

The Relationship between Managers Rewards and the Performance Evaluation

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ABSTRACT: *The current study aimed at evaluation of the relationship between managers' rewards and performance evaluation. For this purpose, the net income and the Economic Value Added (EVA) criteria were used. The data from some of the qualified companies in Tehran Stock Market in the period of 2005 to 2015 were collected for conducting the current study. The relationship between managers' rewards of the chosen companies and the EVA and net income criteria, was then analyzed and interpreted by the use of regression analysis, correlation coefficient, coefficient of determination, and analysis of variance.*

The results of the hypotheses testing showed that for all the companies studied, there was a significant and relatively strong relationship between managers' rewards and the EVA, as well as a strong relationship between rewarding the managers and net income. In addition, testing the relationship between net income and the EVA shows a strong correlation between these two components.

KEYWORDS: *Economic Value Added, net income, components of executive compensation packages, value-based Management*

Date of Submission: 17-02-2018

Date of acceptance: 06-03-2018

I. INTRODUCTION

By formation of public joint stock companies and increasing the number of capital owners in these companies, management was separated from ownership. In this way, the direct administration of affairs was delegated to the owners and transferred to professional directors. Under these conditions, shareholders controlled the company's affairs through the board of directors they chose. By separation of the management and ownership, it was always feared that the decisions of managers would not be taken for the benefit of the shareholders, and this was the beginning of the formation of delegation problem. By creating competitive markets for the management profession, the role of reward policies for executives in stock companies became more prominent. Major plans based on executive compensation, are based on customary accounting practices, such as reported earnings or Earnings per Share (EPS). These scales are not essentially designed to measure the economic reality of the institutions, and they are inherently limitative or can be manipulated by accounting distortions. Among the measures of performance evaluation, the economic benefit scale can reveal the economic realities of enterprises and, to a large extent, also offset the interests of managers and shareholders [17]. For this reason, in the current study, the economic value added has been considered as a performance measure.

An appropriate reward system will motivate managers to focus on long-term corporate performance, since the reward, either implicitly or explicitly, affects the stock performance of the company in the market.

In terms of managers' rewards, some believe that they do the job they are hired to do. Therefore, paying rewards to managers for optimal performance will only create additional costs for shareholders. On the contrary, some believe that the desirable performance of managers will increase stock prices and, as a result, increase the shareholders' wealth. Therefore, in this situation, managers deserve to receive rewards corresponding to the desired performance. [10]

The fact is that if the managers, as the representatives of the shareholders, are not rewarded for a better performance, they will always maintain their performance at the minimum level and solely for the survival of the company, rather than upgrading it. In this way, managers in their decision-makings, will not be motivated to make use of existing potential and also take advantage of potential opportunities to increase shareholder wealth.

Therefore, the need to use appropriate performance measurement criteria to reward the managers, becomes apparent when it comes to the fact that the managers inherently expect to receive rewards in proportion to the additional risk that they will incur in making their own decisions, to increase the shareholder's wealth. On

the other hand, if the evaluation criterion is not appropriate, and the rewards granted to executives are beyond their performance, they will impose costs on shareholders.

II. ECONOMIC VALUE ADDED AND THE VALUE-BASED MANAGEMENT

Value-based performance measures such as EVA were introduced by Stern Stewart in 1982. Economic value added has a key role in managing value creation and is, in fact, a way to implement value-based management theory. The value-based management theory believes that key systems and processes, and even individuals in a business unit, should be driven towards value creation and these systems should be oriented towards value creation.

According to the method of economic value added, the basic strategies of the company can be divided into four groups:

- Strategies to improve the return on existing capital and thereby promoting the profitability and productivity of the company's capital
- The strategy of financing to optimize capital structure and reduce the capital costs
- The strategy of investment in high-yielding projects
- The strategy of releasing low-yielding and non-productive assets [12]

During the last 50 years, the studies conducted on the executive compensation have undergone a drastic rise and have covered different scientific fields.

A large number of the studies have dealt with the evaluation of the relationship between the top managers rewarding and the corporate performance. In these studies, the theory of representation has been considered as the basis for research. Representation theory predicts a positive relationship between managers' rewards and company performance [9].

John P. Evans & Robert T. Evans in 2002 dealt with evaluation of the relationship between the managers rewarding structure and their performance. The study was conducted on 209 companies listed on the Australian Stock Exchange during the period of 1998-1995. According to this study, there is a positive relationship between the managers' compensation in the form of shares and the economic value added. On the contrary, there was no strong relationship between cash payments to managers and economic value added.

Gregg (2005) investigated the relationship between manager rewards and company performance. He chose his sample from the major British companies during the period of 2002 to 1994. The researcher achieved an asymmetric relationship between payment and performance. In years when stock returns were high, the payment-performance attraction was also high. He also found that paying to managers was not sensitive to performance. Thus, during the investigation period, there was a small relationship between performance and payment. He also found that the structure and size of the company, and the company's and industry's risks, affect the managers' rewards.

Jeffrey P. Katz & Ali Fatemi (1999) found in their studies that managers' rewards is relevant to the company's size and risk-taking. They also found that the added value of the company's market is a decisive factor in paying to executives. In other words, based on their studies, market value added and economic value added are better predictors of managers' rewards, than the traditional performance measures such as return on assets. In this study, the reward information were collected from the Standard & Poor's Database during 1996 to 1992, and four reward indicators were used: fixed salary, extra payments, cash bonuses, and total direct rewards. A cash bonus was obtained by summation of salary and extra payments, and the total direct reward was considered to be derived from the sum of salary, extra payments, the value of non-negotiable equity given to managers, the value of the option of the shares deal granted to the managers, and other annual rewards.

Sheikholeslami in 2001, studying the American companies by the use of a cross-sectional data survey, found a positive yet small relationship between EVA and CEO's basic salary, cash rewards and long-term rewards. Interestingly, there was no relationship between the managers' option and current performance. And they say that perhaps, the reward committee hopes that giving the option of stocks dealing to the managers would have future implications that will not be reflected in current earnings and current prices.

Jensen & Murphy (1990) also point out that paying the managers based on accounting profits create incentives to manipulate accounts and select projects with high profitability in the short run, instead of projects that create added value in the long-term. In any case, despite the fact that stock price performance is a popular basis for analyzing management reward schemes, this scheme is not always a good indicator of whether management has made or eliminated value during the year. Stock prices will fluctuate and even with an efficient market, they will not necessarily always reflect the true value of the company.

Duru (1998) studied the followings:

- 1- Study of the relationship between market value added and economic income
- 2- Study of the relationship between manager's reward and economic income
- 3- Investigating the effect of investment opportunities on manager's reward and economic income

He obtained the following results in his study:

- 1- The relationship between market value added and economic income was confirmed. The analysis is indicative of a positive relationship that increases over time.
- 2- There is a periodic inconsistency in the relationship between economic gains and market value added in the form of a theoretical model.

Investigating the managers' reward scheme was conducted by Modarres in 1994. Using a questionnaire, he examined the 70 Stock Market listed companies and 50 companies which were not included in the stock market companies:

Methods of awarding bonuses in 15% of companies are as follows: a percentage of fixed salary, 29% as a percentage of net profit and the profit distributed to the shareholders, 8% as the performance surplus to budget, 8% as the growth of production, 3% as granting the option to buy the share, 10% based on the opinion of the major stockholders and without a clear basis, and 27% based on a combination of the above factors.

Sirani (2004) has investigated the important structures in determining the contracts, indices and parameters of the remuneration of corporate executives in Iran. He has examined two important subjects using representation theory: 1- Relevance of rewards of directors in Iran with accounting profit, profit growth and growth of market value added 2- Study of important structures in determining rewards of managing directors; In the first case, the data of companies that have been profitable and qualified in Tehran Stock Exchange for the period of 1996 to 2001, were used, and the variance and regression have been used as methods of analysis. In the second case, a survey was conducted by sending a questionnaire and collecting the views of the managers and consultants of the institutions, investment companies and industrial organizations. The statistical techniques of the binomial test and Friedman and Kruskal-Wallis variance analysis were also used. In his research, he obtained the following results:

- A long-term and stable reward contract and scheme will further increase the value of the company.
- Companies whose directors have reward contracts with their subsets are better than other companies.
- Most current rewards contracts and schemes are based on accounting profit. Also, a contract and reward scheme that is solely for the accounting benefit, helps less in value creation.
- In cases where the rewards basis is operating profit and production level, managers are interested in investing in their rewards.
- In the efficient reward contract, the manager's reward is not limited. Also, in the efficient reward contract, the rewarding of the director is determined as a linear and exponential function of the gain.

Jahanmiri (2001) examined the existing methods of rewarding the industrial managers and compares them with the EVA method in order to select the best method for increasing shareholders' wealth. This research is of descriptive-empirical method. The AHP technique is a research method for testing hypotheses. Generally, two methods as fieldwork (through a questionnaire) and a library study, are used to conduct a research. The statistical population includes all senior industrial managers of Tehran Stock Exchange listed companies among which, some of them are randomly chosen as the sample. Based on this research, the method of economic value added is one of the best and most effective methods. Other rewarding methods that are prioritized, are percentage dividends and annual accounting profits methods, which are considered by the managers based on the priority of these methods and the satisfaction of short-term and immediate managerial needs.

Accordingly, and in order to meet the research objectives, the following hypotheses are developed:

First Hypothesis: There is a significant relationship between managers' rewards and economic value added.

Second Hypothesis: There is a significant relationship between managers' rewards and net income.

Third Hypothesis: There is a significant relationship between economic value added and net income.

III. METHODOLOGY

Since we evaluate the correlation between the variables in the current study, it is a theoretical research. The time scope of the research is 2004 to 2014.

In the current study, the companies listed in Tehran Stock Market, which are qualified with the following characteristics, are considered as the statistical population:

- have entered the stock up to 2004.
- Their shares have been traded at least once in the market for the years studied.
- The financial statements of the listed companies are available to the Stock Exchange during the study period.
- Have continuous activity throughout the study period.
- At least 7 years of rewards have been awarded to managers.

The needed data were collected through library-based and field methods, by referring to the Tehran Stock Exchange Market and studying the companies' financial statements.

IV. RESEARCH VARIABLES

Economic Value Added: is the residual income obtained after the deduction of capital costs from operating profit, and is calculated as follows:

$$EVA = NOPAT_t - WACC(NA_{t-1})$$

The elements of the above formula are as follows:

NOPAT_t: the net operational profit after deduction of taxes at the end of the period t

WACC: Well-proportioned Average Capital Cost

NA_{t-1}: Total capital to book value at the beginning of period t (end of t-1) [12]

The operational approach has been applied for calculation of NOPAT and NA_{t-1}, in the current study.

NOPAT is calculated by the following operational approach:

$$NOPAT = \text{Tax} - \text{Increase in Capital Equity} + \text{Other Income (Costs)} + \text{operational profit}$$

$$\text{Operational Profit} = (\text{Sales of operating costs} + \text{price of the sold goods}) - \text{net sales}$$

NA is calculated by the following operational approach:

$$NA = \text{Capital Equity balances} + \text{other assets} + \text{Net fixed assets} + \text{Net working capital}$$

Some terms used in the methodology are calculated as follows:

$$\text{Net working capital} = (\text{Current Operating Debt} - \text{Current Debt}) - \text{Current Assets}$$

$$\text{Operating current debts} = \text{Pre-sales} + \text{short-term loans received from banks}$$

$$\text{Net fixed assets} = \text{Accumulated depreciation} - \text{Historical cost of fixed assets}$$

Capital equivalents including the saving in inventories value reduction, doubtful receivables reserves, deferred fees reserves, employee service endowments, LIFO reserves, amortization of accumulated goodwill, intangible asset balances (R & D expense, marketing and product development costs), and other Equivalent capitals are added to the net assets.

For obtaining NOPAT, the increase in capital equivalents including the increase in the savings in inventories value reduction, increase in the doubtful receivables reserves, increase in deferred fees reserves, increase in employee service endowments, increase in LIFO reserves, increase in amortization of accumulated goodwill, increase in intangible asset balances, and increase in other Equivalent capitals are added to the operational profits.

Well-proportioned Average Capital Cost is calculated by the following formula:

$$WACC = (W_d \times K_d) + (W_p \times K_p) + (W_e \times K_e) + (W_s \times K_s)$$

In which:

W_d And K_d are the weight and rate of the debts costs

W_p And K_p are the weight and cost of premium stock

W_e And K_e are the Weight and rate of the cost of accumulated cost

W_s And K_s are the weight and cost of ordinary stock prices [17]

For calculation of the ordinary stock prices, the Gordon model is used:

$$K_e = \frac{D_1}{P_0} + g$$

In this research, for the purpose of obtaining g, the growth rate of each year's distributed benefit, is calculated compared to the previous year, and then using the geometric mean, the growth rate of the company was obtained.

V. DATA ANALYSIS

After collecting information and statistical data, the information and data are analyzed to obtain expected results. SPSS software is used for this purpose. In order to determine the normality of the obtained values and assign the tests used, we first perform the Kolmogorov-Smirnov test. In this test, we seek to prove one of the following assumptions.

H0: the studied variables have normal distribution.

H1: the studied variables do not have normal distribution.

	Managers' rewards	EVA	Net income
Kolmogorov-Smirnov	6.128	8.849	10.025
Significance level	0.000	0.000	0.000

As it is seen, in all the studied variables, the significance level of the first type error is lower than 0.05, so the assumption of the normality of the variables is rejected.

Therefore, for testing the hypotheses, we need to use the converters with which the variables find a normal distribution, and using the normality of them, parametric tests such as the Pearson correlation coefficient and regression can be used. The Kolmogorov Smirnov statistics and the significance level of the variables after the use of *ln*converter, are indicated in the table below.

The Kolmogorov-Smirnov statistic value after conversion

	Managers' rewards	EVA	Net income
Kolmogorov-Smirnov	1.036	1.034	0.766
Significance level	0.233	0.0235	0.600

As it was indicated, after the use of the converter, the significance level of the first type error in all the variables is higher than 0.05, so the normality of the variables is approved. Now, the Pearson correlation coefficient and regression can be used for investigation of a significant relationship between the independent and dependent variables.

First Hypothesis: There is a significant relationship between managers' rewards and net income of the company.

Since the given answers have a numerical scale, we use Pearson's parametric correlation coefficient to determine the existence of correlation and a significant relationship between these two variables.

Correlation Coefficient of Personality Characteristics and Risk-taking Rate

		Net income
Managers' rewards	Correlation coefficient	0.688
	Significance level	0.000
	No. of observations	769

The correlation coefficient between the two variables is 0.688, and the significance level is 0.000. Since the significance level is lower than error level 0.05, the assumption of a significant relationship between the managers' rewards and net income is approved with 95% confidence.

For evaluation of existence of a significant relationship between the managers' rewards as the dependent variable, and company's net income as the independent variable, the regression equation is used. As it is indicated in the above table, the correlation coefficient (R) is 0.688, which is indicative of a strong relationship between the managers' rewards and net income. In addition, the coefficient of determination of the regression equation is 0.47, which indicates that 47% of the changes in the dependent variable of managers' rewards, are determined by the independent variable of company's net income.

In the following, we investigate whether there is a significant relationship between the two variables or not. Actually, we seek to prove one of the hypotheses.

H0: there is not a significant relationship between the independent variable of company's net income and the dependent variable of managers' rewards.

H1: there is a significant relationship between the independent variable of company's net income and the dependent variable of managers' rewards.

	sum of squares	Degree of freedom	Mean of squares	F	Significance level
Regression	275.971	1	275.971	690.300	0.000
Residual	306.635	768	0.400		
Sum	582.606	768			

The F-statistic value is 690.3 and the significance level is 0.000. Since the significance level is lower the first type error level of 0.05, the assumption of existence of a linear relationship between the company's net income and managers' rewards is approved with a 95% confidence. For further approving, we evaluate the coefficients of the regression model.

	Coefficients		t	Significance level
	B	Standard error		
Coefficient	7.323	0.461	15.849	0.000
Company's net income	0.505	0.019	26.274	0.000

Since the significance level of the coefficient of company's net income is 0.000, which is lower than first type error level of 0.05, the independent variable coefficient is approved with 95% confidence. Thus, there

is a significant relationship between independent variable of company's net income and the dependent variable of managers' rewards. The regression equation will be as follows:

$$y = 7.323 + 0.505x$$

Y: logarithm of the managers rewards variable

X: logarithm of the company's net income variable

Second Hypothesis: there is significant relationship between the managers' rewards and the economic value added.

Since the given answers have a numerical scale, we use Pearson's parametric correlation coefficient to determine the existence of correlation and a significant relationship between these two variables.

Correlation Coefficient of Personality Characteristics and Risk-taking Rate

		Economic value added
Managers' rewards	Correlation coefficient	0.583
	Significance level	0.000
	No. of observations	634

The correlation coefficient between the two variables is 0.583, and the significance level is 0.000. Since the significance level is lower than error level 0.05, the assumption of a significant relationship between the managers' rewards and the economic value added is approved with 95% confidence.

For evaluation of existence of a significant relationship between the managers' rewards as the dependent variable, and the economic value added as the independent variable, the regression equation is used. As it is indicated in the above table, the correlation coefficient (R) is 0.583, which is indicative of a strong relationship between the managers' rewards and economic value added. In addition, the coefficient of determination of the regression equation is 0.34, which indicates that 34% of the changes in the dependent variable of managers' rewards, are determined by the independent variable of economic value added.

In the following, we investigate whether there is a significant relationship between the two variables or not. Actually, we seek to prove one of the hypotheses.

H0: there is not a significant relationship between the independent variable of economic value added and the dependent variable of managers' rewards.

H1: there is a significant relationship between the independent variable of economic value added and the dependent variable of managers' rewards.

	Sum of squares	Degree of freedom	Mean of squares	F	Significance level
Regression	153.531	1	153.531	325.631	0.000
Residual	297.981	632	0.471		
Sum	451.512	633			

The F-statistic value is 325.631 and the significance level is 0.000. Since the significance level is lower than the first type error level of 0.05, the assumption of existence of a linear relationship between the economic value added and managers rewards is approved with a 95% confidence. For further approving, we evaluate the coefficients of the regression model.

	Coefficients		t	Significance level
	B	Standard error		
Coefficient	11.107	0.461	24.008	0.000
Economic value added	0.350	0.019	18.045	0.000

Since the significance level of the coefficient of economic value added is 0.000, which is lower than first type error level of 0.05, the independent variable coefficient is approved with 95% confidence. Thus, there is a significant relationship between independent variable of economic value added and the dependent variable of managers' rewards. The regression equation will be as follows:

$$y = 11.107 + 0.35x$$

Y: logarithm of the managers rewards variable

X: logarithm of the economic value added

Third Hypothesis: there is a significant relationship between the economic value added and the company's net income.

Since the given answers have a numerical scale, we use Pearson's parametric correlation coefficient to determine the existence of correlation and a significant relationship between these two variables.

Correlation coefficient between economic value added and the net income

		Net income
Economic value added	Correlation coefficient	0.836
	Significance level	0.000
	No. of observations	778

The correlation coefficient between the two variables is 0.836, and the significance level is 0.000. Since the significance level is lower than error level 0.05, the assumption of a significant relationship between the economic value added and net income is approved with 95% confidence.

For evaluation of existence of a significant relationship between the economic value added as the dependent variable, and company's net income as the independent variable, the regression equation is used. As it is indicated in the above table, the correlation coefficient (R) is 0.836, which is indicative of a strong relationship between the economic values added and net income. In addition, the coefficient of determination of the regression equation is 0.69, which indicates that 69% of the changes in the dependent variable of economic value added, are determined by the independent variable of company's net income.

In the following, we investigate whether there is a significant relationship between the two variables or not. Actually, we seek to prove one of the hypotheses.

H0: there is not a significant relationship between the independent variable of company's net income and the dependent variable of economic value added.

H1: there is a significant relationship between the independent variable of company's net income and the dependent variable of economic value added.

	Sum of squares	Degree of freedom	Mean of squares	F	Significance level
Regression	1191.603	1	1191.603	1800.854	0.000
Residual	513.470	776	0.662		
Sum	1705.073	777			

The F-statistic value is 1800.854 and the significance level is 0.000. Since the significance level is lower the first type error level of 0.05, the assumption of existence of a linear relationship between the company's net income and economic value added is approved with a 95% confidence. For further approving, we evaluate the coefficients of the regression model.

	Coefficients		t	Significance level
	B	Standard error		
coefficient	-0.427	0.571	-0.748	0.455
Company's net income	1.004	0.024	72.736	0.000

Since the significance level of the coefficient of company's net income is 0.000, which is lower than first type error level of 0.05, the independent variable coefficient is approved with 95% confidence. Thus, there is a significant relationship between independent variable of company's net income and the dependent variable of economic value added. The regression equation will be as follows:

$$y = 1.004x$$

Y: logarithm of the economic value added

X: logarithm of the company's net income variable

We now evaluate the predictive power of regression lines, which is based on the hypotheses of this study. For this purpose, the information available from 2008 were used. At first, an estimate of the variables is made and then the difference between the actual and estimated values or the error rate for each observation is calculated and performed for each test, as follows.

H0: the average error is zero.

H1: the average error is not zero.

Based on the first hypothesis which evaluated the relationship between managers' rewards and companies' net income, the following regression line was obtained:

$$y = 7.323 + 0.505x$$

Since the variables mentioned in the above formula are in the form of logarithm, only the independent variables greater than zero can be used in this formula, for calculation of the dependent variable. So, in this way, the number of observations will be 86. The following table shows the test statistics.

Z	No. of observations	Standard deviations of observations	Mean of observations
2	86	560,455,494	93,301,525

Since $Z_{0.025}$ is equal to 1.96, the obtained z is greater than 1.96, so the first hypothesis is approved with a 95% level, which means the average error is not zero. Therefore, for the studied year, and based on the provided regression line and the independent variable of net income, a good estimate of rewards has not been obtained.

Based on the second hypothesis which evaluated the relationship between managers' rewards and economic value added, the following regression line was obtained:

$$y = 11.107 + 0.35x$$

Since the variables mentioned in the above formula are in the form of logarithm, only the independent variables greater than zero can be used in this formula, for calculation of the dependent variable. So, in this way, the number of observations will be 69. The following table shows the test statistics.

Z	No. of observations	Standard deviations of observations	Mean of observations
4	69	682,277,555	328,588,124

Since $Z_{0.025}$ is equal to 1.96, the obtained z is greater than 1.96, so the first hypothesis is approved with a 95% level, which means the average error is not zero. Therefore, for the studied year, and based on the provided regression line and the independent variable of economic value added, a good estimate of rewards has not been obtained.

Based on the third hypothesis which evaluated the relationship between economic value added and companies' net income, the following regression line was obtained:

$$y = 1.004x$$

Since the variables mentioned in the above formula are in the form of logarithm, only the independent variables greater than zero can be used in this formula, for calculation of the dependent variable. So, in this way, the number of observations will be 86. The following table shows the test statistics.

Z	Z	No. of observations	Standard deviations of observations
5	86	166,896,360,445	90,483,767,106

Since $Z_{0.025}$ is equal to 1.96, the obtained z is greater than 1.96, so the first hypothesis is approved with a 95% level, which means the average error is not zero. Therefore, for the studied year, and based on the provided regression line and the independent variable of economic value added, a good estimate of rewards has not been obtained.

The results of the current study are in lines with those of John P. Evans & Robert T. Evans (2002) and Jeffrey p.katz & ali fatemi (1999) in terms of the existence of a relationship between managers' rewards and economic value added, save for the difference that in the above studies, there was a relatively weak relationship between the two components, while in the current study, there is a relatively strong relationship between economic value added and the managers' rewards.

One of the results of Sirani (2004) research, is that most of the current reward schemes and contracts are based on accounting profit. In the current study, there is a strong relationship between managers' rewards and net profit, which indicates a similarity to the result of Sirani's research. Considering the strong relationship between economic value added and net profit, it seems that the use of economic value added as a measure to evaluate the performance of company executives seems to be an additional cost to the company, and the use of net profit of accounting, due to its simplicity of the calculation and being more comprehensible, is a suitable measure for paying the rewards, as nowadays, most companies - according to the hypothesis of the current study and the existence of a strong relationship between the managers' rewards and the net profit of accounting- use the net profit as a benchmark to reward managers.

In the current study, after obtaining the regression lines between variables, the dependent variables were predicted using the obtained models for the year 2009, and were compared with the actual values. Based on the results, regression lines were not able to predict appropriate variables in 2009. However, the global crisis and the loss of profits of most manufacturing companies, and to some extent the pessimistic attitudes of companies for the coming years, might be the reason behind the differences between model predictions and

reality. Not only has the global crisis affected the profitability of many companies, but also many accounts reserves have increased. Accounts such as reserves and doubtful receivables, and the reduction in inventories in 2009, were significantly higher for many companies than in previous years. Due to the lack of transparency in rewards schemes in many companies and the lack of presentation of details of rewards packages, this research faced problems. In many countries, companies whose shares are traded on a stock exchange are required to make public the information about rewards of managers, such as decision-making bases for rewarding, bonus packages components, and the effects of each of them on corporate performance. This will add to the transparency of the market. It is suggested that the laws of our country should also take measures to clarify the rewards of managers in the market.

REFERENCES

- [1]. Adel, A., Momeni, M., (2002, 2003), "Statistics and its application in management" Volume I and II, SAMT Publications (in Persian).
- [2]. Desai, Anand s. Fatemi Ali. Katz Jeffrey. (1999), "Wealth Creation and Managerial pay: MVA and EVA as Determinants of executive compensation". Available at: <http://works.bepress.com/cgi/viewcontent.cgi?article=1003&context=alifatemi>
- [3]. Evans, John P. Evans, Robert T. (2012), "An examination of economic value added and executive compensation", working paper Available at: <http://ssrn.com/abstract=313974>
- [4]. Frydman, Carole. Saks, Raven E. (2007). "Executive compensation: a new View from a Long-Term perspective", available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=972399
- [5]. Hoque, Mahfuzul. Akter, Mahmuda. Shil, Nikhil Chandra. (2014). "Value-based measure: an application of EVA in small manufacturing company in Bangladesh". Available at: <http://mpri.ub.uni-muenchen.de/7711/>
- [6]. Irala, Lokanandha R. Reddy, Raghunatha. (January 2006) "Performance Evaluation, Economic Value Added and Managerial Behaviour", PES Business Review, Vol. 1, No. 1.
- [7]. Izadinia, N., (2014), "Rewards schemes for managers based on economic profit", Journal of Faculty of Administrative Sciences and Economics, University of Isfahan, 2010, No. 1 (in Persian).
- [8]. Jahanmiri, M.S., (2012), "Examining existing methods of rewarding the industrial managers and comparing them with the EVA (Economic Value Added) method in order to choose the best way to increase shareholder wealth with AHP technique." Master's Thesis. University of Tehran (in Persian).
- [9]. Jensen, Michael C. Meckling, William H. (1976). "Theory of Firm: Managerial Behavior, Agency Costs and Ownership Structure". Journal of Financial Economics (JFE), Vol. 3, No. 4.
- [10]. Khaki, Gh., (2004), "Research Methodology in Management", Scientific Publishing Center of Islamic Azad University (in Persian).
- [11]. Khani, A., (2011), "Managing Profits and Rewards: A Study for making the Financial Information transparent", Ph.D. Thesis, Allameh Tabatabaiee University(in Persian).
- [12]. Murphy, Kevin J. (1999), "executive compensation". Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=163914&rec=1&srcabs=794806.
- [13]. Pietge, Stephan. (2003), "EVA as a measure for shareholder value and executive compensation".
- [14]. Raviv, Alon. Landskroner, Yoram. (June 2009). "The 2007-2009 financial crisis and executive compensation: analysis and proposal for a novel structure". Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1433939.
- [15]. Sirani, M., (2005), "model of Bonus payment to the managers by the use of accounting Profit and Market Value Added (MVA)", Ph.D. thesis, University of Tehran(in Persian).
- [16]. Stewart G.Bennett. (1991). "The quest for value", Harper Collins publisher. Inc.
- [17]. Young S, David. O'Byrne, Stephan F. (2000). "EVA and Value – Based Management". Published by McGraw-Hill.

International Journal of Business and Management Invention (IJBMI) is UGC approved
Journal with Sl. No. 4485, Journal no. 46889.

Miriga Catherine N. "Balance Scorecard Perspectives and Performance of Kirinyaga County
Law Courts." International Journal of Business and Management Invention (IJBMI) , vol. 07,
no. 03, 2018, pp. 37–45.