

THE RELATIONSHIP BETWEEN INSTITUTIONAL AND MANAGEMENT OWNERSHIP AND FINANCIAL FLEXIBILITY IN IRAN

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Abstract

The aim of the current study is to investigate the factors affecting the companies' ownership structure and the effect of financial health and flexibility on these factors. The statistical technique used to test the hypothesis proposed in this research is panel data. R software used to test the hypotheses. The statistical sample consists of 786 observations in 8 industries as automotive industry, chemical, rubber and plastics, pharmaceuticals, cement-lime plaster, food except sugar, basic metals and machinery over the years 2009-2014. The findings show that a positive interrelation exists between the management share, percentage of institutional owners, rate of return and percent of company growth, and the company's financial flexibility strengthens the relationship between the percentage of institutional owners' share and managers' share.

Keywords: Ownership Structure, Debt Policy, Institutional Ownership

1. INTRODUCTION

Over the time, the human being chose the collective life rather than living in the caves or individual life based on rational considerations, and human societies were formed. Furthermore, he found companies as an appropriate format for performing the economic activities in order to reduce the costs and the number of trading, and then established the corporations for doing the great activities. According to Jensen and Meckling's agency theory (1976), due to the separation of ownership from management, the conflict of interest between the manager and owner would be inevitable because of seeking to maximize their own interests. Due to such conflict of interests, the owners should incur some expenses in order to align the representative's interests with themselves (Zahirul, 2010). According to Jensen and Meckling (1976), if there are conflicts of interest, managers due to the accessibility to the sources, and shareholders due to being remote from the control need mechanisms for the reduction of costs. One way of reducing the agency costs is using an appropriate ownership structure considered as one of the effective mechanisms of corporate governance for minimizing the costs associated with the separation of management and ownership. The evidence shows that due to the alignment of director and shareholder's objectives, the agency costs have been reduced in companies with high management ownership share (Frankfurter et al., 2003; Jensen and Meckling, 1976; Fazlzadeh et al., 1999). On the other hand, transferring the shares to the board of directors may lead to the trench management costs.

Different goals between investors, managers, and board members would create some problems for

companies, and the researches on the structure of ownership in order to find a way to control the companies by investors can reduce these problems. In this study, we aim to identify the variables affecting the ownership of manager.

2. THEORETICAL ISSUES AND RELATED LITERATURE

2.1. Corporate governance mechanisms

The theoretical principles of corporate governance include 6 different mechanisms in order to control the agency costs:

- Ownership structure (Jensen and Meckling, 1976; Schiffer and Vishny, 1986)
- Capital structure (Jensen, 1986)
- Board structure (Jensen, 1986)
- Managerial salary and compensation (Jensen and Murphy, 1990)
- Competition in product market (Hart, 1983)
- Integration of companies (Fama and Jensen, 1983) and (Jensen and Warner, 1988)

Though the theoretical analysis of corporate governance studies the mutual control mechanisms, the empirical literature highlights the role of this mutual relational mechanism and considers the corporate value as an outcome of these mechanisms. Since the major stockholding has been common throughout the world (except for the United States and the Scandinavian countries), this research indicates that the major stockholders' motivation and abilities to collect information and precise management control would reduce the agency costs (Kumar, 2003).

2.2. Ownership structure

The ownership corporate structure can affect the investors' investment decisions as one of the main mechanisms of corporate governance for controlling the managers and reducing the conflict of agency. The ownership structure refers to shareholders in a company. Every type of ownership can affect the corporate performance (Etemadi et al., 2009) because diversity in ownership can play a key role in controlling the management and reducing the representative costs; hence, it should be taken into account in investment and financial decisions by investors, creditors and other decision makers (Mohammadi et al., 2009).

2.2.1. Ownership structure components

Ownership concentration, management ownership, and institutional ownership are three features which specify the ownership structure of company in this study.

2.2.2. Ownership concentration

The ownership concentration refers to shareholders who own at least 5% of stock in a company. According to Schiffer and Vishny (1976), the major stockholders' efficient supervision will increase the corporate share value in line with the share value belonging to the major stockholders. The major stockholders' control will reduce the risk. On the other hand, the concentration of ownership will reduce the liquidity of stock market. Furthermore, the poor performance and high costs of bankruptcy in companies with high leverage force the major management stockholders to accept the additional risk which leads to the creditors' loss of wealth (Jensen and Meckling, 1976). Therefore, the value of company is increased by concentration of ownership at the lower levels (the effect of efficient supervision), but reduced with high levels of ownership concentration (effect of expropriation from minority shareholders) (Miguel et al., 2004).

2.2.3. Managerial ownership

The managers' ownership is defined as a stock percentage maintained by the board of directors. According to Jensen and Meckling (1976), the managers are willing to maximize their own interests and align the company resources with shareholders even in conflict with their interests, and thus minimize the conflict and accept the investment projects with positive net present value in order to maximize the corporate value (benefits convergence hypothesis). However, when the manager owns a considerable percentage of corporate shares, he will tend to take the advance of free cash flow in line with his own interests by investment projects with negative net present values because of sufficient effectiveness and maintained job position (manager opportunity-oriented hypothesis) (Miguel et al., 2004).

2.2.4. Institutional ownership

Institutional ownership is a percentage of shares held by major investors such as banks, insurance companies and investment organizations (Bushi, 1998). The institutional investors' roles have become

more important as the intermediaries of fund and saving transfer into the capital market and resource management in financial markets (Fakhari and Taheri, 2010). Algzar (1998) argues that the institutional shareholders, who have sufficient wealth and financial resources, have more tendencies to obtain and utilize more expensive and valuable information in order to predict the future profitability of companies compared to other investors. The institutional shareholders can change the corporate behavior with regard to the type of performed regulatory activities (Bushi, 1998) because the institutional shareholders have the same incentives to supervise management. Accordingly, the institutional investors can be classified into the passive (temporary) and active categories. The passive institutional investors have short-term and transient perspectives, pay more attention to current stock price, and prefer the current to long-term performance of company; in contrast, the active institutional investors have long-term perspectives and consider the long term corporate performance; hence, they have much motivation for employing a representative on the board of investee companies to monitor the management decisions actively (Ebrahimi-Kordlou et al., 2010).

2.3. Liability policy

The greater use of liability in the capital structure of company is considered as a mechanism for reducing the agency costs based on the agency theory literature because the greater use of liability in the capital structure of company reduces the conflicts of interest between managers and shareholders by reducing the financial need and through the equity (Jensen and Meckling, 1986). The hierarchy and stable equilibrium theories are two major theories about the corporate financing in financial literature. Based on the hierarchy theory, the companies follow certain hierarchies in financing. According to this theory, if there is an information asymmetry between extra-organizational managers and investors, the managers prefer financing from internal resources to external ones. In contrast, according to the stable equilibrium theory, the tax advantage of liability will increase the value of company with more liability. Furthermore, the corporate value is reduced by costs of possible financial crisis and bankruptcy due to the non-fulfillment of debt obligations in a timely schedule. In summary, the capital structure of company can be considered as a balance between the tax advantages of liability and costs of financial crisis and possible bankruptcy due to the liability (Bagherzadeh, 2003; Kimiagari et al., 2008)

2.4. Financial structure and financial distress costs

A company will have the financial distress when it is unable to repay the financial obligations to creditors. The debts of a company may be used to finance its operations, but then it would be more at risk of experiencing the financial distress. Therefore, if financial distress of company is not solved, it will lead to the bankruptcy (Haigins, 2007). The financial distress costs include the direct and indirect costs as described below:

Direct bankruptcy costs such as the wages and legal costs.

Indirect bankruptcy costs associated with the managerial problems and controlling a refining company.

The probability of bankruptcy is increased by reduction in income as the result of more emphasis on financing through liability. The increase in probability of bankruptcy will reduce the current value of company and increases its capital cost.

The leveraged firm will be less attractive for investment in the case of high financial distress and bankruptcy costs. The expected rate of return will be also increased if the debt rises.

The creditors and creditors initially bear the bankruptcy costs and probably transfer it to shareholders in higher interest costs in these companies that utilize the high leverage. Eventually, if the leverage is increased, the investors will have to reduce the stock price. Therefore, the tax exemption is neutralized because of leverage through increasing the expected costs of bankruptcy as well as the risk. Therefore, the optimal financial structure is where the additional leverage increases the expected bankruptcy costs in a way that it is exactly equal to the tax savings of liability.

The projects with higher risk are selected, and the management spends less money and fewer fringe benefits if the aim is maximization of stock market value. Therefore, if manager is a shareholder or earns profits from the interests of increased stock price, he will spend less money and tries to earn the maximum benefit from resources.

3. LITERATURE REVIEW

Kapopoulos and Lazaretou (2007) studied the effect of ownership structure on firm performance through data of 175 Greek companies. Their results clarify that the more centralized ownership structure is more positively correlated with higher profitability of company and there is a less requirement for ownership with less dispersion in order to achieve higher profitability.

Driffield et al., (2007) investigated the effects of ownership structure on the capital structure and firm value. According to results, the concentration of ownership has a significant positive impact on financial leverage and corporate value. Furthermore, the ownership concentration minimizes the agency costs.

Henry (2010) investigated the dependent variables agency costs, ownership structure and corporate governance in addition to many independent variables such as director's duality, funding through borrowing, and ownership of board and institutional ownership in Australian Stock Exchange companies. According to his results, the individual governance features do not have any significant impact on the agency costs of company, but it significantly reduces the higher coordination with strategic compatibility index and levels of agency cost in company both statistically and economically. Furthermore, there is a negative correlation between the cost of agency and compliance with corporate governance guidelines.

Fio li and Ting Kio (2014) conducted a research to assess how the tax and ownership structures of companies affect the balance of relationship between the director stock ownership and liability in order to reduce the agency costs. According to the results of

this study, the effective tax rate and control shareholders' percentage of stock are among the effective factors on correlation between the liability, director ownership and debt level.

Slobodan et al., (2015) studied the ownership structure and firm performance correlation which may be significantly strong and constructive in structures of transitional economies. In this study, they have found this correlation in the Republic of Serbia. They utilized an appropriate linear model for panel database of non-financial companies active on stock exchange during 2008-2013. They have much lower profitability than competitors after controlling the effect of firm size according to the situation, foreign ownership or dispersion. They have also argued that the lack of entrepreneurial spirit is an exacerbated problem of profitability.

Baratian and Salehi (2013) investigated the correlation between management resistance and capital cost. Their sample consisted of 55 companies listed on Tehran Stock Exchange during 2006 to 2009. Their results indicated that there was a significant correlation between management resistance and capital cost.

Namazi and Kermani (2008) studied the impact of ownership structure on the firm performance. According to their results, there is a significant negative correlation between the institutional ownership and firm performance, but a positive significant correlation between the corporate ownership and performance. The management ownership significantly and negatively affects the performance, but there is not any evidence indicating the foreign investors' ownership in sample companies. The major ownership is better to be available for corporate investors in the case of private ownership.

4. RESEARCH HYPOTHESES

The following hypotheses are postulated on the study:

H_1 : There is a significant correlation between the percentage of shares held by directors and percentage of institutional shareholders in a company.

H_2 : There is a significant correlation between the percentage of shares held by directors and percentage of growth in a company.

H_3 : There is a significant correlation between the percentage of shares held by directors and returns of a company.

H_4 : The financial flexibility of company strengthens the mutual correlation between percentage of institutional shareholders and percentage of shares held by directors.

H_5 : Corporate bankruptcy prediction variable reduces mutual relationship between percentage of institutional shareholders and percentage of shares held by directors.

5. RESEARCH METHODOLOGY

5.1. Measurement of research variables

This study utilizes the semi-experimental or post-event method and aims at investigating factors influencing the managers' stock.

This research is applied based on objective and has the interpretational-correlative type in terms of nature. Data collection is performed using *Rahavard Novin* software through obtaining direct information from financial statements. Financial statements of companies are taken from website of Tehran Stock

Exchange. The research hypotheses are examined after selection of sample companies and collection of relevant information as well as processing this information using Excel spreadsheet and R software.

The test model is as follows:

$$MSO_{it} = \alpha_0 + \alpha_1 DR_{it} + \alpha_2 ROA_{it} + \alpha_3 INST_{it} + \alpha_4 Growth_{it} + \alpha_5 DIVY_{it} + \alpha_6 Beta_{it} + \alpha_7 (Beta_{it})^2 + \alpha_8 Size_{it} + \beta_9 INST_{it} \cdot CASH_{it} + \beta_{10} INST_{it} \cdot Z\text{-SCORE}_{it} + \mu_{it} \quad (1)$$

Measurement of dependent variable:

MSO: Managers and board members' stock percentage

Measurement of independent variables:

INST: It is the institutional ownership percentage of companies measured by stock percentage belonged to banks, insurance companies, investment funds, investment companies, etc. The large institutional investors will be able to supervise the director's activities and minimize the agency problems (Jiraporn and Kitsabonart, 2012).

GROWTH: It is the growth rate of company measured by ratio of corporate stock value to book value of equity. This ratio represents the investment opportunities of companies. The supervision of manager's measures will be more difficult when this ratio is high in company.

ROA: It is the current operating income divided by total assets and is applied to measure the corporate profitability. The increased ratio will lead

to the more resources entered into the companies, and thus the managers will take benefit from additional revenues. Therefore, more attention is paid on supervision of manager's measures in these companies and this can be achieved by solutions such as increasing the manager's stock. The managers often paid attention to profit margins and ignored the turnover times, while the supervision of operational assets is the managers' one of the most important tasks. If the additional assets are applied in an operation, it means that the operating costs are increased. According to the important benefits of ROA formula (return on assets), the managers are forced to control the operational assets together with controlling the costs, net profit rate and sales volume. Nowadays, the ROA formula (return on assets) is one of the most important criteria for measuring the managers' efficiency especially for supervision of investment centers.

CASH variable: This variable is used for grading financial flexibility of company and it is measured by formula below:

$$OZCH = \frac{\text{Total cash and short-term investment of company at the end of year}}{\text{Total assets at the end of year}} \quad (2)$$

It is equal to 0 and 1 as a dummy variable.

1 = If the excluded cash of company is higher than the total mean of companies.

0 = If the excluded cash of company is lower than the total mean of companies.

Z-SCORE Variable: It is a bankruptcy prediction variable measured by Altman model and predicts the corporate bankruptcy through financial ratios. The model consists of 4 variables with obtained coefficients through discriminant analysis and implemented as a function in which the financial ratios are its independent variables. Altman value of company can be calculated on this basis.

$$Z = 0.6X_1 + 6.72X_2 + 3.26X_3 + 6.56X_4$$

X1= Book value of shareholders' equity divided by total debt

X2= Earnings before tax and interest

X3= Retained earnings of company

X4= Working capital of company

It should be noted that:

The companies are bankrupt if Z-values are less than 1.8; they are totally healthy if Z-values are more than 2.99, but there is no classification for values between these two.

Measurement of control variables:

DTVY: The previous studies for instance by Jensen et al. (1992) have argued that the payment of dividends reduces agency cost in company. The

distribution of dividends will force the managers to finance in capital market. Therefore, the creditors will begin the accurate exploration and supervision on corporate issues and this will reduce the agency costs (Ko, 2013).

BETA: It refers to the beta coefficient at the end of each year and is obtained by *Rahavard Novin* software. The beta coefficient indicates the business risk of company. If the business risk of company is high, the managers are reluctant to invest their capital in companies. The beta is also used for controlling the nonlinear effect potential of MSO (Chen and Steiner, 1999).

SIZE: It refers to the natural logarithm of total assets in company. Large companies have institutional shareholders and this leads to a more accurate and high quality supervision over managers' activities (Kadapakam and Kumar, 1998).

DR: It refers to long-term debt of company divided by market value of equity. It should be noted about financial leverage degree that the higher ratio will lead to higher financial risk degree of company because if the financial leverage is increased, the earnings per share may become negative by a relative small decrease in profit before interest and tax, and thus the managers will lose their motivation in order to increase investment.

5.2. Statistical population and sample

The statistical population of this study consists of manufacturing companies listed on Tehran Stock Exchange in a 6-year period of 2009-2014. The following restrictions have been considered for selection of companies:

1) Company should be accepted in stock exchange before 2009 and have continued membership up to 2014.

This restriction is applied since the research variables should be available for 2009. Therefore, the target company should be active in the whole 2009.

2) The financial periods of companies should be finished at the end of solar year in order to enhance the comparability and homogeneity of companies in terms of time period.

3) Banks, investors and holdings are excluded from target population due to different investment.

131 companies or 786 years-companies are selected as the samples after application of limitations above and investigating all companies of population.

5.3. Analytical research model

This research utilizes the panel data and regression model and analyzes data through R software.

6. DATA ANALYSIS AND HYPOTHESIS TEST

6.1. Descriptive statistics

The descriptive statistics indicate values of dispersion and central indices. The knowledge about the descriptive statistics is a step towards understanding the mean data procedure and correlation between them as well as investigating the distribution status. This section describes the most important descriptive statistics associated with studied variables. The mean is the main central index, which reflects balance point and center of distribution gravity, and a good index for indicating the data centrality. For instance, the mean of manager stock index variable is equal to 64.379 indicating that most of data is concentrated around this point. The median is another central index referring to population status. According to the results, the median debt variable is equal to 0.089 indicating that a half of data is less than this value and the rest of them higher than this value. The standard deviation (SD) is one of the most important dispersion parameters as a criterion for determining the dispersion of observations from mean.

Table 1. Descriptive statistics

Variable	Median	Mean	Min	Max	S.D
MSO	57.041	64.379	0	100	29.331
ROA	0.17124	0.143845	-0.3342	2.206	0.1813032
DIVY	0.000086	0.000052	0	0.001	0.0001033
INST	75.136	82.8	0	100	26.151
GROWTH	5.543	3.032	0.15	43.963	6.32
DR	0.089821	0.049301	0	1.24	0.1227047
BETA	0.537303	0.427114	-7.5644	6.264	1.039
SIZE	13.64	13.511	10.086	18.817	1.446
Z.SCOR	2.21679	2.499654	-9.58132	10.2589	5.472565
CASH	0	0.278626	0	1	0.44885

6.2. Hypotheses testing

We should perform the tests for selecting the appropriate model before implementation of model. The results are summarized as follows.

6.2.1. Selection of integrate and panel data methods (F-Limer test)

F-Limer test is utilized to select the integrated or panel data. F-Limer test indicates that the panel method of fixed effects should be utilized at the error level of 5% between the OLS and fixed effects panel methods.

Table 2. Selection of methods

Type of test	Statistics	P-value	Result
F-Limer test	F-Statistic= 10.052	<2.2e-16	Panel data model

6.2.2. Accurate model detection and identification test (Hausman test)

Hausman test is utilized after selection of panel data model in order to detect and identify the applied model and identify whether fixed effects model or

random effects model is the subject of estimation method. According to the results of this test, the fixed effects model is acceptable.

Table 3. Selection of methods

Test	Statistics	P-value	Result
Hausman test	Chi-square statistic=185.97	<2.2e-16	Fixed effects model

6.2.3. Selection test of effects model

POOL test is applied to test fixed effects model or fixed time effects of random impact. The test results of model are presented as follows:

Table 4. Results of Pool test

Time integration test (POOL)	F-Statistic= 0.75624	<2.2e-16	It is impossible to integrate time
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Therefore, the panel model of integrated data is approved based on the table above.

6.2.4. Godfrey test

This test is applied to test whether applied data has serial autocorrelation. The obtained results indicate a serial correlation, and thus we should use the generalized regression model.

Table 5. Result of pre-test on hypotheses of model to select the appropriate method

Chi Square statistic	Degree of freedom	Significance level	Result
230.54	1	<2.2e ⁻¹⁶	Application of generalized regression model

We implement the MSO model after determining the proper regression model as follows.

Table 6. Results of generalized regression model

Variables	Parameter estimation	Standard deviation of error	P - value
Intercept	19.951946	1.2369	0.216111
INST	0.287420	0.05119	1.845e ^{-08***}
Growth	0.147220	0.16013	0.0355829
ROA	9.421206	4.6864	0.045245
DR	0.21144	1.453	0.003572**
DIVY	6942.576786	7468.68	0.353209
Beta	-1.075775	0.6626	0.103961
Size	0.903573	1.188	0.445300
INST * Z-SCORE	6.136e ⁻⁶	1.621e ⁻⁶	0.1233
INST * CASH	2.963e ⁻¹⁸	3.976e ⁻⁶	0.0454

INST coefficient is significantly positive according to the regression coefficients and indicates that a majority of Iranian companies are run by institutional owners and the managers are in fact the representatives of organizations in companies.

The ROA variable indicates the rate of return and has a significant positive correlation with manager's percentage of ownership. If ROA ratio is higher, the more resources will be entered into companies, and thus the managers take the personal advantage of additional revenues. INST*CASH coefficient is also positive and significant indicating that the degree of financial flexibility strengthens the positive correlation between the institutional owners and managers' stock.

7. CONCLUSION

This research studies the impact of institutional ownership stock percentage, the growth rate of company, the rate of return on ownership structure, as well as effect of financial flexibility and bankruptcy prediction variables on correlation between ownership structures through analysis of financial data in companies listed on Tehran Stock Exchange through R software. The first hypothesis test results refer to a positive and significant correlation between

institutional shareholders and managers' ownership percentage and indicate that the percentage of management stock is increased due to purchasing shares by institutions and companies because most of companies in Iran are run by representatives of institutional shareholders. Our results are consistent with findings of research by Asadi (2011).

The second hypothesis results indicate a significant positive correlation between percentage of company growth and management ownership. In this regard, the managers prefer to invest in companies with greater growth. The third hypothesis results suggest that there is a significant correlation between rate of return on assets and management ownership percentage. According to this argument, the managers prefer to invest in companies with higher return on assets. According to the fourth hypothesis about the impact of liquidity on correlation between percentages of management ownership and institutional stock, the increase in liquidity will strengthen the correlation between institutional stockholders and company owners. The last hypothesis, indicating that the bankruptcy variable reduces the mutual correlation between institutional shareholders and company owners, is not confirmed.

8. RESEARCH LIMITATIONS

The limitations of this research are presented as follows:

- The first research limitation refers to the data collection of research. Obviously, the information on the number and percentage of shares has not been fully disclosed in some cases due to the lack of full data disclosure to assembly.

- If the time period of research was considered for a longer period, it would have more interoperability, but if more years were considered for sample selection, the number of member companies and statistical samples would be reduced, and thus it would lead to reduced validity.

- Some mistakes may have occurred during data collection, for example, some of the company's financial statements available in the database of the Stock Exchange are scans with very low quality that leads to misread the numbers. Moreover, the data from Rahavard Novin software used in this study is also experiencing difficulty. Of course we tried to compare the seemingly anomalous data with other databases and ensure their accuracy.

9. FURTHER TO THE STUDY

With regard to research topic and since it is conducted in stock companies, this subject can be attractive for stock brokers, corporate managers, potential and active investors in various sectors such as institutional, public and legal investors, accounting and financial management teachers and students and other individuals who are interested in this topic. Therefore, the following suggestions are offered based on obtained results and performed analyses in this chapter:

1)Tehran Stock Exchange is suggested considering the results of this research to improve investment in companies;

2)With regard to the effect of ownership type on agency costs and its correlation with debt costs, the investors are suggested paying more attention to managers' rates of stock in order to achieve a profitable investment.

3)The future studies are recommended paying attention to other variables for controlling the effective variables in order to measure this correlation such as the audit reports and increase in board members' capital and compensation.

REFERENCES

- Asadi, Gholam-Hossein, Mohammadi, Shapur, Khorram, Esmaeel (2011). The relationship between capital structure and ownership structure, accounting knowledge quarterly, Vol. 4, pp. 29-48.
- Bagherzadeh, Saeed (2003). Explaining the pattern of capital structure of listed companies on Tehran Stock Exchange. Journal of Financial Research, Vol. 5, No. 16, pp. 23-47.
- Baratiyan, Somayeh. Salehi, Mahdi. (2013). The Effect of Management Entrenchment capital. Pakistan Journal of Commerce and Social Sciences, Vol. 7, No. 1, pp. 19-26.
- Brailsford, T. J., Oliver, B. R., & Pua, S. L. H. (2002). On the relation between ownership structure and capital structure. Accounting and Finance, Vol. 42, pp. 1-26.
- Bushee, B. J. (1998). The influence of institutional investors on myopic R&D investment behavior. The Accounting Review, Vol. 3, pp. 305-333.
- Chen, C. R., & Steiner, T. L. (1999). Managerial ownership and agency conflicts: A nonlinear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy. Financial Review, Vol. 34, pp. 119-136.
- Cheng, Few Lee. Nan, Ting Kuo (2014). Effects of ultimate ownership structure and corporate tax on capital structures: Evidence from Taiwan. International Review of Economics and Finance Vol. 29, pp. 409-425.
- Driffield, N. L. & Pal, S. (2007). How does ownership structure affect capital structure and firm performance? Recent evidence from East Asia. Economics of Transition, Vol. 15, No. 3, pp. 535-573.
- El- Gazzar, S. M, (1998). Predisclosure information and institutional ownership: A cross-sectional examination of market revaluations during earnings announcement periods. The Accounting Review, Vol. 73, pp. 119-129.
- Etemadi, Hussein, Babajani, Jafar, Azar, Adel and Dianati Deilami, Zahra (2009). The impact of organizational culture, concentration of ownership, and ownership structure on the quality of the financial information of listed companies on Tehran Stock Exchange, Journal of Management Sciences, Vol. 4, No. 15, pp. 59-85.
- Fakhari, H., Taheri, E. (2010). The relationship between institutional investors and volatility of stock returns of listed companies in Tehran Stock Exchange. Journal of Accounting Research, Vol. 2, No. 4, pp. 159-172.
- Fama, E., and Jensen, M., (1983), Separation of Ownership and Control, Journal of Law and Economics, Vol. 26, pp. 228-307.
- Frankfurter, G., Wood, B. & Wansely, J. (2003). Dividend policy theory and Practice. CA: Academic Press.
- Hart, O.D., (1983), The market mechanism as an incentive scheme, Bell Journal of Economics Vol. 14, pp. 366-382.
- Henry, D., (2010). Agency cost, ownership structure and corporate governance compliance: a private contracting perspective, Pacific-Basin Finance Journal, Vol. 18, pp. 24-46.
- Jensen, G. R., Solberg, D. P., & Zorn, T. S. (1992). Simultaneous determinant of insider ownership, debt, and dividend policy. Journal of Financial and Quantitative Analysis, Vol. 27, pp. 247-263.
- Jensen, M. and Meckling, W., (1976). Theory of the firms: Managerial behavior, agency costs and ownership structure, Journal of Financial Economics. Vol. 3, pp. 305-360.
- Jensen, Michael C. (1986). Agency costs of free cash flow, corporate finance and takeovers. American Economic Review, Vol. 76, pp. 323-329.
- Jiraporn, P., Kim, J., Kim, Y., & Kitsabunnarat, P. (2012). Capital structure and corporate governance quality: Evidence from the Institutional Shareholder Services (ISS). International Review of Economics and Finance, 22, 208-221.
- Kadapakkam. P.R., Kumar. P.C, Riddick. L.A. (1998). "The impact of cash flows and firm size on investment: The international evidence". Journal of Banking & Finance. Vol. 22, pp. 293-320.
- Kapopoulos, P. and S. Lazaretou. (2007), Corporate ownership structure and firm Performance: Evidence form Greek firms. Corporate Governance: An International Review, Vol. 15. No. 2, pp. 144-158.
- Kimiagari, Ali Mohammad and Einali, Sodabeh (2008). Providing a comprehensive model of capital

- structure. *Journal of Financial Research*, Vol. 10, No. 25, pp. 91-108.
23. Kordlar Ebrahimi, Ali, Moradi, Mohammad and Eskandar, Hoda (2010). Effect of institutional ownership on the performance of companies listed on Tehran Stock Exchange, *quarterly journal of accounting and auditing research*, Vol. 2, No. 8, pp. 104-109.
24. Kuo, N. T. (2013). Dividend tax signaling and the pricing of future earnings: A case of taxable stock dividends. *Review of Quantitative Finance and Accounting*, Vol. 40, pp. 539-570.
25. Miguel, A., Pindado, J., & de la Torre, C. (2004). Ownership structure and firm value: New evidence from Spain. *Strategic Management Journal*, Vol. 25, pp. 1199-1207.
26. Mohammadi, S., Ghalibaf, H., Meshki, M. (2009). The effect of ownership structure (concentration and composition) on the performance and value of companies listed in Tehran Stock Exchange. *Journal of Financial Research*, Vol. 11, No. 28, pp. 69-88.
27. Moon, D., & Tandon, K. (2007). The influence of growth opportunities on the relationship between equity ownership and leverage. *Review of Quantitative Finance and Accounting*, Vol. 29, pp. 339-351
28. Shleifer, A., Vishny, R (1986). Large shareholders and corporate control. *Journal of Political Economy*, Vol. 94, pp. 461-488.
29. Slobodan Čerović, Nemanja Stanišić, Tijana Radojević and Nikica Radović, (2015), the impact of ownership structure on corporate performance in transitional economies, *Economic Interferences*, Vol. 17, No. 38, pp. 441-454.
30. Zahirul Islam, M. (2010). Agency problem and the role of audit committee: Implications for corporate sector in Bangladesh, *Journal of Economics and Finance*, Vol. 2, No. 3, pp. 177-188.