# Determinants of the Managerial Behavior of Agency Cost and its influential extent on Performance: A study in Iraq

## Prof. Dr. Moayad Mohammad Ali Fadhl Alfadhl

College of Administration and Economics, Accounting Department Al-Qadisiya University, Iraq

## Tariq Tawfeeq Yousif Alabdullah

College of Administration and Economics, Accounting Department University of Basrah, Iraq.

PhD. Student School of Management, University Sains Malaysia 11800 USM, Penang, Malaysia.

## Abstract

This study aims to investigate the relationship between some determinants of managerial behavior and agency cost from one hand, and the impact of this relationship on firm performance from the other. In order for this study to achieve its objective, the researchers examine three variables representing the determinants of managerial behavior, namely: managerial ownership, information asymmetry, and percentage of firm debts. The approach uses data of a sample of 27 firms distributed to three economic sectors: banks, industry and services. The findings in relation to ownership variable confirm there is a significant and non-linear correlation between managerial ownership and agency cost of ownership; and such relationship is affected by firm performance. As for the other two variables, the findings show there is no relationship between them and agency cost and no impact of performance on this relationship.

Key Words: Agency cost, managerial ownership, information asymmetry, debt ratio, performance, Iraq

## 1. 1 Introduction

Against the backdrop of the phenomenon of absent ownership, the agency theory emerged as one of the theories of the company, as whereby the company is explained as a set of contractual explicit or implicit relationships between two parties: the shareholders (the principal), and management (agent), based on which the second party is tasked to perform certain activities for the first party and authorized to take decisions on his behalf. This relationship is based on several key hypotheses (Kim and Nofsinger, 2007; Moldoveanu and Martin, 2001; La Porta et al., 2000; Hill and Jones, 1992; Eisenhardt, 1989):

- 1. Management is as a person or persons characterized by diligence and awareness; in that they know their interests; so they seek to maximize their expected benefits which, in turn, will determine their behaviors and decisions.
- 2. Based on the above, management seeks to maximize their own benefit even if at the account of shareholders . Here, some sort of interest conflict will arise, and that needs some mechanisms to reduce the opportunities of conflict at the minimum.
- 3. With the recognition of interest conflict between the two parties, yet this does not deny the recognition of the common positive ones between them, and focused on ensuring the continuation and success of the company.

Accordingly, Agency Theory investigates the economies and behaviors of the role of these two parties based on four rules; first is economic analysis within the company; second is behavioral analysis of the groups that make up the company; third is accounting analysis for agency cost as an inevitable result of conflict between shareholders and management; and the last of these rules is the legal analysis of contract which should be done between all parties to solve problems (Chen and Fang, 2011).

Within this context, Jensen and Meckling (1976) demonstrate, within the framework of shareholders' and management's behaviors, that the role of management represented by being delegated by shareholders to manage available financial resources of the company and negotiate with all concerned parties on their behalf, must be in such a way that achieves positive outputs exceeding the opportunity cost in which those resources could be utilized and shareholders' wealth maximized. They explain that such a case is achieved in its most acceptable form when management is represented by the company's only owner, where this will lead to the compatibility of interests between the management and the shareholders, thus the conflict of interests disappears. But when the capital of the company is fragmented over a great number of shareholders, and the need to rely on outside managerial expertise out of shareholders appears, this will create concern for shareholders' interests, especially when the management doesn't have the right to get cash flows achieved from its outstanding performance of the company's recourses only of the agreed upon extent.

These differences between management control rights and those of shareholders regarding to cash flows may lead to a management deviation from its functional behavior from the perspective of maximizing shareholders' wealth through making decisions to increase their own benefit function and harm the shareholders' interests, especially regarding their residual claims represented by net cash flows remaining from performance outcomes or from net liquidation, from one hand; and this increases their exposure level to business risks arising from the variance between the expected cash flows of the available resources and the external cash flows agreed upon with management, on the other hand, which means the occurrence a conflict of interests leading to an agency problem which can be embodied in the form of practices of managerial opportunism by exploiting the incentive and rewards system, or creating management goodwill by making use of freedom available to choose among alternative accounting policies within the framework of intelligent disclosure of performance that ensures job stability and achieves direct and indirect gains. Associated to this agency problem are the high expenditures by managers and the lost revenues on shareholders' part due to the participation into non-profitable investments by shareholders or as it is known as " the problem of less investment ... etc.", affecting the interests of the shareholders in the company (Jensen , 2008; Zhao-guo et al. ,2007 ).

Many studies (Wu et al., 2011;Wang 2010) confirmed that agency problem is related to the extent of conflict between both management and shareholders' rights in cash flows, and extending the researchers' efforts in this vital respect, this study aims to present evidences derived from the Iraqi environment dealing with agency cost for ownership and the explanation of its relationship with some of the managerial behavior determinants for this cost, such as managerial ownership rate, information asymmetry, and indebtedness ratio, and then examining the difference of performance impact on the relationship between such determinants and agency cost for ownership.

### **1.2 Problem Statement**

The problem in the current study lies in the following questions:

- 1) What are the rates of growth of the agency cost of ownership in the period (2005-2008)?
- 2) Is the agency cost influenced by the determinants: ratio of managerial ownership, information asymmetry, and debt contracts?
- 3) Is there an impact for the performance on the relationship between such variables and agency cost of ownership?

### 1.3-Significance of the study

The importance of the study comes from its theoretical and practical sides. Theoretical importance comes from highlighting an important subject related to agency theory, namely the problem of agency cost for ownership through demonstrating the concept of agency cost for the ownership, its most important measures and its relatedness with some variables from one hand, and the impact of performance variance, on the other hand. The practical importance lies in presenting evidence about agency problem for ownership in the Iraqi companies for guidance to reduce agency cost and improve some of financial policies having significant impact on and upgrade the financial performance in such a way that increases the value of the company in the Iraqi financial market, particularly the Iraqi business environment lacks such frameworks in addition to having the phenomenon of managerial opportunism.

### 2.1 Theoretical Background

### 2.1.1-Concept of agency cost for ownership

It is the cost which arises due to conflict of interests between shareholders and managers. Jensen and Meckling (1976) classify agency cost into costs of monitoring managers by shareholders, bonding costs, and residual loss. In support of this opinion, (Watts and Zimmerman ,1990; Hill and Jones ,1992) consider the agency costs by giving examples on agency costs such as expenditures resulting from principal's monitoring, the managers' bonding expenditures, and residual loss. They show that these costs appear due to the differences in interests and actions from both principals and managers and that will affect eventually on principals' benefit, and in such a way on firm value. There are other viewpoints for Harris and Glegg (2009) who believe that agency cost may arise and also increase in case of restricting the shareholders right.

2.1.2- Determinants of managerial behavior towards emergence of agency cost for ownership: relevant researchers admit that within the context of agency theory, the reasons for agency cost for ownership could be attributed to one or more of the following managerial behaviors:

Control rights and the emergence of managerial ownership: since the time of the pioneering study by the economists Berle and Means (1932) which confirms what has been mentioned by Adam Smith over three centuries in his book titled "The Wealth of Nations" in which he warned of the potential problems of the corporate absent ownership when he raised the issue of separation between ownership and stewardship in the joint-stock corporations, mentioning that managers of other people's money cannot be expected to be as careful as if they owned this money. Ever since, absent ownership has been considered as one of the most important agency cost sources. Due to the separation between ownership and management, shareholders will be in a position of being unable to understand and distinguish all acts and decisions made by managers, making it difficult for them to recognize whether managers seek to maximize their wealth or otherwise. Several studies (e.g, Fama and Jensen, 1983; Fleming et al., 2005; Dan and Xiao-yu, 2010; Chuang et al., 2010) show practical evidence explaining that increasing separation level of ownership and managerial control rights lead to the inevitability of increased agency cost. They demonstrate that there is a strong correlation between the managerial control rights in cash flows and agency problems. They admit that in the case of increasing managerial control rights (represented by managerial ownership) in cash flow, this will lead to motivate management of the company to work hard to maximize its personal wealth. As long as management wealth is related to other shareholders' wealth in the company, no conflict of interests will be existent; in that, no agency problems and no agency costs.

Nevertheless, other studies such as (Wang, 2010; Jun et al. 2008) have another opinion that lies in the notion that in case of increased managerial ownership in the company's capital, this gives the managers immunity against punishment. Consequently, it will create a new kind of conflict that lies in the management's controlling on the cash flows of the company and could involve in other projects to maximize their benefit apart from shareholders' benefit. On the other hand, to own a part of the company's capital is not harmful or not useful; several studies admitted such a notion by explaining the important role of managerial ownership which has the motivation role to make the managers keen to maximize profitability of the company and reduce agency cost of its ownership (see for example; Margaritis and Maria , 2010; Chen et al., 2006). As a result, managerial ownership is a double-edged sword. One edge is represented by shared benefits which arise from the fact that a manager having a stake in the capital is logically seeking to maximize both his wealth and that of others as well. The other edge is the negative side represented by the managers' bad intention to direct company's resources for their personal benefit which eventually affects shareholders' wealth.

• Information asymmetry, the nonconforming information is another source of the problems of agency conflicts. Managers provide information in their reports when readers expect that this information reflects a good situation of work progress, while managers utilize this information to achieve performance and decisions leading to achieve their own interests and create negative impacts on shareholders' interest. In support for this idea, Harris and Raviv (2010) admit that the information would never be fully revealed on the part of the managers due to agency problems.

addressing information The early beginnings of asymmetry might be made by the economist Hayek (1945) who emphasized the importance of knowledge and how knowledge and its distribution have an active role in contributing to economic development. That was when he dealt with the nature of the economic problem in society in his article titled "The use of knowledge in society". Hayek demonstrated that the organization's good performance depends on the importance of knowledge possessed by a decision maker; but unfortunately, he did not deal with the cost of knowledge transfer to the decision maker; so he was criticized by Jensen and Meckling (1995) as they manifested that it was necessary to take into account the cost associated to knowledge transfer. They, however, praised the great role played by Hayek in demonstrating the importance and role of what is called "information asymmetry" which occupied a wide scope in the literature on agency conflict.

• Debt contracts: Lenders seek in most cases to make contracts between them and company's management whereby they determine some restrictions to limit making farther decisions from the management side, where such decisions may negatively affect company's ability to accomplish its obligations, such as reducing the issuance of new debt or specify a maximum of dividends and set a minimum limit for liquidity and debts (Shi and Xiao – Zhong, 2011). These contracts are considered among the main determinants of management is subject to strong control by capital market members represented by investors, creditors, banks, etc. secondly , making debt contracts leads to increasing company's financial risk, which may lead to motivate managers to reduce agency cost to keep on the financial ability of the company to meet debt and burdens on time (Harvey et al.,2004).

### 2.2 Literature Review

### 2.2.1-Previous Foreign Studies

### - **Pinteris** (2002) conducted a study entitled:

"Agency Costs, Ownership Structure and Performance in Argentine Banking".

This study empirically investigates two main objectives: first is related to the reality of banking sectors in Argentine. Such objective proves the agency problems existence between stakeholders and management, from one hand, the stakeholders and government represented by banking institutions, from other hand. Second objective is represented by providing evidences related to the impact of bank ownership concentration on both agency cost and performance using available information related to banks in the period 1997-1999. The study reveals an inverse relationship between ownership concentration and performance. The study also concludes that the banks having high ownership concentration should have high risk on bank's loan portfolio; at the same time it does have a high agency cost as compared to other banks which have low ownership concentration. The results of this study also show a strong conflict between stockholders and the management of banks because of the asymmetric information and the stockholders' attempt to push the bank's managers towards investment on the account of deposits and reserves ratios.

## - Yuk-Chow So (2005) conducted a study entitled:

### "Agency Costs and Ownership Structure: Evidence From the Small Business Finance Survey Data Base".

The purpose of this paper was to show the impact of managerial effectiveness on agency cost of ownership and debts in light of the variety of ownership structure, debt contract and investment. This study uses the data of 1993, revealing that the managerial effectiveness has an important role to alleviate both agency cost of ownership and debts. The findings of this study recommended giving more attention to the important role played by management to lighten agency cost of ownership in light of differences of ownership structure, as well as to mitigate the debt contracts and investment policy impact on agency cost for ownership.

#### -Alford and Stangeland (2005) conducted a study entitled:

"Personal Taxation, Corporate Agency Costs and Firm Performance".

The study aimed at explaining the impact of taxation imposed on managers income being a kind of political cost, on the relationship between agency cost and performance. The study proposed that personal tax is important for both the efficiency of firm and agency cost. In addition, it has a negative impact on the managerial performance. The findings of this study conducted to compare the results of testing the hypothesis reached two different samples.

The first belongs to 1995 and is 1761 industrial and service companies in the United States and the second related to 2002 totaling 1785 companies in the same sector and country, reveals that the impact of personal- tax on the relationship between agency cost and performance is always negative.

## - Wang, (2010) conducted a study entitled:

"The Impacts of Free Cash Flows and Agency Costs on Firm Performance"

The purpose of this study is to investigate the relationship between free cash flow and agency cost, and investigate how such relationship could affect the firm performance through testing four hypotheses:

H1: There is a significant impact for the cash flow on agency cost.

H2: Both of free cash flows and agency cost have a negative impact on firm operating performance.

H3: The firm value is influenced negatively by free cash flow and stock return.

H4: The free cash flows and agency cost affect stock return.

The findings of the study conducted on Taiwan publicly-listed companies were focusing on three main points:

1. The free cash flows have significant effect on agency cost.

2. There is a positive effect for agency cost on firm performance and its stock returns in versus of the existence of positive relationship between free cash flow and firm performance and stock returns.

3. There is no significant effect to refer to the effect of agency cost on firm performance.

### 2.2.2-Previous Arabic studies:

-Mustafa (2006) conducted a study entitled:

This study provided a new measurement for agency cost of ownership represented by irregular risk related to the company. It supposed a model to interpret agency cost of ownership through two groups of determinants: First one is represented by causes behind agency cost arising between shareholders and managers, and the second determinant lies in the impact of financial policies on agency cost. Furthermore, this study used other two variables: company size and the field of company's activity.

This study was applied in sample of 40 Egyptian companies. Multiple regression analysis was employed to explore the accounting and market information for the period 2000-2004. The results support the integrity of the model, and the study also reveals the importance of information asymmetry and debt financing to increase agency cost of ownership.

The comparative analysis shows that the current study is similar to the previous studies regarding to examining the relationship between agency cost of ownership and some other factors associated with managerial behavior such as the percentage of managerial ownership, information asymmetry, and debt contracts. Nevertheless, in the researchers' knowledge, the current study offers a new contribution of investigating the impact of performance on such relation between these variables. Eventually, the debate of this subject in such area is another contribution being the first in Iraq.

### 3.0 Research Methodology

### 3.1 Hypothesis of the Study

The researcher made the following basic hypotheses according in the questions of the problem of the study:

H1: Agency cost of ownership in a year is equal to / less than the agency cost for the company in previous year.

H2: Agency cost of ownership is not affected by the determinants: percentage of managerial ownership, information asymmetry, and debt contracts.

H3: There is no effect of performance on the relationship between agency cost of ownership and all determinants managerial behavior. Consequently, there is no significant role of the three determinants in determining such a relationship.

## **3.2-Research Variables**

The study consists of independent variables (percentage of managerial ownership, Information asymmetry, and debt contracts), a moderator variable (Performance) and the dependent variable (Agency cost of ownership).

## 1. Independent Variables

In this section, the independent variables are listed below:

- 1. Management ownership ratio: It refers to the executive's shareholdings owned by the board of directors' members. There are differences about the modes of expression this variable made by the researchers. Some of them measured it by the common shares held by the board of directors divided by total common shares being outstanding; while some of them used the cumulative percentage to have more than 3% of the shares of percentage or percentage of shares owned by managers in the company (Chen et al., 2006; Alfadhl, 2007). The current study will use the common shares held by the board of directors divided by total common shares outstanding due to the possibility of providing information in Iraqi companies compatible with such a measurement. In order to test the impact of this variable on agency cost of ownership, the researches peruse to test the effect of this variable on the ownership agency cost of the, the researcher classified the sample companies into two groups using the mediator rate of management ownership, describing companies where the management ownership rate is higher than the value of the mediator as having high management ownership rate, whilst describing companies where management ownership is less than the mediator value as companies with a low rate. Table (1) shows distribution of the study sample according to the proportion of management ownership. It should be noted that the highest average rate of management ownership was in the banking sector due to the family nature of companies that dominate ownership highly on the management, distinguishing them from other companies that depend on job experience of non-owners in the management of its activities; in that a survey conducted by the researcher shows that 63.6% of executives in the banking sector companies are shareholders.
- 2. Information asymmetry: This variable has been measured by using the ratio of market value to book value being the measurement of growth and the opportunity of investment. Whenever this ratio raises, the information asymmetry level increases also with real difficulty for the investments and market to oversee the performance of managers. To test the effect of this variable, the researchers classified the sample companies into companies having high level of information asymmetry and others characterized with low level of information asymmetry as the same fact when classifying the managerial ownership as shown in the Table (1).

It is worth mentioning that the biggest gab between the users of accounting information and management in the company could be found in banking sector. The average ratio of information asymmetry in such a sector is 7.35% (as shown in Table (2)). The researchers believe that the reason for this is attributed to the high uncertainty in the disclosure of credit and investment portfolios, which is one of the critical success factors of banking activity.

3. Debt contract: This variable refers to the rate of debt measured by dividing the total debt to total assets. To test the effect of this variable, the researchers use the same way in classifying the companies' sample of the study following the managerial ownership and information asymmetry. It is noted in Table (2) that the highest average for debt ratio was for the banking sector due to the nature of the activity that is primarily dependent on savers' deposits.

#### 2. Dependent variable

Agency cost of ownership: It is measured using the same way done by Ang et al (2002) by using two alternative measurements: the expense ratio and the asset utilization ratio. The first ratio includes using the excessive expenses used by managers to get fancy things related to office, such as fancy furniture, resort properties, and automobiles. In this study, the researchers will depend on using the first ratio because it is related to the excessive expenses which are more common type of agency cost in Iraqi companies.

For agency cost of ownership for the selected sample, it has been identified on the basis of the difference between the average of operating expenses ratio for sample of 25 companies run by their owner with their counterparts (in the same year) in each company of the study sample and for each year of the study period between 2005 and 2008.

#### **3.** Moderator variable

Firm performance: This is represented by ROI. The reason to choose this measurement is that it reflects the extent of management's efficiency to observe the available resources of the company to maximize the wealth of shareholders, as the company's profitability is the result of effective monitoring of management to the shareholders for the good performance resulting from the good decisions made by the management. Furthermore, such variable reflects the management's ability to create flows necessary to ensure the survival of the company and its continuation in the market competition.

To test the determinants of the managerial behavior of Agency cost of ownership, the researchers classified the sample companies into two groups, by using mediator rate of return on investment, a segment of companies described the companies that have more return on investment than the mediator described as high-performing companies (the number of views of this segment is 62). For the other segment of companies where the rate of return on investment (ROI) is less than the mediator described as a low-performing companies (the number of observations is 46). It is worth noting that the highest rate of return on investment was for the banking sector with an average about 16.4%, while the industrial sector occupied less than the mediator rate of return on investment by 5.7% due to the strong competition for imported products and the absence of customs protection.

#### 3.3- Research Sample

Sample of the study consist of 62 companies registered in Iraq Financial Market in the period between 2005 and 2008. The choice of this sample was based on the large proportion of the company's operating expenses compared to the average of the community as a whole. It has reached 27 companies distributed to three sectors namely: Banking- 55.6%; Industrial-25.9%, and the rest is for Commercial and Service sector. To investigate that the sample is characterized by its high proportion of operation expenses, the researchers made the following hypothesis:

H: All companies in the study sample are characterized by the high proportion of their operating expenses.

The test of M.W came with the result to accept the hypothesis at the abstract level of 2.7%, and Table (2) explains the distribution of the sample according to the percentage of managerial ownership, information asymmetry, and debt ratio.

### 3.4- Research Model

Based on the study hypotheses and its variables, the model has been made follows:



## **Fig.(1)**

#### 4. Determine the appropriate statistical method to test hypotheses

Before choosing the appropriate method of statistical technique to test the hypotheses of the study and achieve its goals, it should test whether or not the distribution of the original community from which the sample is withdrawn naturally. For this purpose, the researchers use (Lillefor's test for normality) which is based on the arithmetic mean and the standard deviation of a single total assets of the study sample. Where the hypothesis has been tested:

H0: The data of the study sample computed from the original community is characterized by normal distribution at 5% level of significance.

The test was conducted based on the following form:

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T = \sup(x) | F^*(x) - S(x) |
Where:
Sup = Largest period or vertical distance between F*(x), S(x)
F*(x) = Normal distribution function
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#### S(x) = Distribution function test of the sample

After computing for S (x), it was found that the biggest difference or vertical distance between each of the F \* (s) and S (x) was 0.178, where the value of the indexed W.95 was less than the computed value of T, the null hypothesis was rejected. Thus, it should use nonparametric statistical tests; and for this purpose, the researchers will use Kendall correlation to measure the association between two variables and Kolmogorov–Smirnov test the differences between the two variables.

### 5.0 Analysis hypotheses and interpretation of results

#### 5.1 First Hypothesis

H1: Agency cost of ownership in a year is equal to / less than the agency cost for the company in previous year.

It is shown in Table (3) that the annual growth rate for the agency cost of ownership increased continuously over the years of the study, where the figure of the standard cost in 2008 was with average of 199.59 compared with what was in 2005, this is confirmed by the K-S test results that came rejecting the hypothesis for all years of the study. This means that the managers in the companies' study sample are marching towards using these costs to build empires in their companies which makes them immune against any punishment or decision of the shareholders. This is indicated by the statistical procedures done by the researchers about restricting the duration of managers survival in their position, showing that 74.1% of managers are still in the management' positions for five years. The researchers attribute this result to two main reasons: First is the weakness of managers' oversight because of the severe fragmentation in ownership structure with the high proportion of minority shareholders who lack the knowledge for how oversee the managers. Second is related to the managers in the companies' study sample in terms of the percentage of their ownership in the capital of the company, the average of managerial ownership in the sample of the study around 10.43%, which is relatively low compared with neighboring countries such as Jordan that reach about 30% (Al-shaip and Abu - Tapanjeh,2005).

#### **5.2 Second Hypothesis**

H2: Agency cost of ownership is not affected by the determinants: percentage of managerial ownership, information asymmetry, and debt contracts.

#### 1. Test the effect of the percentage of managerial ownership:

The researchers noted that there was a weakness in the relationship between average of agency cost of ownership and percentage of managerial ownership. This ratio didn't exceed 8.35%, but when the managerial ownership exceeds this ratio, that means its relationship with the average of agency cost becomes positive and significant but non-linear function as shown in Fig. (2).

#### $\operatorname{Fig.}(2)$ : Tendency of agency cost of ownership with the proportion of managerial ownership



Managerial ownership ratio

The researchers believe that such relationship is logical due to the large proportion of minority shareholders' contribution in the capital of the companies' sample of the study which is about 50%, and such a percentage will allow managers to invest in a portion of the net cash flows of the company through the exploitation of agency cost of ownership.

Because of rising this cost that will lead to inevitable necessity to reducing net cash flows of the company as well as the share of such flows, and because of the availability of high proportion of the shares of capital in the hands of minority shareholders, meaning the larger part of agency cost of ownership borne by minority shareholders.

KS test confirms the presence of statistically significant differences correlation between the size of the agency cost of ownership of the sample with a high proportion of managerial ownership and its counterpart in the other part of the low percentage ( see table 4).

## 2. Test the effect of information asymmetry

As shown in Table (5), the results of Kendal measures of correlation are listed; there is an absent and significant statistically correlation between information asymmetry and size of agency theory despite the high percentage of market value of the stock to its book value in most of the companies' sample of the study during the years of the study, which means based on this measurement, the difficulty of monitoring by shareholders and customers in the financial market to the performance of managers is allowing the latter an opportunity to spend more of agency cost. The researchers believe that before admitting this result, it is necessary to examine the relationship between the market value of the shares and book value in order to verify the reliability expression of this ratio about information asymmetry variable because the Iraqi market Stock Exchange is one of the weak markets due to the poor response to accounting information disclosed in the financial statements of companies, as the value of the stock in the market is not determined according to company data, but accordance with mechanisms of supply and demand or speculation, and sometimes the information leaks and rumors. This makes the researchers believe that the capacity gap between the two values is large. Therefore, the researchers measure Kendal correlation for two values as shown in Table (6). It reveals and conforms the belief of researchers. The table shows that there is an absence correlation between the market value of stock and its book value. We conclude that this ratio is not active to express the information asymmetry variable, and can't be described as a determinant of management behavior in the field of agency cost for the companies listed in the weak financial markets. This conclusion confirms the test results of K-S that didn't show statistically significant differences between the size of the agency cost of ownership in the part of the sample with a high level of asymmetry and its counterpart in the other part of the sample with a low level of information asymmetry.

## **3.** Test the effect of debt contracts

As shown in Table (7), the result of statistical test again came according to what was perceived, where test results of Kendal measures show lack of a statistically significant relationship between the ratio of debt and the size of the agency cost of ownership. As well, K-S test doesn't show statistically significant differences between the size of the agency cost of ownership in the part of the sample that has high debt ratio and its counterpart in the other part that has low debt ratio. This means that this variable is not determinant to the management behavior of spending agency cost of ownership in the case of Iraq, such conclusion may be extremely correct in spite of its incompatibility with the results of many previous studies because of the limitation of adaptation of the Iraqi companies on debt and loans to finance their financial needs and because of the lack to such a kind of finance.

## 5.3 Third Hypothesis

H3: There is no effect of performance on the relationship between agency cost of ownership and all determinants managerial behavior. Consequently, there is no significant role of the three determinants in determining such a relationship.

1. The influence of performance on management ownership ratio Table no. (8) shows there is a strong inverse correlation between management ownership ratio and agency cost of ownership in the sample that its performance is low, where in this segment, the ownership agency cost decreases whenever the management ownership rate increases, and vise versa. The reason of this is that the managers here who have a large proportion of capital stock peruse to reduce agency cost of ownership in the desire to improving the profitability of the company because such improvement has a positive effect on the share price in the financial market. The interpretation about managers behavior, in case they have low ownership ratio in the company, to increase agency cost is their desire to use such cost to maximize their own benefit, especially the incentives and rewards system in the company being not associated with a net profit, while in the high-performance sample, the relationship is strong and there is positive correlation between management ownership ratio and agency cost of ownership.

- 2. The influence of performance on information asymmetry
- Despite the market value ratio of the share to its book value in the segment of companies has highperformance that look less than their counterparts in low-performing companies, but the comparative analysis of the correlation between this ratio and the agency cost of ownership within the two segments didn't show effect of the performance on such relationship, where Kendal test reveals the acceptance of the hypothesis. Thus, this result confirms the explanation brought by the researchers for the absence of relationship between information asymmetry and agency cost of ownership (see table 9).
- 3. Performance impact on Debt Ratio Table (10) shows that there is no effect of performance on the relationship between debt ratio and agency cost, where the results showed no statistically significant relationship between the two variables in both segments of the companies. Thus, this study doesn't support the assumption by Jensen and Meckling stating that financing by debts compared with ownership consequent increases managers ownership ratio to aligning the interests between the principals and the agents, and then alleviate the agency problems.

### 6. Conclusions and Recommendations

### Conclusion

- 1. There is a conflict of interests and increase in agency problems in Iraqi companies that led to high agency cost rate in such companies.
- 2. Management ownership ratio is considered as important economic motives in agency problems in the case of Iraq and therefore it has to be drawn to its risk increasing.
- 3. The difficulty to computing information asymmetry variable in Iraq by the market value of shares to its book value, or even by standard deviation of the market returns of stocks due to the fact that the Iraqi securities market is a very weak market that doesn't respond to the companies' requirements. Hence, it is not possible for shareholders and for market participants to monitor performance of managers. Thus, it should look for other indicators suitable to the case of Iraq.
- 4. The limitation of important role played by debt ratio to force the managers towards limit the agency cost of ownership because of the limitation of external financing by the companies and depending on adopting new issue of the shares in providing their needs.

#### Recommendations

- 1. Provide more transparency and disclosure of the company's performance periodically and encourage investors and financial market participants to rely on financial reports instead of rumors and tips brokerage offices in order to reduce the levels of information asymmetry.
- 2. The necessity of finding alternative choices for corporate finance and motivate managers to those choices instead of using new Issue shares mechanism.
- 3. Conduct other studies and put into consideration other sectors and variables not taken in this study.

## References

### **English References**

- Al-Shiab, M., & Abu-Tapanjeh, A. (2005). Ownership structure and firm performance: The case of Jordan. *Journal of Business Administration*, 1(2), 1-27.
- Ang, J.S., Cole, R.A., & Lin, J.W. (2002). Agency costs and ownership structure. the Journal of Finance, 55(1), 81-106.
- Berle, A. A., & Means, G. C. (1932). The Modern Corporation and Private Property (MacMillan, New York, NY).
- Chen, C.R., Guo, W., & Mande, V. (2006). Corporate value, managerial stockholdings and investments of Japanese firms. *Journal of International Financial Management & Accounting*, 17(1), 29-51.
- Chen, P.C., & Fang, S.C. (2011). Can agency theory disclose organizational commitment? Exploring employees and agency workers. Paper presented at the Technology Management Conference (ITMC), International Conference on (100-102). IEEE.
- Chuang, L., Xiuhong, L., & Lei, Z. (2010). Earnings Quality and the Agency Costs of Controlling Shareholder. Paper presented at the E-Business and E-Government (ICEE), International Conference on (pp. 5132-5135). IEEE.
- Eisenhardt, K.M. (1989). Agency theory: An assessment and review. Academy of management review, 57-74.
- Fama, E.F., & Jensen, M.C. (1983). Separation of ownership and control. JL & Econ., 26, 301.

- Fleming, G., Heaney, R., & McCosker, R. (2005). Agency costs and ownership. structure in Australia. Pacific-Basin Finance Journal, 13(1), 29-52.
- Harris, O., & Glegg, C. (2009). Governance quality and privately negotiated stock repurchases: Evidence of agency conflict. Journal of Banking & Finance, 33(2), 317-325.
- Harris, M., & Raviv, A. (2010). Control of corporate decisions: shareholders vs. management. Review of Financial Studies, 23(11), 4115-4147.
- Harvey, C.R., Lins, K.V., & Roper, A.H. (2004). The effect of capital structure when expected agency costs are extreme. Journal of Financial Economics, 74(1), 3-30.
- Hayek, F.A. (1945). The use of knowledge in society. The American Economic Review, 519-530.
- Hill, C.W.L., & Jones, T.M. (1992). Stakeholder-agency theory. Journal of management studies, 29(2), 131-154.
- Jensen, M.C., & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of financial economics, 3(4), 305-360.
- Jensen, M., & Meckling, W. (1995). Specific and general knowledge and organizational structure. Harvard University Press.
- Jensen, M.C. (2008). Agency costs of overvalued equity. Financial Management, 34(1), 5-19.
- Kim K.A. & Nofsinger J.R., (2007), Corporate Governance Second Edition, Pearson Education, Inc., Upper Saddle River, New Jersev.
- Lopez de Silanes, F., Vishny, R., & Shleifer, A. (2000). Agency problems and dividend policies
- around the world. Journal of finance, 60(1), 1-33.
- Margaritis, D., & Psillaki, M. (2010). Capital structure, equity ownership and firm performance. Journal of banking & finance, 34(3), 621-632.
- Moldoveanu, M., & Martin, R. (2001). Agency theory and the design of efficient governance mechanisms. document de travail, Joseph L. Rotman School of Management, Université de Toronto, 2.
- Pinteris, G. (2002). Ownership structure, Board characteristics and performance of Argentine Banks. Urbana, 51, 61801.
- Shi, H., & Song, X. (2011). Overview and analysis of capital structure and output markets competition using agency costs theory. Paper presented at the Artificial Intelligence, Management Science and Electronic Commerce (AIMSEC), 2nd International Conference on (pp. 3160-3163), IEEE.
- So, J. (2005) "Agency costs and ownership structure: evidence from the small business finance survey data base" Office of Advocacy, U.S. Small Business Administration No. 268.
- Wang, G.Y. (2010). The Impacts of Free Cash Flows and Agency Costs on Firm Performance. Journal of Service Science and Management, 3(4), 408-418.
- Watts, R.L., & Zimmerman, J.L. (1990). Positive accounting theory: a ten year perspective. Accounting review, 131-156.
- Wu, J., Zhu, X., & Huang, G. (2011). CFO complex characteristic, agency costs and corporate value: Based on financial engineering cube concept. Paper presented at the Business Management and Electronic Information (BMEI), 2011 International Conference on (pp. 840-843). IEEE.
- XIE, J., JIANG, L., & TANG, Z. (2008). Monitoring, Incentives and Equity Agency Cost: An Empirical Study Based on Business Groups of China. Journal of uangdong University of Business Studies, 4, 010.
- Zhang Zhao-guo; He Wei-feng; Zhu Sha-sha; "Capital Structure and Agency Costs" Management Science and Engineering, 2007.
- ZHOU, D., & YANG, X. (2010). Ownership Structure, Managerial Power and Diversified Management-Based on Empirical Study of Listed Companies in China. Journal of Changchun University of Science and Technology (Social Sciences Edition), 5, 021.

- مراجع الدراسات العربية: مصطفى محمد عبده محمد (2006) , نموذج مقرح لقياس وتفسير تكلفة الوكالة للملكية في الشركات المصرية , المجلة العلمية للاقتصاد والتجارة , كلية
- مؤيد محمد علي الفُصل العلاقة بين الحاكمية المؤسسية وقيمة الشركة : در اسة ميدانية في سوق عمان المالي : مجلة أفاق إقتصادية , (2007), العدد 112, المجلد 28 ماتحاد غرف التجارة والصناعة في دولة الأمارات العربية

Type of	Sample	base	ription ed on mance	base	ription ed on ership	Descr base inform	d on	Descr base debt	d on
economic	observations	•		ra	ite	asym	metry		
sector		High	Low	High	Low	High	Low	High	Low
		perf.	perf.	rate	rate				
Banks	60	42	18	36	24	38	22	47	13
Industrial	28	12	16	17	11	17	11	9	19
Commercial&	20	8	12	12	8	11	9	7	13
service									
Total	108	62	46	65	43	66	42	63	45

## Table (1) Classification of study sample according to statistical test requirements

## Table (2) Description of the study sample on the basis of average value of variables

		Sample size	e		Sampl	e description ba	sed on:	
Details								
	No.	Sample	Mediator	Mediator	Mediator	Mediator	Mediator	Mediato
Economic	of	observatio	of	of agency	of	of	of	r
sector	compani	ns	management	cost	performan	management	information	Of
	es		rate	of	ce	ownership	Asymmetry	debt
				ownership		rate		rate
Banks	15	60	55.6	13.8%	12.6%	13.94	7.35	82.18%
Industrial	7	28	25.9	11.7%	9.4%	9.31	4.14	29.04%
Commerci	5	20	18.5	5.79%	11.3%	5.12	4.08	20.78%
al& service								

## Table (3) Results of first hypothesis test

Years	2005	2006	2007	2008
details				
Mediator of agency cost of	7.3 %	8.8%	11.05%	14.57%
ownership				
Annual growth rate		34.25%	25.6%	31.86%
Cost index		134.25%	151.37%	199.59%
K-S test results				
calculated value		13.6	14.03	12.83
Level of significance		3.66	4.85	3.91
Decision rule		Reject H1	Reject H2	Reject H3

years		2005	2006	2007	2008
Details					
Lowest rate of manage ownership	ment	8.86	7.34	6.12	5.9
highest rate of manage ownership	ment	17.94	14.92	14.56	11.86
	S I vel of	8.35% of 1 Sample size calculate Level of sig 8.35% of 1 mple size	e 47 observatio d value (0.328 gnificance 3.35	) 5% ownership rate cions	
		ŀ	K-s test		
Details	Sam obse	ple rvations	Calculated value	Level of significance	Decision rule
Years	N1	N2	-		
For all study years	65	43	359.6	2.13%	Reject the hypothesis
2005	17	10	83.45	4.18%	Reject the hypothesis
2006	14	13	79.16	2.49%	Reject the hypothesis
2007	16	11	81.22	3.17%	Reject the hypothesis
2008	12	15	92.4	3.65%	Reject the hypothesis

Table (4) Results of testing management ownership rate effect

## Table (5) Results of testing information asymmetry effect

Years	20	005	2006	2007	2008
Details	_				
Ratio of market value to	3.	8	4.17	6.85	7.67
book value					
Result of Kendal test: Number of observations 108 calculated value 0.386 Level of significance 13.4% Decision rule: accept the hypothesis K-S Test					
Details	Nu	nber of	calculated	Level of	Decision rule
	obse	rvations	value	significance	
Years					
All years of the study	42	66	341.3	19.1%	accept the hypothesis
2005	9	18	117.4	9.4%	accept the hypothesis
2006	11	16	126.4	9.8%	accept the hypothesis
2007	10	17	137.4	11.12%	accept the hypothesis
2008	12	15	131	10.7	accept the null hypothesis

 Table (6) Kendal correlation coefficient between the market value and the book value

Years Details	2005	2006	2007	2008	All years of study
Number of	27	27	27	27	108
observations					
Calculated value	0.278	0.313	0.268	0.271	0.393
Level of significance	21.3%	22.4%	22.3%	17.22%	18.4%
Decision rule	accept the n	ull hypothesis	between the m	arket value and	the book value

## Table (7) Test results of debt ratio effect Particular

Results of Kendal test						
Number of	calcula	ted value	Level of	significance	<b>Decision rule</b>	
observations						
108	0	.314	12	2.65%	Hypothesis is accepted	
Results of K-S test						
Details	Num	ber of	calculated	Level of	Decision rule	
Years	observ	vations	value	significance		
For all years of study	45	63	388.6	14.3%	Hypothesis is accepted	
2005	9	18	86.4	9.88%	Hypothesis is accepted	
2006	9	18	78.6	10.3%	Hypothesis is accepted	
2007	11	16	93.78	12.4%	Hypothesis is accepted	
2008	12	15	71.13	15.7%	Hypothesis is accepted	

Details	High level of performance	Low level of performance
Number of observations	62	46
Mediator of management ownership	12.85	6.07
Mediator of agency cost of ownership	11.12	7.16
Mediator performance of companies	14.8	8.5
calculated value of Kendal test	0.295	0.338
Level of significance	3.4%	2.95%
Decision rule	Reject the Hypothesis	Reject the Hypothesis

## Table (8) Test results of performance effect on management ownership rate

## Table (9) Test results of performance effect on information asymmetry

Details	High level of performance	Low level of performance
Number of observations	62	46
Mediator ratio of market value to book value	4.66	5.72
Mediator of agency cost	11.12	7.16
Mediator' companies performance	14.8	8.5
calculated value of Kendal test	0.168	0.213
Level of significance	16.4%	15.3%
Decision rule	Hypothesis is accepted	Hypothesis is accepted

## Table (10) Test results of performance effect on debt ratio

Details	High level of performance	Low level of performance
Number of observations	62	46
Mediator ratio of market value to book value	65.6%	22.4%
Mediator of agency cost	11.12	7.16
Mediator' companies performance	14.8	8.5
calculated value of Kendal test	0.157	0.204
Level of significance	15.4%	13.3%
Decision rule	Hypothesis is accepted	Hypothesis is accepted