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The Effect of Ownership Structure on Corporate Performance of Listed Companies in Amman Stock Exchange: An Empirical Evidence of Jordan

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Abstract: This research has investigated the effect of different ownership structure (The largest, Five Greatest, Individual and Institutional Shareholder Structure) on performance of listed companies in Amman Stock Exchange. The research hypotheses are based on the type of relationship between ownership structure and corporate performance. The research has four hypotheses. To test each hypothesis; a model was defined based on dependent variables employed to measure performance. The sample is consisted of 51 Jordanians companies from 2005 to 2009. Statistical method used in this research was panel data. Findings indicate that there is significant and negative relationship between the percentage of ownership of biggest shareholder and firm performance. There is a positive and significant relation between the percentage of ownership of five greater shareholders and firm performance. The relationship between the percentage of ownership of individual shareholders and the percentage of ownership of institutional shareholders are significant and negative. So, all these results are consistent with prior empirical studies. This research helps all investor in which kind of companies should be invested, in a company that appears (large, five greatest, institutional, and individual of ownership structure)?

Keywords: Ownership Structure, Firm Performance, Jordan.

1. Introduction

In spite of an abundance of corporate governance literature across the world, the Jordan corporate sector is lacking. The purpose of this study is to investigate the relationship among the ownership structure and financial performance to determine the role of corporate governance in the performance behavior of companies listed in such an emerging market in Jordan.

Ownership structure is one of the main dimensions of corporate governance and is widely seen to be determined by other country-level corporate governance characteristics such as the development of the stock market and the nature of state intervention and regulation (La Porta, López-de-Silanes, Shleifer and Vishny, 1998).

Shareholder structures are quite diverse across countries, with dispersed ownership being much more frequent in US and UK listed firms, compared to Europe and Middle East, where controlled ownership is prevalent (La Porta, Lópezde-Silanes, Shleifer and Vishny, 1999).

The movement from individual ownership to collective ownership caused to raising new problems in the field of financial resources management, so that (Berle and Means, 1932) considered it as agency problem (Morey et al, 2008). This may cause conflicts of interest and agency problem. That resulting from shareholder's attempt for controlling directors. These efforts include the efforts and agreements will be closed between the director or directors and shareholders. The agency theory considered the clarification of how agency problems may raise between the employer (shareholder) and agent (manager) due to information asymmetry. Meanwhile, the effective corporate governance structures helped to prevent from creation of interests conflict between the directors and shareholders by making information conformity and balance. On other words, these structures motivate the management to take the necessary measures for increasing the validity of the firm. Therefore, the more yield of the

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firm requires the improvement of corporate governance mechanisms, since it may cause to decrease agency costs, higher evaluation of shares, therefore the better performance during long term. (Brown and Caylor, 2004) reasonable investors will ask, is it good corporate governance leads to improve the performance of capital markets? In other words, how corporate governance mechanisms will help to create balance between rights and responsibilities of effective actors of corporate and management.

This research is aimed to explore the analysis & effect of one variable of corporate governance which is the shareholder structure - (weather the shareholder are individual or institutional, are focused or disseminated, are great or little, are domestic or foreign) - of Jordanian performance in Amman stock exchange, and to give advice based on facts to investors where to invest in Amman stock exchange. So, it provides useful information that is of great value to policy makers and academics.

1.1. Research Importance

This research is intended to analyze this question: What is the role of ownership structure of accepted firms in ASE on the firm performance? So, this research in respect of purpose is an applied basis research, since in this research the relations of variables in the market of securities has been analyzed see (Sara and Khaled, 2013), and it is for clarification of relations and presentation of proposals towards promotion of the efficiency of the market.

Meanwhile its approach is inductive, i.e. reaching the generalities from analyzing details.

1.2. Research Theoretical Framework

We examined the effect of shareholder structure on performance of the firm sample. So, the model has been used by (Alipour and Amjadi, 2011), and fit by nature, as shown by Figure (1-1).

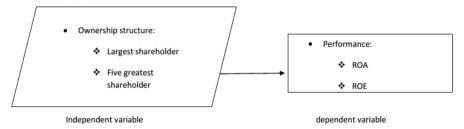


Figure (1-1). *Displays the theoretical proposed relation between the study variables.*

1.3. Research hypotheses

This research tries to test the following null hypotheses; in order to investigate the effect of ownership structure on performance.

- H0, 1: There is no statistically significant relationship between ownership percentage of the greatest shareholder and performance of the company.
- H0, 2: There is no statistically significant relationship between ownership percentage of the five greater shareholders and performance of the company.
- H0, 3: There is no statistically significant relationship between ownership percentage of the individual shareholders and performance of the company.
- H0, 4: There is no statistically significant relationship between ownership percentage of the institutional shareholders and performance of the company.

1.4. Operational Definitions

Performance (dependent variable):

Firm performance is measured using accounting-based measures such as: return on assets ratio, return on equity ratio, Tobin's Q, net profit margin, EVA and market to book value ratio. So, most financial services publish these ratios for most companies, they can be calculated independently by using net profit and total revenue from the Income Statement of a company's financial report, and total assets and stockholders' equity from the Balance Sheet. But In this research, we use return on assets ratio (ROA), return on equity ratio (ROE) and return to book value ratio (MBVR) as a measurements of performance evaluation, As follows:

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- Return on assets (ROA): is one of the accounting measures which have been widely used in empirical studies of performance.
- The following formula used by chaing (2005) and (shen and chang, 2005), employ it as a proxy of performance. Ajloui (2007) discusses the use of ROA versus Tobin's q as a measurement of performance.
- The ROA measured as the ratio of net income after interest and tax to total assets.

$$ROA_{ii} = \frac{NI_{ii}}{TA_{ii}}$$

Where:

ROAit: refers to return on assets for the company I in year t.

NIit: refers to Net Income for the company I in year t.

TAit: refers to total assets for the company I in year t.

- Return on equity (ROE): is also considering one of the accounting measures of performance. Prowse (1997) adapt ROE as a measure of company's performance.
- The Return on equity measured as the ratio of the net income after interest and tax to total common equity.

$$ROE_{ii} = \frac{NI_{ii}}{TE_{ii}}$$

Where:

ROEit: refers to return on equity for the company I in year t.

NIit: refers to net income for the company I in year t.

TEit: refers to total equity for the company I in year t.

• Market to book value ratio (MBVR): is calculated by the following formula as used by Black (2003) and Drobetz (2004).

$$MBVR_{it} = \frac{MP_{it}}{BV_{it}}$$

Where:

MBVR_{it}: refers to Market to book value ratio for the company I in year t.

MPit: refers to Market price per stock for the company I in year t.

BVit: refers to Book value per stock for the company I in year t.

Shareholder structure (Independent Variable):

Different definitions and specifications have been specified for shareholders structure in different researches. In this research, Shareholder structure is classified like (Sara and Khaled, 2013), with the following four indexes was stated that will lead to have four hypotheses:

- The amount of ownership of the largest shareholder: is equal to the percentage of ownership of the greatest shareholder of each company.
- The amount of ownership of five greatest shareholders: is equal to the sum of the percentage of ownership of five greater shareholders of each company.
- The amount of ownership of institutional shareholders: is equal to the sum of the percentage of ownership of the legal shareholders of each company.
- The amount of ownership of individual shareholders: is equal to the sum of the percentage of ownership of the individual shareholders of each company.

2. A LITERATURE REVIEW

2.1. Ownership Structure and Corporate Performance

The connection between ownership structure and performance has been the subject of an important and ongoing debate in the corporate finance literature. The debate goes back to the (Berle and Means, 1932). Thesis, which suggests that an inverse correlation should be observed between the diffuseness of shareholdings and firm performance. So, an important factor shaping the corporate governance system is the type of ownership structure Aoki, (1995).

(Demsetz and Lehn,1985), based on a sample of 511 large US companies and using return on equity (ROE) as an indicator, find no significant relationship between top-five and top-twenty shareholder ownership concentration and firm performance.

(Shleifer and Vishny,1986) show that some degree of ownership concentration enhances firm performance because large block shareholders, in a position to harvest a substantial portion of the gains from improvement in firm performance or a takeover, have some incentives and resources to monitor management decisions. Similarly, Wruck (1988) finds a strong and positive link between the change in ownership concentration and firm performance.

(Thomsen and Pederson, 2000) in a research title "Ownership Structure And Economic Performance In The Largest European Companies" found that there is a significant positive relationship between concentrated ownership and economic performance, Although, this relation was non-linear and concentration of ownership over a certain level has reverse and negative effects on performance. They also concluded that, unlike the concentrated ownership, when there is distributed ownership, the other shareholders cannot participate in the corporate policy, and this weakness is related to corporate governance mechanism can lead to reduction of optimal performance.

(Demsetz and Villanonga, 2001) in a research titled "Ownership Structure and Firm Performance," examine the relationship between ownership structure of shareholders and firm performance in a sample including 233 companies. Demsetz and Villanonga found no meaningful statistical relation between the ownership structure and performance of the firm. As it is said by these researchers, "the results of this research conform to this point of view that, while the unfocused ownership may lead to aggravate the agency problem but it has benefits which may solve too much problems".

Amba, (2002) in a research title "Corporate governance and firms' financial performance" examines 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. They found 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.

(Cornett et al, 2007) in a research titled "the impact of institutional ownership on corporate operating performance" analyzed the relationship between institutional shareholders as one of the mechanisms of corporate governance and operational yield of large companies. They found a significant and positive relationship between the ratio of operating cash flow to sales as a measure of performance and the number and percentage of institutional shareholders as corporate governance mechanism.

(Al- Haddad et al, 2011) in a research titled "The Effect of Corporate Governance on the Performance of Jordanian Industrial Companies: An empirical study on Amman Stock Exchange" They founds that there is a direct positive relationship between profitability -measured either by Earnings per share (EPS) or Return on assets (ROA) - and corporate governance, and a positive direct relationship between each of liquidity, dividend per share, and the size of the company with corporate governance, also they found a positive direct relationship between corporate governance and corporate performance.

In addition, Several studies have examined the impact of corporate governance mechanisms on firm performance across countries operating under different characteristics (Callen et al., 2003; Erhardt et al., 2003; Garg, 2007; Kang et al., 2007; Rose, 2007; Sheridan & Milgate, 2005, Chin et al. (2004), Elayan et al. (2003), Hossain et al. (2001), Prevost et al. (2002), and Reddy et al. (2008) and Reddy et al. (2010) and all of them found the significant relationship.

3. RESEARCH HYPOTHESES

In this research, same as our previous research—The effect of ownership structure on share price volatility of listed companies in ASE –(Sara & Khaled,2013), we divided the ownership structure variable, into four indexes: the amount of ownership of the greatest shareholder (indicates focusing ownership structure), the amount of ownership of five greater shareholders (indicates focusing ownership structure), the amount of ownership of institutional shareholders (indicates being institutional of ownership structure), the amount of ownership of individual shareholders (indicates being real of ownership structure) According to this, the hypothesis of this research is as follows:

First hypotheses: The amount of ownership of the greatest shareholder is related to the firm performance of the companies.

Second hypotheses: The amount of ownership of five greater shareholders is related to the firm performance of the companies.

Third hypotheses: The amount of ownership of the institutional shareholders is related to the firm performance of the companies.

Forth hypotheses: The amount of ownership of the individual shareholders is related to the firm performance of the companies.

4. RESEARCH METHODOLOGY

In fact, the method of sampling in this research is screening type and following conditions was considered for screening the society and sampling:

- The annual reports of the companies, must be available for the period from 2005-2009.
- Companies which didn't announce their shareholders structure will be omitted from sampling.

After screening conducted as mentioned above in methodology 51 companies were selected as sample from all sectors; for analyzing and examining the effect of different ownership structure (shareholder structure) on a performance of listed companies in Amman Stock Exchange.

5. DATA COLLECTION

Panel data-(methodology was adopted because it combined time series and cross sectional data)- were collected from 2 sources, the main source was Amman Stock Exchange (ASE), and the other one was The Securities Depositary Centre (SDC) in Jordan.

In order to study and test hypotheses model and in line with earlier studies that employ similar methodology, the researcher has employed the following methods:

We use ROA, ROE and MBVA for estimating of performance by calculating the (Return on assets = Net income / Total assets; Return on equity = Net income / Total equity; Market to book value = Market price per stock/ Book value per stock) for each company in our sample.

We use percentage for estimating of shareholder structure by collect the percentage of ownership (depend on classification of shareholder structure) for each company in our sample.

6. EMPIRICAL MODEL

In this research, in order to recognize the relation between independent and dependent variables, the regression is used and an equation is formed through it the influence of the independent variable on the dependent variable is evaluated. So that for each hypothesis an equation is formed and the influence of each separate independent variable on the dependent variable is determined.

$$PER = \alpha o + (\beta 1 * Largest) + (\beta 2 * Five greatest) + (\beta 3 * INST) + (\beta 4 * IND) + \xi$$
 (1)

Where:

PER: (Performance) is a measure of profitability or performance of the company and consists of three variables in this research:

• ROA (return on assets): measured as the ratio of net income after interest and tax to total assets.

- ROE (return on equity): measured as the ratio of net income after interest and tax to total equity.
- MBVR (market to book value ratio): measured as ratio of Market price to book value per stock.

OWNS: (shareholder) any person, company, or other institution that owns at least one share in a company.

Largest: is the largest ownership percentage in the company.

Five greatest: it is that sum of the five who owns the largest percentage of the company.

INST: (institutional) is equal to the sum of the percentage of ownership of the institutional shareholders of each company.

IND: (individual) is equal to the sum of the percentage of ownership of the individual shareholders of each company.

 α : is the constant.

B: The coefficients of the independent variables (explanatory variables).

E: residual.

7. EMPIRICAL RESULT

After forming the regression equations, we investigate auto-correlation, R-squared (R²) and meaningfulness of model and its coefficient. So, for investigation the auto- correlation among the error terms, we use DW test as used by most of the recent researcher Sav in and White (1977) and Fare brother (1980). R- Squared is a measure for determination the strength of relation between dependent and independent variables. In fact, the value of R-squared coefficient indicates that what percentage of dependent's variability explained by the independent variable? We used test-F for meaningfulness test and t-test is used for testing equations coefficients.

Finally, to evaluate each hypothesis, three separate models were defined and estimated based on for each dependent variable, i.e., ROA, ROE and return to book value ratio (MBVR) that used for performance evaluation as you see in equation 2,3and 4. Then, according to the results of three models, each hypothesis was evaluated as a separate species and ultimately the overall result was expressed for each hypothesis.

The First Model

$$ROA = \alpha o + (\beta 1 * Largest) + (\beta 2 * Five greatest) + (\beta 3 * INST) + (\beta 4 * IND) + \xi$$
 (2)

The Second Model

$$ROE = \alpha o + (\beta 1 * Largest) + (\beta 2 * Five greatest) + (\beta 3 * INST) + (\beta 4 * IND) + \xi$$
(3)

The Third Model

$$MBVR = \alpha o + (\beta 1 * Largest) + (\beta 2 * Five greatest) + (\beta 3 * INST) + (\beta 4 * IND) + \xi$$
(4)

First hypotheses

H0,1: There is no statistically significant relationship between ownership percentage of the greatest shareholder and performance of the company.

Table1.

Independent	Dependent	Probability	Result	Probability	Result	Kind of	R-	Durbin-
Variables	Variables	F-Statistics		T-Statistics		relation	Square	Watson
OS_BIG	ROA	0.000	Accept	0.000	Accept	Negative	0.85	1.907
OS_BIG	ROE	0.000	Accept	0.001	Accept	Negative	0.95	1.918
OS_BIG	MBVR	0.000	Accept	0.000	Accept	Negative	0.78	1.902

Morck et al (1988) asserted that the big shareholders have their advantages that sometimes are not consistent with other shareholders' advantages.(Thomsen and Pederson, 2000). Perhaps, we can describe the cause of negative relation between the amount of ownership of greatest shareholder and firm's performance by this claim.

As you can see at table (1), according to being high R² and being significant and negative coefficient of independent variable - the amount of ownership of greatest shareholder- in all three models, can be

said that, whatever the rate of shareholder ownership be increased, the firm's performance will be weakened, significantly.

Second hypotheses

H0, 2: There is no statistically significant relationship between ownership percentage of the five greater shareholders and performance of the company.

Table2.

Independent	Dependent	Probability	Result	Probability	Result	Kind of	R-	Durbin-
Variables	Variables	F-Statistics		T-Statistics		relation	Square	Watson
OS_5BIG	ROA	0.000	Accept	0.001	Accept	Positive	.88	1.919
OS_5BIG	ROE	0.000	Accept	0.000	Accept	Positive	.97	1.901
OS_5BIG	MBVR	0.000	Accept	0.003	Accept	Positive	.83	1.819

According to Table (2) and being high R² and being significant and positive coefficient of the independent variable - the amount of ownership of five greater shareholders - in all three models, we can say that, whatever the amount of ownership of five greater shareholders be increased, the firm's performance will be better, significantly. Indeed, whatever the number of major shareholders in the firm's ownership is more makes sharing control among the majors shareholders, conflict of interest between them, decreases and returns of shareholders also will increase. When the shares of firm belongs to a few major shareholders, whereas the interests of companies are belongs to them, to this reason, the most of their efforts is for increasing profitability.

Third hypotheses

H0, 3: There is no statistically significant relationship between ownership percentage of the institutional shareholders and performance of the company.

Table3.

Independent Variables	Dependent Variables	Probability F-Statistics	Result	Probability T-Statistics	Result	Kind of relation	R- Square	Durbin- Watson
OS_INST	ROA	0.000	Accept	0.000	Accept	Negative	.74	1.912
OS_INST	ROE	0.000	Accept	0.001	Accept	Negative	.95	1.918
OS_INST	MBVR	0.000	Accept	0.000	Accept	Negative	.91	1.910

About third hypothesis, As you can see in Table (3), according to being high R² and being significant and negative coefficient of the independent variable - the amount of ownership of institutional shareholders - in all three models, can be said that, whatever the amount of ownership of institutional shareholders be increased, the firm's performance will be weakened, significantly.

Forth hypotheses

H0, 4: There is no statistically significant relationship between ownership percentage of the individual shareholders and performance of the company.

Table4.

Independent	Dependent	Probability	Result	Probability	Result	Kind of	R-	Durbin-
Variables	Variables	F-Statistics		T-Statistics		relation	Square	Watson
OS_IND	ROA	0.000	Accept	0.000	Accept	Negative	.87	1.903
OS_IND	ROE	0.000	Accept	0.001	Accept	Negative	.76	1.919
OS_IND	MBVR	0.000	Accept	0.000	Accept	Negative	.79	1.906

About fourth hypothesis, as you see above in table (4), according to being high R² and being significant and negative coefficient of the independent variable - the amount of ownership of individual shareholders - in all three models, we can say that, whatever the percentage of ownership of individual shareholders be increased, the firm's performance will be weakened, significantly.

8. CONCLUSION & RECOMMENDATIONS

Our research, complete another piece of this puzzle. Based on findings of this research, we suggest investors that in while buying and selling decisions, consider ownership structure's an important variable. Investors can select for investment, the companies that most percentage of ownership of their shares belongs to five greater shareholders as more suitable options. And attend to the negative

impact of the ownership of biggest shareholder and institutional shareholders and individual shareholder on firm's performance and take appropriate decisions. Finally we recommend to Re-Do this study for the following years since recent change in Jordan demography is already now taking place and take into considerations additional new variables like the Tobin's Q .

REFERENCES

- Ajlouni, Mohd Mahmoud (2007) "corporate governance and performance: the case of Jordanian stock companies" A research accepted for the world association of sustainable development (WASD), UK.
- Al- Haddad, Waseem.M, Saleh. T, Fares .J, (2011) "The Effect of Corporate Governance on the Performance of Jordanian Industrial Companies: An empirical study on Amman Stock Exchange", **International Journal of Humanities and Social Science**, Vol. 1 No. 4;
- Alipour & Amjadi, (2011)" The Effect of Ownership Structure on Corporate Performance of Listed Companies in Tehran Stock Exchange: An Empirical Evidence of Iran" **International Journal of Business and Social Science**, Vol. 2 No. 13
- Amba , Sekhar .M,2002," Corporate governance and firms' financial performance" **New York Institute of Technology, Bahrain**.
- Berle, A., Means, G. (1932). "The Modern Corporation and Private Property", **New York,MacMillan**.
- Black, B.S., Jang, H. and Kim, W. (2003), "Does corporate governance affect firm value?" paper presented at Workshop Paper, available at: www.law.uchicago.edu/Lawecon/ workshop-papers/black-jang-kim-stanford.pdf
- Brown, L.D. and Caylor, M.L., 2004, "Corporate governance and firm performance", Georgia State University working pape.
- Callen, J. L., Klein, A., & Tinkelman, D. (2003). Board composition, committees, and organizational efficiency: The case of nonprofits. Nonprofit and Voluntary Sector Quarterly, 32(4), 493–520. doi: 10.1177/0899764003257462
- Chiang Hsiang-tesi. (2005) "An empirical study of corporate governance and corporate governance", **Journal of American academy of business**.
- Chin, T., Vos, E., & Case, Q. (2004). Levels of ownership structure, board composition and board size seem unimportant in New Zealand. Corporate Ownership and Control, 2, 119–128.
- Cornett, M.M., Marcus . A .J ., saunders , A. , Tehranian , H. , 2007. "The impact of institutional ownership on corporate operating performance." **Journal of Banking & Finance** 31, 1771-1794.
- Demsetz, H. and Lehn, K. (1985), "The structure of corporate ownership: causes and consequences", **Journal of Political Economy**, Vol. 93, pp. 1155-77.
- Demsetz, H. and Villalonga, B. (2001), "Ownership structure and corporate performance", **Journal of Corporate Finance**, Vol. 7, pp. 209-33.
- Drobetz wolfgang, schilhofer andreas, zimmermann Heinz. (2004)" **corporate governance and expected stock return: evidence from Germany**", European Financial Management, vol.10, No.2pp267-293.
- Elayan, F., Meyer, T., & Lau, J. (2003). Executive incentive compensation schemes and their impact on corporate performance: Evidence from New Zealand since legal disclosure requirements become effective. **Studies in Economics and Finance**, 21, 54–92.
- Ehrhardt, O., Nowak, E. & Weber, F.M. 2006, "'Running in the Family': The Evolution of Ownership, Control, and Performance in German Family-Owned Firms, 1903-2003", SSRN eLibrary,.
- Farebrother, R. W. (1980). "The Durbin-Watson Test for Serial Correlation whin there is No Intercept in the Regression, **Econometrica** 48, 1553-1564.
- Garg, A. K. (2007). Influence of board size and independence on firm performance: A study of Indian companies. Vikalpa, 32(3), 39-60.
- Hossain, M., Prevost, A. K., & Rao, R. P. (2001). Corporate governance in New Zealand: The effect of the 1993 Companies Act on the relation between board composition and firm performance. **Pacific-Basin Finance Journal**, 9, 119–145.

- Kang, H., Cheng, M., & Gray, S. J. (2007). Corporate governance and board composition: Diversity and independence of Australian boards. Corporate Governance, 15(2), 194–207.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R.W. 1998, "Law and Finance", **Journal of Political Economy**, vol. 106, no. 6, pp. 1113.
- La Porta, R., Lopez-de-Silane, F. & Shleifer, A. 1999, "Corporate Ownership around the World", **The Journal of Finance**, vol. 54, no. 2, pp. 471.
- Morey, M., Gottesman, A., Baker, E., Godridge, B., 2008. "Does better corporate governance result in higher valuations in emerging markets? Another examination using a new data set". **Journal of Banking & finance**33 (2009) 254-262.
- Morck, R., Shleifer, A. and Vishny, R.W. (1988), "Management ownership and market valuation an empirical analysis", **The Journal of Financial Economics**, Vol. 20, pp. 293-315.
- Prevost, A., Rao, R., & Hossain, M. (2002). Determinants of board composition in New Zealand: A simultaneous equations approach. **Journal of Empirical Finance**, 9, 373–397.
- Prowse, Stepheb (1997), "corporate control in commercial banks", **Journal of financial research**. Vol.xx, No.4, pp 509-527.
- Reddy, K., Locke, S., & Scrimgeour, F. (2010). The efficacy of principle-based corporate governance practices and firm financial performance. **International Journal of Managerial Finance**, 6, 190–216.
- Reddy, K., Locke, S., Scrimgeour, F., & Gunasekarage, A. (2008). Corporate governance practices of small cap companies and their financial performance: An empirical study in New Zealand. **International Journal of Business Governance and Ethics**, 4, 51–78.
- Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. **Corporate Governance**, 15(2), 404–413.
- Sara Z.AL-Rewash, Khaled A. Alzeaideen, (2013)"The Effect of Ownership Structure on Share Price Volatility of Listed Companies in Amman Stock Exchange" **Research Journal of Finance and Accounting**, Vol. 5, No. 6, 2014
- Savin, N. E., and K. J. White. 1977. The Durbin–Watson test for serial correlation with extreme sample sizes or many regressors. **Econometrica** 45: 1989–1996.
- Shen, Chung-Hua and Chang, Yuen-Hsiang, (2005) "Do Regulations Affect Banking Performance? Government Governance may Matter" **Contemporary Economic policy**, vol.24, No.1, pp92-105
- Sheridan, A. and G. Milgate (2005). 'Accessing board positions: a comparison of female and male board members views', Corporate Governance, 13, pp. 847–855.
- Shleifer A. and R. Vishny. 1986. Large Shareholders and Corporate Control. **Journal of Political Economy** 94: 461-88.
- Thomsen S. and Pedersen T., (2000)." Ownership structure and economic performance in the largest European companies." **Journal of strategic management** 21, 689-705.
- Wruck, K. H. (1988), "Equity Ownership Concentration and Firm Value," **Journal of Financial Economics**, 23, pp.3-28.