 25*(4), 409-434.

Dittmar, A., and J. Mahrt-Smith (2007). Corporate Governance and the Value of Cash Holdings. *Journal of Financial Economics, 83*(3), 599–634. doi:10.1016/j.jfineco.2005.12.006

Eisenberg, T., et al. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics, 48*, 35- 54.

Emmanuel, A., and Hodo, R. (2012). Does Corporate Governance affect Bank Profitability? Evidence from Nigeria. *American International Journal of Contemporary Research, 2* (7), 135-145.

Fama, E. (1980). Agency problems and the theory of the firm. *The Journal of Political Economy, 88*(2), 288-307.

Fama, E., and Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301-325.

Gompers, P., Ishii, J., and Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics, 118* (1), 107-156.

Heenetigala, K., and Armstrong, A. (2011). The Impact of Corporate Governance on firm performance in an unstable economic and political environment: Evidence from Sri Lanka. *Paper submitted to the 3rd Conference on Financial Markets and Corporate Governance*, 1-17.

Jaradat, M., and Al-Zeaud, H. (2011). Testing the Weak-Form Efficiency of Amman Stock Exchange. *International Research Journal of Finance & Economics,* Issue 65, 93-98.

Jensen, M., and Meckling, W. (1976). Theory of the firm: Managerial behaviour, agency costs, and ownership structure. *Journal of Financial Economics, 3*(4): 305-360.

Maher, M., and Andersson, T. (1999). Corporate Governance: effects on firm performance and economic growth. Organization For Economic Co-Operation And Development, OECD 1999, from https://www.oecd.org/sti/ind/2090569.pdf

Mohamad, S. (2014). Random Prices' Movement and Market Efficiency Level Evidence from Amman Stock Exchange. *Dirasat: Administrative Sciences, 41(*2), 417-423.

Qabaja, A. (2008). *The Impact of Corporate Governance Effectiveness on Financial Performance for Listed Companies on the Palestine Securities Exchange*. Unpublished doctoral dissertation, Amman Arab University.

Rogers, M. (2008). Corporate Governance And Financial Performance Of Selected commercial Banks In Uganda. Queen's University Belfast, http://www.crrconference.org , 1-18.

Sami, H., et al. (2011). Corporate Governance and Operating Performance of Chinese Listed Firms. *Journal of International Accounting, Auditing and Taxation, 20*(2), 106-114. doi:10.1016/j.intaccaudtax.2011.06.005

Singh, M., and Davidson, W. (2003). Agency Cost, Ownership Structure and Corporate Governance Mechanisms. *Journal of Banking and Finance, 27*(5), 793-816. doi: 10.1016/S0378-4266(01)00260-6

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*, 185-211.

Amman Stock Exchange: www.ase.com.jo
Securities Depository Center: www.sdc.com.jo