

Relationship between Return on Bonds Resulted From Return on Assets and Managers' Rewards in Tehran Stock Exchange

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Abstract: The goal of the preset study is to investigate about the effectiveness of return on bonds based on fluctuations in return on assets of firms on managers' rewards based on performance. This research is a library study and a cause an effect one based on panel data analysis. In this research the financial information of 106 firms enlisted in Tehran Stock Exchange during the time period between 2008 and 2013 (636 firm-year) has been investigated. To analyze the results, SPSS20, Eviews7, and Minitab 16 software were used. Since the data in financial statements specifically net earnings and ratios resulting from that such as return on accounting are often used to measure managers' performance, those managers whose rewards are determined based on earnings have incentives to use excessive earnings accounting methods and therefore they increase profitable investments. The research results showed that there has been a meaningful and direct relationship between bonds' return resulting from fluctuations in return on assets and paying managers' rewards based on firms' performance.

Keywords: Bonds' Return Resulting From Fluctuations In Return on Assets, Managers' Reward, Firms' Performance

1. INTRODUCTION

Rewarding theory discusses the role of accounting choices in plans to compensate for management's services [1]. Managers constantly benefit some bonus rewards based on their performance in addition to their salary. Data in financial statements especially net income and ratios resulting from that such as return on accounting are often used to measure managers' performance [2]. Thus, managers have some incentives in their choice of accounting methods and applying their authority regarding accounting estimates in order to improve advantages related to rewards appropriated to compensate their own services [3]. The previous researchers have interpreted that those managers whose rewards are determined based on earnings, are stimulated to choose certain excessive accounting methods and therefore they increase profitable investments. Regarding how rewards should be paid to the managers, there are several perspectives and since managers' rewards are somehow related with firm's performance and investments' efficiency, these may lead to increase or decrease firms' risks [4]. Fabozzi&Kothari (2007) [5], found out in their research that by increasing or reducing return on accounting, managers' rewards may increase or decrease. Thus, studying the relationship between these factors would be very important in our country. Paying attention to the effect of managers' rewards, risk, and return and accounting are highly important in developing countries. Thus, the present research is going to investigate about the relationship between managers' rewards, risk, and return on accounting in firms and this can be considered as a principle step forwards in order to create appropriate infrastructures for the future researches. Therefore, this topic would be of great interest for scholars in the field. The results of this research that has been carried out in firms enlisted in Tehran Stock Exchange would certainly pave the way to answer many unanswered questions in this regard. The absorption of

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investors in capital market in our country is also very important due to the fact that it is a newly emerged market compared to capital market in developed countries and it would be very important to try to recognize the relationships between factors such as: bonds' return resulting from fluctuations in return on assets, and its effectiveness on paying rewards to board of directors based on performance as a resolution to achieve the final goals of the firms. Regarding the main goal of the present study, the researcher is going to answer the following question: "Do bonds' return resulting from fluctuations in return on assets affect the payment of rewards to managers based on performance in firms enlisted in Tehran Stock Exchange or not?"

1.1. Theoretical Foundations

Using financial tools to create motives and paying rewards to managers was first started in European companies. In these companies, paying rewards was based on income in early 20th century. Then, American companies devised plans of motivating and rewarding based on income in European companies, as well. Today, using financial tools to motivate is considered as a common method and % 97 of corporate companies in America administer such plans [6]. Mehran & *et al.* [7], believe that most concerns about payments to managers diminish when high payments to managers and high sensitivity of shareholders' wealth result in a better performance and more value of the company. The main problem is to recognize the effects of managers' rewards. Managers' rewarding plans are a complex process through which several groups in companies have role such as: all members of board, rewarding committee, counselors in reward payments, and some others. Thus, managers' rewarding plans are related with some tangible and some unobservable factors. This makes it difficult to state anything related with revealing any effective observable factor regarding payments to managers and firm's performance. For example, rewards paid to managers and firm's performance can be interrelated because rewards affect performance or vice versa. Or even it was so because unobservable factors or certain characteristics of managers affect both variables [8]. In recent years, most shareholders and specifically institutional shareholders disagreed with broad ownerships in companies regarding rewards paid to top managers not based on performance and emphasized on the relationship between CEO and firm's performance [9]. These people believe that if payments to management are based on the current performance of firms, managers will act better to achieve firm's goals. The researches about this issue have commenced in Europe and America and it can be considered to be simultaneous with growth and spread of corporate companies and the start of agency theory debates.

2. RESEARCH LITERATURE

Lambert (1982) studied agency theory in a research in the form of long-term contracts of managers' rewarding payments and the result was that if a rewarding contract is going to cover a longer (more than 1 year) period both shareholders and managers would be in a better states. Managers' rewards at the end of a period should be appropriate to the performance during that period and performances during the previous periods. Thus, an optimal rewarding contract should entail both motivations for the current period and for the future year [10].

Murphy (1985) carried out a study during the years between 1964 and 1981 and showed that there has been a positive and meaningful correlation between reward payment to administrative managers and performance and even if there is not a relationship between reward payment and performance, resources for administrative managers depend on means such as stock authority, long-term performance plans, and most importantly stock ownership depends on firm's performance. Also, he showed that fee incentive plans such as short-term and long-term not only do not harm shareholders, but also they are advantageous for them [11].

Murphy and Jensen (1990) studied the relationship between CEO's reward and firm's performance by using a combination of measurable data and authority value of stock deals in Black Sholes Company. They concluded that there has been a positive relationship between stock dealing authority conferred to managers and changing shareholders' wealth [12].

Duru (2005) investigated about the relationship between board rewards and economic income and studying the effect of investment opportunities on the relationship between board's reward and economic income and concluded that the experimental relationship between board's reward and economic income is stronger than the relationship between board's reward and accounting earnings. This recent finding presented evidences based on approving 'adjusted accounting earnings' theory. Some adjustments such as capital costs that reflect economic incidents resulting from decisions by manager are more compatible with shareholders' goals. Another result of this research was that economic income should not be used as the only factor in conferring rewards to board of managers [13].

Gray & *et al.* (2009) studied 'accruals' quality, information risk, and capital cost' and showed that there was not any evidence showing that firms with lower accruals' quality have had higher capital costs. Their results showed that the natural effect of accruals on capital cost has been more than its optional parts [14].

Anderson & *et al.* (2009) studied the effect of corporate variation on firm's risk. They found that corporate variation reduces risk in some firms and increases it in some others. But in a medium way it can be stated that it does not reduce firm's risk [15].

Sheri (2004) tried to use market researches and stock return selection to predict in order to experimentally test the usefulness of accounting information in his dissertation entitled: "the role of fundamental accounting information in stock return prediction" [16].

Namazi & Seirani (2004) used agency theory to investigate about two important issues: 1- the relationship between CEO's rewards in Iran and accounting earnings, earnings' growth, and market value added, 2- studying important structures in determining CEO's rewards [6].

Khoshtinat & Esmaili (2006) studied the relationship between earnings quality and stock return in firms enlisted in Tehran Stock Exchange for the years between 2000 and 2004. In this research earnings quality, accruals' amount, optional elements and obligatory items in accruals have been utilized as independent variables and stock return has been considered as the dependent variable. Studying the research hypotheses by getting helps from regression analyses showed that there has been a weak relationship between earnings quality and stock return [17].

Namazi & Moradi (2006) documented to the theoretical foundations in agency theory to investigate about effective structures in determining board's rewards in firms enlisted in Tehran Stock Exchange and studied the concepts of agency theory in order to identify the capital market conception of managers' performance and market strategies in determining board's rewards. Their findings within all companies and based on data gathered for the years between 1999 and 2003 showed that there has been a meaningful relationship between independent variables including the ratio of return on assets and changes in it, firm size, ownership concentration, and financial risk and the dependent variable (board's reward) [18].

Sajjadi & Zarezadeh-e-Mehrizi (2011), studied the relationship between managers' rewarding plans and economic criteria of performance assessment in firms enlisted in Tehran Stock Exchange in a sample consisting 83 firms within the time period between 2004 and 2009. They concluded that there has been a meaningful relationship between rewards paid to managers and economic criteria (economic value added, market value added, and adjusted economic value added) of performance assessment. Also findings showed that there has been a meaningful relationship between the percentage of managers' ownership and market value added and there was a lack of relationship with other economic criteria of performance assessment [19].

3. RESEARCH HYPOTHESIS

In this research we have investigated about the effect of bonds' return resulting from fluctuations of return on assets on managers' reward payments based on firms' performance to reach a scientific answer to the following question:

Does bonds' return resulting from fluctuations of return on assets affect managers' reward payments based on firms' performance?

In order to find an answer for the question posed above and based on theories presented, the research hypothesis was devised as follows:

There is a meaningful relationship between bonds' return resulting from fluctuations of return on assets and managers' reward payments based on firms' performance.

3.1. Test Period, Statistical Population and Sampling

The study period for the present research was the years between 2008 and 2013. The population consisted of all firms enlisted in Tehran Stock Exchange that included 520 firms in 37 industry groups. To choose our sample we have used a criteria-filtering technique (deletion). To do so, the following criteria were observed and when a firm had all the criteria, it would have been chosen as one of sample members.

- 1) Regarding the required data from the year 2007, the firms should have been enlisted in Tehran Stock Exchange at least up to the end of the year 2006 (21st March 2006) and their names should not have been deleted from the list up to 21st March 2012.
- 2) During the study period, the stocks of firms should have been exchanged actively.
- 3) In order to increase comparability of the firms during study period, their fiscal year should have ended on 20th March (29 Esfand) and during the study period they should not have changed their fiscal year.
- 4) They should not be among financial intermediary firms (investing, holding, lease, banks, and insurance companies) because their performances are somehow different.

4. RESEARCH METHODOLOGY

The research method was correlation and to discover the correlation between variables we have used a post incidental method. The present study was an applied research and it fall within positive theory domain regarding the use of real information and different statistical methods to reject or approve the hypotheses. Doing this research fell within analogy-referential reasoning frameworks and it means that the theoretical foundations and research literature were collected through library studies, articles, websites and in the form of analogy and the data collection was carried out to approve or reject the hypotheses. In this study we have used a multiple variable linear regression model. The statistical method used in this research was panel data method because we have used two different aspects of the issue in order to investigate about the relationship between independent variables and the dependent variable. On the one hand, these variables were tested within different firms and on the other hand they were tested during the time period between 2008 and 2013. In this study we have used SPSS21, Eviews7, and Minitab16 software to test hypotheses.

4.1. Variables and Research Model

The analytical research model was estimated as follows on the whole:

$$\begin{aligned} \ln(\text{Bonus} / \text{TA})_{i,t} * \text{TObin's} Q_{i,t} = & \alpha_0 + \beta_1 \text{SRV}_{i,t} * \text{ROA}_{i,t} + \beta_2 \ln(\text{ABS} / \text{TA})_{i,t} + \beta_3 \text{BookLeV}_{i,t} + \\ & \beta_4 \text{SRiSK}_{i,t} + \beta_5 \text{OperIncom}_{i,t} + \beta_6 \ln(\text{Salary} / \text{TA})_{i,t} + \beta_7 \text{CEO}_{i,t} + \beta_8 \text{Boardsize}_{i,t} + \varepsilon_{i,t} \end{aligned} \quad (\text{Model 1})$$

4.1.1. Independent Variable

Return on bonds resulting from fluctuations in return on assets of *firm i in the year t*

4.1.2. Dependent Variable

Board's reward based on firm i performance in the year t

4.1.3. Control Variables

The ratio of book value of current assets of *firm i in the year t*

Book value of firm i leverage in the year t

Firm i risk in the year t

Firm i operating income in the year t

Firm i sales ratio in the year t

Firm i institutional shareholders' ratio in the year t

Firm i board size in the year t

4.2. Operational Definitions of Independent Variables

Bonds' return resulting from fluctuations in return on assets ($SRV_{i,t} * ROA_{i,t}$):

Based on a research carried out by Dmitry (2008) [20], bonds' return resulting from fluctuations in return on assets can be calculated as follows:

First bonds' return is calculated through the following formula.

Bonds' return is the ratio of total income resulting from investment within a certain period considering an initial amount of capital that has been utilized to achieve that amount of income. Earnings created for a shareholder during a year is achieved through two factors: 1- increasing price of each share, 2- the earnings paid in cash. Thus, the cross-sectional return would be calculated regarding the following equation:

$$r_s = \frac{DPS + p_1(1 + \alpha + \beta) - p_0 - (1000 \times \alpha)}{P_0 + (1000 \times \alpha)} \quad (\text{Model 2})$$

Where,

R_s : stock return

P_0 : stock price at the start of month

DPS: dividend appropriated per share

α : the percentage of capital increase from cash input

P_1 : stock price at the end of month

β : percentage of capital increase regarding reservoirs

Then, fluctuations of return on assets would be calculated as follows:

$$\frac{ROA_{i,t} - ROA_{i,t-1}}{ROA_{i,t-1}} \quad (\text{Model 3})$$

Where,

$GROA_{i,t}$ = growth of return on assets of firm i in the year t

$ROA_{i,t}$ = return on assets of firm i in the year t

$ROA_{i,t-1}$ = return on assets of firm i in the year t-1

$ROA_{i,t}$ = net earnings of current period / book value of total assets

And finally, bonds' return resulting from fluctuations in return on assets can be calculated by comparing the two variables of bonds' return and fluctuations of return on assets.

4.3. Operational Definition of Dependent Variable

Reward payment to board based on firm's performance ($\ln(\text{Bonus} / \text{TA})_{i,t} * \text{Tobin's } Q_{i,t}$):

According to a research by Ortiz[21], the calculation of reward payment to board based on performance would be as follows:

First firm's performance would be calculated through QTobin ratio as follows:

Tobin's $Q_{i,t} = (\text{Book value of total assets} - \text{stock's book value}) + \text{stock's market value} / \text{Book value of total assets}$ (Model 4)

Then, growth rate of firm's performance will be calculated through the following formula:

$$G\text{Tobin's } Q_{i,t} = Q_{i,t} - Q_{i,t-1} / Q_{i,t-1} \quad (\text{Model 5})$$

Where,

$G\text{Tobin's } Q_{i,t}$ = firm's performance growth rate

$Q_{i,t}$ = firm's performance in current year

$Q_{i,t-1}$ = firm's performance in previous year

And finally board's reward payment based on firm's performance would be calculated as follows:

$$\ln(\text{Bonus} / \text{TA})_{i,t} * \text{Tobin's } Q_{i,t} = \text{Bonus}_{i,t-1} + (\text{Bonus}_{i,t-1} * G\text{Tobin's } Q_{i,t}) \quad (\text{Model 6})$$

Where,

$\ln(\text{Bonus} / \text{TA})_{i,t} * \text{Tobin's } Q_{i,t}$ = board's reward payment based on firm's performance

$\text{Bonus}_{i,t-1}$ = reward paid to board in previous year

$G\text{Tobin's } Q_{i,t}$ = growth rate of firm's performance

4.4. Operational Definitions of Control Variables

4.4.1. The Ratio of Book Value of Current Assets ($\ln(\text{ABS}/\text{TA})_{i,t}$)

Based on a research carried out by Fan & *et al.* (2006) [22], the ratio of book value of current assets can be calculated as follows:

$$\ln(\text{ABS} / \text{TA})_{i,t} = \text{current assets} / \text{book value of total assets} \quad (\text{Model 7})$$

- Book value of leverage ($\text{BookLeV}_{i,t}$)

Most probably a high ratio of leverage shows increasing the amount of liability to cash reservoir of the company and it will most probably cause financial bankruptcy for firms. A high ratio of financial leverage shows that by increasing liabilities, the level of cash would decrease. Accordingly, firms with more cash assets can cover these assets with cash levels and reduce most liabilities. Ferreira & Vilela (2004) [23], showed that firms with higher liability have less capability in reserving cash. In this study and to calculate financial leverage ratio we have used Zhang's (2011) [24] research and have calculated leverage ($\text{LeV}_{i,t}$) as follows:

$$\text{BookLeV}_{i,t} = \text{book value of total liabilities} / \text{book value of total assets} \quad (\text{Model 8})$$

- **Firm's risk** ($SRiSK_{i,t}$)

We calculated risk as follows (Hallock & *et al.*, 2009) [25]:

$$AnDisp_{i,t} = R_f + [E(R_m) - R_f] * \beta_i \quad (\text{Model 9})$$

Where,

R_{it} = return rate of firm i in period t

R_{ft} = risky return rate in period t

β_1 = stock exchange market beta (systematic risk) of firm i

R_{mt} = market portfolio rate in period t

It should be noted that to measure systematic risk, we have used data related to return rate of bonds and market portfolios recorded in bourse organization. Bourse organization has used the following formula to measure real return of bonds:

- **Operating income** ($OperIncom_{i,t}$)

It is equal to net annual income of a firm whose data would be extracted from income statement of the firm and it would be calculated as follows (Jiangli & Pritsker, 2008) [26].

$OperIncom_{i,t}$ = net income during current year / book value of total assets (Model 10)

- **Sales ratio** ($Ln(Salary/TA)_{i,t}$)

Firm's sales ratio is considered as a determinative factor in firm's performance. Based on findings by Ozkan (2001) [27], sales ratio is used as an index for growth opportunity value. Firm's sales ratio is calculated by using the following formula:

$$Ln(Salary/TA)_{i,t} = \text{net sales in current year} / \text{book value of current assets} \quad (\text{Model 11})$$

- **Institutional shareholders' ratio** ($CEO_{i,t}$)

Based on a research by Skarabot (2001) [28], it would be calculated as follows:

$CEO_{i,t}$ = the number of stocks owned by institutional shareholders / firm's total stocks (Model 12)

- **Board size** ($Boardsize_{i,t}$)

It is the number of members who participate in board's meetings. This variable is used to control potential effects of board size on earnings management [29].

$\varepsilon_{i,t}$ = random error of firm i at the end of year t

4.4.2. Testing the Hypothesis and Research Findings

The goal of testing research hypothesis was to study the relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance and the statistical theory is defined as follows:

H₀: there is not a meaningful relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance.

H₁: there is a meaningful relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance.

This hypothesis was estimated by using the model mentioned in panel data mode. If the coefficient β_1 is meaningful in an assurance level of %95, it would be approved.

$$\begin{cases} H_0 : \beta_1 = 0 \\ H_1 : \beta_1 \neq 0 \end{cases}$$

To be able to identify whether using panel data method would be efficient with the intended model or not, we have used Chaw test or F statistic test to determine which method (fixed effects or random effects) is more appropriate for estimation (recognizing the fixed or random status of differences in cross-sectional units) and we also used Hausmann’s test. The results of these tests have been presented in figure (1).

<i>P-Value</i>	<i>F Degree</i>	<i>P Value</i>	<i>Statistics</i>	<i>No.</i>	<i>Test</i>
0.0000	(522,105)	4.5059	<i>F</i>	636	Chow
0.0131	8	11.1537	χ^2	636	Hausman

Figure 1: Results of Chaw & Hausmann’s Tests

Regarding the results of Chaw’s test and P-Value of it (0.0000), H_0 of test was rejected in an assurance level of %95 and it showed that we could use a panel data method. Also regarding the results of Hausmann’s test and its P-Value (0.0131) that was less than 0.05, H_0 of test was rejected in an assurance level of %95 and H_1 was approved. Thus, it would be necessary to use fixed effects method to estimate the model.

To measure the validity of the model and to investigate about presuppositions of classic regression it would be necessary to carry out tests regarding normality of residuals, variances convergence, residuals’ independence, and lack of model modification error (linearity of model) besides studying lack of existence of co-linearity between independent variables entered into the model. To test normality of error utterances we could use different tests. One of these tests, was Jarque-Bera test that showed residuals resulting from research model’s estimation did have a normal distribution in an assurance level of %95, in a way that the probability related to this test (0.8425) was greater than 0.05. Another statistical presupposition of classic regression was residuals’ variance convergence. If variances were divergent, the linear estimating would be non-indent and it would not have the least variance. In this study and to investigate about variances’ convergence, we have used Breusch-Pagan’s test. Regarding that the importance level of this test has been less than 0.05 (0.0263), the null hypothesis stating that there has been convergence was rejected and it could be said that the model has had variance divergence problem. In this study and to remove the problem we have used generalized least squares estimation method (GLS). Also we have used Durbin-Watson’s test to test lack of correlation between residuals that have been one of the presuppositions in regression analysis and are called self-correlation. Regarding the primary results of the model, the amount of Durbin-Watson statistic was 1.92 and since it was located between 1.5 and 2.5, we could conclude that the residuals were independent of each other. Additionally, to test whether the model has a linear relationship and if the research model has been identified properly to be linear or non-linear, we have used a Ramsey test. Regarding that the importance level of Ramsey test (0.5710) was bigger than 0.05, the null hypothesis of this test regarding the model’s linearity was approved and the model did not have an explicit error. The summary of results of tests above has been represented in figure (2).

Regarding the results of Chaw and Hausmann’s tests and also the results of statistical presuppositions of classic regression, the research model was estimated by using panel data method and in the form of fixed effects. Results of model estimation have been presented in figure (3). The estimated model form using Eviews 7 software would be as follows:

statisticRamsey		statisticDurbin-Watson	statisticBreusch-Pagan		statisticJarque-Bera	
<i>P-Value</i>	<i>F</i>	D	<i>P-Value</i>	<i>F</i>	<i>P-Value</i>	χ^2
0.5710	0.5668	1.92	0.0263	2.1938	0/8425	1.9859

Figure 2: Results of Tests Related To Statistical Presuppositions

$$\begin{aligned} \ln(\text{Bonus} / \text{TA})_{i,t} * \text{Tobin's } Q_{i,t} = & 0.0005 + 0.0001 \text{SRV}_{i,t} * \text{ROA}_{i,t} - 5.2732 \ln(\text{ABS} / \text{TA})_{i,t} \\ & + 4.0665 \text{BookLeV}_{i,t} + 0.0002 \text{SRiSK}_{i,t} - 8.3974 \text{OperIncom}_{i,t} + 1.9144 \ln(\text{Salary} / \text{TA})_{i,t} \text{ (Model 13)} \\ & - 5.0196 \text{CEO}_{i,t} + 1.4196 \text{Boardsize}_{i,t} + \varepsilon_{i,t} \end{aligned}$$

The dependent variable: The Board is performance-based bonus Views: 636 years - company				
Relation	P-Value	Statistic	Ratio	Variable
Positive	0.0006	3.4344	0.0005	Fixed component
Positive	0.0000	5.3663	0.0001	Yield securities arising from fluctuations in asset efficiency
Negative	0.0009	-3.3416	-5.2732	Book value ratio of current assets
Meaningless	0.4335	0.7838	4.0665	Book value of financial leverage
Positive	0.0000	5.6619	0.0002	Corporate Risk
Negative	0.0034	-2.9442	-8.3974	Operating income
Meaningless	0.7462	0.3237	1.9144	Sales ratio
Meaningless	0.3870	-0.8657	-5.0196	The proportion of institutional investors
Meaningless	0.8546	0.1833	1.4196	The Board of Directors
0.6639	Determining factor model			
5.9747 (0.0000)	Statistic F (<i>P-Value</i>)			

Figure 3: Results of Testing Research Hypothesis by Using Fixed Effects Method

In studying the meaningfulness of total model and regarding that the amount of F statistic was less than 0.05 (0.0000), we could approve the total model in an assurance level of %95. Also the model's identification coefficient showed that 66.39% of managers' reward payment based on firms' performance could be explained by variables entered into the model.

In studying the coefficients' meaningfulness and regarding the results presented in figure 3, and since the probability of t statistic for variable's coefficient of bonds' return resulting from fluctuations in return on assets has been less than 0.05 (0.0000), the existence of a meaningful relationship between bonds' return resulting from return on assets and managers' reward payment based on firms' performance was approved in an assurance level of %95. Therefore, research hypothesis was approved and we could say with an assurance level of %95 that there has been a meaningful relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance. The positive amount of this variable (0.0001) showed that there has been a direct relationship bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance, in a way that by increasing 1 unit to bonds' return resulting from fluctuations in return on assets, payments of managers' reward based on firms' performance will increase 0.0001 units. Thus, regarding the analyses carried out related to research hypothesis approval we can conclude that there has been a meaningful and direct relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance.

4.5. Result of Testing Research Hypothesis

In studying the meaningfulness of the total model and regarding that the amount of F statistic probability was less than 0.05 (0.0000) we can say with an insurance level of %95, the meaningfulness of total model has been approved. Also identification coefficient of the model showed that 66.39% of managers' reward payments based on firms' performance could be identified by using variables entered into the model. In studying the meaningfulness of coefficients and regarding the results presented in figure 4-7, since the probability of t statistic for the coefficient of the variable of bonds' return resulting from fluctuations in small assets has been less than 0.05 (0.0000). Thus, the existence of a meaningful relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance has been approved in an assurance level of 95%. Therefore, the research hypothesis was approved and we could say that there has been a direct relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance. The positive amount of the coefficients in this variable (0.0001) showed that there has been a direct relationship bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance, in a way that by increasing 1 unit to bonds' return resulting from fluctuations in return on assets, payments of managers' reward based on firms' performance will increase 0.0001 units. Thus, regarding the analyses carried out related to research hypothesis approval we can conclude that there has been a meaningful and direct relationship between bonds' return resulting from fluctuations in return on assets and managers' reward payments based on firms' performance.

5. DISCUSSION AND CONCLUSION

The financial resources of firms are divided into two parts of internal and external financial resources regarding doing or lack of investment based on financial policy. In internal financial resources, the firm finances through the earnings achieved; i.e. instead of distributing earnings among shareholders, the earnings should have been utilized in mainly operating activities to gain higher returns and in external financial reserves, financing would be carried out through liabilities and stocks. Using internal or external financial resources has had different effects on yield, return on accounting, and investment efficiency considering the fluctuations related to reward payments to managers [30]. Therefore, the question is that: "how do firms finance to affect earnings positively and maximally, investment's efficiency, and return of shareholders and minimize firm's risk". Several factors such as activity, assets, and type of industry, and the amount of rewards paid to managers affect financing and return resulting from it in firms. For example, firm's activity nature may be in a way that input cash flows are prepared easily; in such a situation using liabilities instead

of stocks would be cheaper and firm's earnings would increase (Bebchuk, Grinstein, 2005) [31]. Hallock & *et al.* [25] concluded that there has been a meaningful relationship between the ratio of rewards paid to managers and increase or decrease previous liabilities and investments' yields. Regarding the main goal of the present research, the researcher wanted to find out whether bonds' return resulting from fluctuations in return on assets on the managers' reward payments based on performance of firms enlisted in Tehran Stock Exchange or not? The present research concluded that there has been a meaningful and direct relationship between bonds' return resulting from fluctuations in return on assets on the managers' reward payments based on performance. Therefore, results in the present study have been similar to research results of Murphy (1985) [11], Lambert (1982) [10], Murphy and Jensen (1990) [12], Namazi & Moradi (2006) [18], and Sajjadi & Zare zadeh-e-Mehrizi (2011) [19].

5.1. Research Suggestions

5.1.1. Suggestions Resulted From the Research

1. Stock Exchange Organization can publish more comprehensive information about paying rewards to managers based on performance for shareholders regarding the results of this and similar researches.
2. Accounting standards devising referents are suggested to reveal major information regarding the amount and return level of bonds resulting from fluctuations in return on assets of firms.
3. Since increasing the amount and return level of bonds resulting from fluctuations in return on assets of firms can have important effects on decisions by shareholders, presenting complete and transparent information on the part of management regarding bonds return resulting from fluctuations in return on assets and paying managers' rewards based on performance would be very influential.

5.1.2. Research Suggestions for Future Researches

In order to use research results more and help the clarification of the issue related to bonds' return resulting from fluctuations in return assets affect managers' reward based on firms' performance, the following topics would be taken into consideration, seriously:

1. Studying the effect of industry type on the relationship between bonds' return resulting from fluctuations in return assets and managers' reward based on firms' performance.
2. Using other control assessment variables such as expected return for stocks and industry index, in studying the effect of bonds' return resulting from fluctuations in return assets and managers' reward based on firms' performance.
3. Studying the effect of macro-economic variables such as: inflation, oil price, and foreign currency price on identifying the effect of industry type on the relationship between bonds' return resulting from fluctuations in return assets and managers' reward based on firms' performance.
4. Doing another similar research regarding the bonds' return resulting from fluctuations in return on assets resulting from political issues and the effect of it on firms' intrinsic value.

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