

The Effect of Accruals Quality on the Incentive Contracting Role of Earnings in Tehran's Stock Market

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Abstract

In this paper, the effect of accruals quality on the role of profit in negotiating an incentive contract has been examined. For this purpose, a sample that contains 153 accepted companies in stock market since 2003 until 2010 has been considered. For measuring the total accruals quality, method of Dechow and Dichev (2002) has been used. According to Francis et al (2005) the accruals have been separated in optional and compulsory components. Additionally, for testing hypothesis the two methods of multivariate linear regression from Peng (2011) have been used, adopting the method of combined data. The results showed that the quality of accruals has no significant relationship with usefulness of profit for negotiating incentive contracts neither in total level nor in level of each optional or compulsory component. Nevertheless, quality of accruals in total level and in levels of each optional or compulsory component has a direct relationship with the changes in director's reward. Also, the other results of the research have showed that stability and informational content of the profit have a direct relationship with the usefulness of profit for negotiating incentive contracts.

Keywords: accruals quality, optional accruals, compulsory accruals, profit stability, informational content of the profit.

Introduction

Business unit's interest is one part of financial statement having a great importance for all of the users. It has been mentioned in proclamation NO.1 of financial accounting that the financial reports have emphasized the information about the company's performance that is presented through the calculation of interest and its component. Since company's interest has a great importance for the users of financial statement, the manager tries to misreport the cost of the interest and the way that it is presented. There are two main reasons for manipulation of interest (management of interest). The first reason is encouraging the investors to buy company's equity and the second reason is to increase the company's market value (Kellog and Kellog, 1991). Using the accruals is a method for misreporting the company's interest because accrual accounting gives to the managers the choice to determine the interest in different periods of time. Actually the managers in the accrual accounting system are confronted with the different items for the best time of incomes and costs detection. One of these items is fast detection of incomes by selling them on credit. This activity of managers is called the management of interest. Manager's opinion in the detection of reported interest has an effect on interest quality and reduces it. The managers equilibrate the reported interest by choosing especial accounting politic, accounting estimates and accrual management. The main purpose of this paper is to study that whether the accrual quality has any effect on in negotiating an incentive contract. To consider them in order to achieve a desired profits and with Investing more in stock, the economy has become more prosperous.

Literature Review

With developing the commerce and industry and a distance between the owner and the corporation's managers, there should be controlled and incentive mechanism for these relationships. According to agency theory, the organization has set by a series of contract. The existence of a business unit is based on its contract. These contracts can be written or unwritten. One of the most important contracts is the reward plan for the owner and the company's managers. Agency relationship is a contract on which the owner delegates the decision-making power to an agent (Namazi, 2006).

The problem for reducing and solving the agency conflict is to make a contract that provides incentive for the manager to interact. This kind of contract is named optimal incentive contract. In such situation, the required information for making this contract should be provided. Usually this contract has two main features: 1)It provides the required information in a risky situation. 2)It makes a good base for stakeholders and managers to working in a partnership in risk. The stakeholders and the managers should act about two things: 1)They might make a contract that determines the amount of salary and benefits and partnership in risk of the manager and stakeholder's share. 2)They might choose an accounting and information system that provides required data for contract's base. The system's data should be visible and considerable for both manager and stakeholder (Namazi, 2005). Contract's base and reward's plan can be the criteria based on one of these items:

1. Accounting interest
2. Economic criteria of performance evaluation like development of the market value, economic value added, Increase of the quantity and quality of production.
3. Granting of choosing to buy a share to directors
4. A combination of the above.

With making an incentive optimal contract we hope that the operation and market value of the company increase and it is the result of manager's effort.

The accrual accounting system provides information to conclude and implement agreements. The Data generated in the system (for example, accounting profits), will form the basis of many of these performance indicators, and has an important role in representing. Therefore, the quality of accounting information is used for this very important purpose. Evidence shows that when the relationship between accounting interest and stock returns is less, in reward contract for the managers, the accounting interest has more importance (Lambert and Larcker, 1987), (Sloan,1993). Also, the amount of reaction to benefits is influenced investment opportunities, profitability and sustainability information content of interest (Bushman ET el, 2006).

Kwon (1989) has proved that the accruals develop the relationship between the efforts of the director and the future cash flows. An accounting system based on accrual in incentive contracts work more effective than an accounting system based on cash flows. On the other hand, two types of failure in accrual accounting earnings are presented as a performance measure. Firstly, it is possible that the current and future accruals and cash flows aren't linked; secondly, it is possible that pattern of accruals on cash flows are including factors that are outside the control of managers (Lambert, 2006).

Researchers have defined accruals quality as the predictive power of these items and the estimation of future cash flows (Dechow and Dichev, 2002), (Francis et al 2005). Thus, accrual-based interest with high quality, forecasts future cash flows more accurate. Such benefits, however, do not necessarily recognize the efforts of managers. For example, the director estimates doubtful receivables through his/her experiences, accounts receivable, customer credit quality and current state of the economy. If accrual quality is low, it is possible that accounting system is not successful in providing accurate information for presenting them to administrators of estimating the amount of

doubtful receivables; in conclusion the quality of reported earnings reduces. In contrast, accruals quality based information may allow the director to have more precise estimates and to avoid reporting low quality interest. In such situation, net profit, would be more appropriate for estimating future cash flows and, therefore, will be more effective in determining director remuneration. In this regard, accruals quality has two messages for both shareholders and investors. First, the power of managers in evaluation and assessment of the accruals and less deviation of profit from cash flow that causes, in general, users of financial statements have more confidence in company's reported profits, and probably the public forums of shareholders in the companies with higher accruals quality, put more emphasis on detection of Board's reward as compared to other performance criteria. In addition, in these companies, the accounting profit is one of the main elements of the contract of the Board's reward. Thus, this research question is the following:

Does the accruals quality have an effect on negotiating an incentive contract? Conducted Researches on the basis of this research include foreign and internal research. First, the foreign and then internal research will be presented.

Shalev et al (2011) in a research titled as the accounting interest and manager's reward have studied the impact of the company's executive compensation structure on current value in the combined companies. The results show that because of using different accounting criteria in company's performance detection, the reward contract had an effect on the accounting methods which was chosen by the managers.

Croci et al (2001) at the research Boards remuneration have investigated the familial control and institutional investors, the impact of family ownership and institutional shareholders on the remuneration paid to the Board in Continental Europe. They found that family ownership reduces potentially the rewarding and also cash bonuses paid to the Board. The results also suggest that family ownership can control the additional level of remuneration paid to directors actively and can thwart profit-seeking motives of administrators. The results show that institutional shareholders raise the remuneration paid to directors.

Jiang et al (2009) in a research titled as the impact of ownership concentration on relationship between directors reward and company's performance in New Zealand, have examined the effect of ownership structure on firm performance related bonuses paid to managers. The results indicate that the companies that have concentrated ownership structure, the relationship between management compensation and firm performance is negative and in the companies that doesn't have concentrated ownership structure, the relationship between management compensation and firm performance is positive.

Goel and Thakor (2009) in a study titled "Why do firms manage interest?", Concluded that companies with high variability in cash flows prize money to the board for smoothing the interest. They showed that in some circumstances, rewarding to managers for creating smooth profits is desirable. They claimed that most shareholders are the investors with short-term perspective and may have to sell the stock in the near future duo to investors need the liquidity which is typically relevant with the stock conditions and characteristics.

Aria et al (2008) in a research titled as "Is the profit management always better for shareholders?" found that managers remove volatile components of profit by income smoothing, and they establish a threaded connection between the profits of different years. This makes the assessment of the market capitalization of shares depend potentially on patterns of income smoothing by managers. As a result, in the periods that the chance of smoothing is less, in the market value of the stock return anomalies changes occur.

Alfred and Burcin (2006) in research as "ownership structure and director's payment in Germany", have studied the relationship between ownership structure and the remuneration paid to

directors. In this study they have worked one hundred and sixty German companies during the period from 1987 to 2003. The results indicate that the remuneration of directors based on the agency theory, decrease the company's profit. On the other hand lack of control of the owner, makes administrators able to increase the reward. In firms which the managers try to increase their voting rights to receive cash bonuses the link between performance and reward of the manager is weak.

Kordestani, and Lotfi (2011) in a study on the relationship between earnings forecast errors and accruals have examined the relationship between management forecast errors and accruals in the next year. The results of their study show a positive correlation between accruals and earnings management prediction error. The results of this study indicate positive relationships between the companies that have more volatility in operating cash flows are more.

Sajjadi et.al (2011) in a research on the relationship between a manager's bonus plan and the criteria for evaluating economic in the companies listed in Tehran Stock Exchange, the effect of variable remuneration paid to directors and their ownership of stock on the company's performance have been investigated. Using panel data analysis indicated a significant relationship between remuneration paid to directors with economic criteria (economic value added, market value added and economic value added adjusted) of performance appraisal. The findings suggest significant relationship between the percentage of shares owned by managers and the market value added and also no relationship with other measures of economic performance.

Mashayekhi (2010), in a study titled by "Capital expenditure, accruals and stock returns", has studied accruals anomaly (accrual effect on returns), misfit's capital expenditure (capital expenditure effect on returns) and stock performance by using misfits in Iran's capital market. The results indicate that capital expenditure and accruals anomaly exists in Iran and the capital markets and they are separated, although these abnormalities may be related in different ways. Their results indicate that after controlling for the three Fama and French risk factors, investors earn higher returns, by using two misfits rather than only one.

Nurvash and hoseini (2009) in a research as "The relationship between disclosure quality (reliability and timeliness) and earnings management" have shown earnings management is associated with less, because the quality of corporate disclosure can reduce the information asymmetry and reduce information asymmetry. Their research shows that between the quality of corporate disclosure and earnings management, there is a significant negative relationship. The findings indicated a significant negative relationship between being in time incorporate disclosure and earnings management.

Ghaemi et al (2008) in a research as "The quality of earnings and stock return" have studied the relationship between earnings quality by accrual and its components with normal and abnormal stock returns in the Tehran Stock Exchange. Accruals have been separated in discretionary and nondiscretionary components. The results show accruals and its components have effect on the stock return.

Research hypotheses

- The first hypothesis, the quality of total accruals is related to profit usefulness in incentive contracts.
- The second hypothesis, compulsory accruals quality is associated with profit usefulness in incentive contracts.
- The third hypothesis, optional accruals quality is associated with profit usefulness in incentive contracts.

Modeling

Firstly we investigate the fundamental variables using data collected. The basic variables are included the dependent and independent variables.

The Dependent Variable

In hypothesis test model of this research quality of accruals is the dependent variable.

Accruals Quality Estimation

To measure the quality of accruals Dechow and Dichev (2002) model will be used. The model is calculated as follows:

$$CAC_{it} = \beta_0 + \beta_1 CF_{i,t-1} + \beta_2 CF_{i,t} + \beta_3 CF_{i,t+1} + \beta_4 \Delta SALES_{i,t} + \beta_5 PPE_{i,t} + \varepsilon_{i,t}$$

In which:

CAC: complete accruals current

CF: Cash function

$\Delta SALES$: changes in sales revenue

PPE: gross tangible fixed assets

$\varepsilon_{i,t}$: Error estimates

CAC in the complete accruals current is calculated as follows:

$$CAC = \Delta CA - \Delta CL - \Delta Cash + \Delta STDEBT$$

ΔCL : Change in current liabilities

ΔCA : Changes in current assets

$\Delta STDEBT$: Change in financial receivables

$\Delta Cash$: Change in Cash

All the variables divided by the book value of assets scale at the beginning of the time. Regression residuals (ε) are the index of accruals quality (AQ). When it is in low value, makes the accruals high quality. The bibliography shows that accruals quality has a compulsory component which reflects economic fundamentals and an optional component that reflects management's choices. Francis and colleagues [13], have separated these components through the use of regression models (1-2)

$$AQ_{i,t} = \beta_0 + \beta_1 STDSALES_{i,t} + \beta_2 STDCF_{i,t} + \beta_3 LOGTA_{i,t} + \beta_4 NEGEARN_{i,t} + \beta_5 OC_{i,t} + \varepsilon_{i,t}$$

In which:

AQ: the total accruals quality (Accruals Quality residuals obtained from model)

STDSALES: The standard deviation of sales

STDCF: the standard deviation of operating cash

LOGTA: natural logarithm of firm assets

NEGEARN: net earning negative

OC: the company's operating cycle

The amount predicted by the regression models above as compulsory accruals quality are presented with symbol AQ-IN in the hypothesis test, and the remaining amount of the optional accruals quality are presented with AQ-DIS in the hypotheses test. Francis et al (2005)

The Dependent Variables

The change in remuneration paid to the Board as the dependent variable are extracted from the companies audited financial statements and it does not need to estimate.

The Control Variables

In this study for control the effects of firm-specific characteristics on the results of testing hypotheses, the control variables of investment opportunities, profitability and stability of earnings information content is used. Method of measurement and estimation are followed:

Investment Opportunities

Investment opportunities in the ratio of market value to the equity value of the company. And it is calculated in the following equation:

$$MTB_{i,t} = \frac{\text{Market Value } i, t}{\text{Book Value } i, t}$$

Market value of the company is obtained from stock market price in the company's shares outstanding. Book value of the company is the book value of equity at end of financial period.

Profit stability

Based on Kormendi and Lipe (1987), the profit stability is measured by PVR that is current value of expected future profits. First, a linear regression model (1-4) estimates from benefit changes for periods of 2, 1 and 0 for the sample firms.

$$\Delta EARN_{i,t} = \beta_0 + \beta_1 \Delta EARN_{i,t-1} + \beta_2 \Delta EARN_{i,t-2} + \varepsilon_{i,t}$$

After estimating the coefficients β_1 and β_2 , consistent profits in the year - now, with the assumption that the discount rate for all companies is 10%, from equation is calculated as equation (1-5):

$$PERSIT_{i,t} = \frac{1}{(1 - V)(1 - V\beta_1 - V\beta_2)} - 1$$

$$V = 1/(1 + r)$$

r: is the discount rate of the present value of expected future profits.

Informational content of earnings

For estimation the informational content of earning base of study, we use the earnings response coefficients in which the net profit on stock returns is estimated by the following regression model:

$$RET_{i,t} = \beta_0 + (ERC) \Delta EARN_{i,t} + \varepsilon_{i,t}$$

In the above regression, ERC coefficient is the earnings response coefficients and reflects its informational content. In Hypotheses test model this variable is shown with the symbol ERC (Peng, 2011).

Methodology

The method of this research is the kind of quasi-experimental study and of the nature of correlation. Because the fundamental purpose of this study is explaining the empirical the relationship between the phenomena, theory test and to add to existing knowledge in a particular field. And we say "correlation" because in this study the relation between the variable is considered. The present study investigates the relationship between the the variable and seeks to prove the existence of this relationship based on historical data. Methods used to assess correlations between variables is the cross regression. This study includes a dependent variable and one or more independent variables that the effect of the independent variables on the dependent variable has examined by regression tests. Accordingly, the number of companies listed in Tehran Stock Exchange during the period selected data from 2003 until 2010 is collected, after estimating the fundamental variables to study the relationship between these variables can be statistically analyzed.

Statistical population and sampling method

The Statistical population of this study includes all companies listed in Tehran Stock Exchange, excluding the financial firms and the banks. Select a sample of listed companies in Tehran Stock Exchange is considering by the following criteria:

1. End of the financial year should be at the end of March.
2. The company shouldn't have a change in financial year during the study.

3. Trading symbol should be active and should be used at least once a year.
4. Financial information should be available in the period of study.
5. Therefore the sampling method is systematic exclusion, based on the above considerations the companies that do not have the mentioned qualifications are excluded from the sample.

Hypothesis Test of the research

The results of the first research hypothesis test

The first hypothesis tests has been done for the purpose of considering the relationship between the quality of the benefit with the interest usefulness for incentive contracts and the statistical hypothesis is defined as:

- H_0 : Accruals quality is not associated with benefit from profits for incentive contracts.
- H_1 : Accruals quality is associated with benefit from profits for incentive contracts.

For the first hypothesis tests, we have used the following regression model that is combination of data:

$$\begin{aligned} \Delta \ln Comp_{i,t} = & \beta_0 + \beta_1 \Delta EARN_{i,t} + \beta_2 \Delta EARN * AQ_{i,t} + \beta_3 \Delta EARN * V(earn)/V(ret)_{i,t} \\ & + \beta_4 \Delta EARN * MB_{i,t} + \beta_5 \Delta EARN * PERSIST_{i,t} + \beta_6 \Delta EARN * ERC_{i,t} \\ & + \beta_7 RET_{i,t} + \beta_8 RET * AQ_{i,t} + \beta_9 RET * V(earn)/V(ret)_{i,t} + \beta_{10} RET * MB_{i,t} \\ & + \beta_{11} RET * PERSIST_{i,t} + \beta_{12} RET * ERC_{i,t} + \beta_{13} AQ_{i,t} + \beta_{14} V(earn)/V(ret)_{i,t} \\ & + \beta_{15} MB_{i,t} + \beta_{16} PERSIST_{i,t} + \beta_{17} ERC_{i,t} + \varepsilon_{it} \end{aligned}$$

In this model, Chow test is used to find the panel data estimation of model is better or using the combined data. The results have been shown in Table (1).

Table 1: The Results of Chow Test

P-Value	Freedom degree	Amount of Test statistic	Test statistic	Type of test
0.062	1031.6	2.007	F	Chow test

Based on the Chow table's results, since the amount of P-Value is more than 0/05, the difference in width has ruled from the beginning. In conclusion it is necessary that the first model of study be estimated by combined data method. Table 2 presents the results of the first model. The model is also estimated by using Eviews software:

$$\begin{aligned} \Delta \ln Comp_{i,t} = & 32.24352 - 0.000041 \Delta EARN_{i,t} + 0.000016 \Delta EARN * PERSIST_{i,t} \\ & + 0.219501 \Delta EARN * ERC_{i,t} + 0.188485 RET_{i,t} - 0.005079 \beta_{11} RET * PERSIST_{i,t} \\ & + 19.66621 AQ_{i,t} - 0.261802 AR(1) \end{aligned}$$

The overall significance of the model, given that the probability (P-VALUE) of F-statistic for the 0.05 is smaller than (0.000), with 95% assurance, the overall significance of the model is confirmed. According to the model coefficients, only 7.85% of the variation in manager's compensation is explained by the variables in the model.

Given that the probability (P-VALUE) corresponding to the test is more than 0.05; homogeneity of residual variance is approved. In this study, for testing not correlated residuals which is one of the assumptions of regression analysis and is called correlation, Watson's Durbin test has been used. In this case, according to preliminary results of Watson statistic Durbin outside the range is 1.5 and 2.5 and residual autocorrelation is confirmed. In order to solve this problem in the first variable auto correlated AR (1) model is imported. Since after this varies, the amount of the statistic Durbin - Watson was close to 2 (2.16), remaining independent model is also verified.

Table 2: The Results of the First research Hypothesis Testing by First Model

Dependent variable: EViews 894 Years – Company				
variable	Coefficient	t-statistics	P-Value	Relationship
Constant factor	32.2435	2.593	0.0097	Positive
Benefit changes	-0.000041	-2.065	0.0392	Negative
Benefit changes × accruals quality	0.000068	1.002	0.3165	Meaningless
Benefit changes × Variance of profit to stock returns	-0.000001	-1.705	0.0884	Meaningless
Benefit changes × Market value to book value	-0.000018	-1.139	0.2550	Meaningless
Benefit changes × profit stability	0.000016	3.476	0.0005	Positive
Benefit changes × Informational content of profit	0.219501	2.417	0.0158	Positive
Stock returns	0.188485	2.293	0.0221	Positive
Stock returns × accruals quality	0.074733	1.490	0.1365	Meaningless
Stock returns × Variance of profit to stock returns	-0.000001	-0.651	0.5149	Meaningless
Stock returns × Market value to book value	0.003027	0.439	0.6602	Meaningless
Stock returns × profit stability	-0.005079	-3.302	0.0010	Negative
Stock returns × informational content of profit	-32.99419	-1.854	0.0640	Meaningless
Accruals quality	19.66621	2.490	0.0129	Positive
Variance of profit to stock returns	0.000001	0.477	0.6328	Positive
Market value to book value	0.588353	0.581	0.5609	Meaningless
Profit stability	-0.0164842	-0.415	0.6779	Meaningless
Informational content of profit	112.2648	0.216	0.8288	Meaningless
AR(1)	-0.261802	-8.438	0.0000	Negative
The coefficient of model determination				0.078597
F-Statistics				4.146 (0.0000)

In addition, to test whether the model is a linear model and also whether the case study is linear or not, the Ramsey test has been used. Since the importance level of the test is more than 0.05 (0.1433), Therefore, based on the zero hypothesis of correct specification of the model is verified and there is no error in model. Summary results of these tests have been presented in Table (3).

Table 3: The Results of the First Tests of the Assumptions of Linear Regression Model

Ramsey		Durbin-Watson	Breusch-Pagan		Jarque-Bera	
<i>P-Value</i>	<i>F</i>	<i>D</i>	<i>P-Value</i>	<i>F</i>	<i>P-Value</i>	χ^2
0.1433	2.145	2.16	0.0001	0.1616	0.0000	140.59

Based on the result presented in table, since the value of t-statistics associated with variable changes × total accruals quality is more than 0/05 (0/3165), the H_0 hypothesis is accepted and can be said that accruals quality is not related to incentive contracts. In conclusion the first research hypothesis is rejected with the 95% confidence level.

The results of the second and third research hypothesis

To test the second and third hypothesis, the combined data from the following regression model is used:

$$\begin{aligned} \Delta \text{LnComp}_{i,t} = & \beta_0 + \beta_1 \Delta \text{EARN}_{i,t} + \beta_2 \Delta \text{EARN} * \text{AQ_IN}_{i,t} + \beta_3 \Delta \text{EARN} * \text{AQ_DIS}_{i,t} \\ & + \beta_4 \Delta \text{EARN} * \text{V(earn)/V(ret)}_{i,t} + \beta_5 \Delta \text{EARN} * \text{MB}_{i,t} + \beta_6 \Delta \text{EARN} * \text{PERSIST}_{i,t} \\ & + \beta_7 \Delta \text{EARN} * \text{ERC}_{i,t} + \beta_8 \text{RET}_{i,t} + \beta_9 \text{RET} * \text{AQ_IN}_{i,t} + \beta_{10} \text{RET} * \text{AQ_DIS}_{i,t} \\ & + \beta_{11} \text{RET} * \text{V(earn)/V(ret)}_{i,t} + \beta_{12} \text{RET} * \text{MB}_{i,t} + \beta_{13} \text{RET} * \text{PERSIST}_{i,t} \\ & + \beta_{14} \text{RET} * \text{ERC}_{i,t} + \beta_{15} \text{AQ_IN}_{i,t} + \beta_{16} \text{AQ_DIS}_{i,t} + \beta_{17} \text{V(earn)/V(ret)}_{i,t} \\ & + \beta_{18} \text{MB}_{i,t} + \beta_{19} \text{PERSIST}_{i,t} + \beta_{20} \text{ERC}_{i,t} + \varepsilon_{it} \end{aligned}$$

This model can be used to determine whether the use of panel data to estimate the model would be effective or using combined data from the Chow test. The results of this test have been shown in Table (4).

Table 4: The Results of Model Selection for Testing the Second Research

P-Value	Freedom degree	The amount of test statistic	The test statistic	Type of test
0.0578	1026.6	2.039	<i>F</i>	Chaw test

According to the results of Chaw test, since the amount of P-Value is more than 0.05 (0.0578), this hypothesis has been refused and the combined data model can be used.

Table 5: The Results of the Second and Third Research Hypothesis Testing Using Combined Data

Dependent variable: change in directors remuneration Views: 893 Years – Company				
Variable	Coefficient	t	P-Value	Relationship
Constant factor	31.618	4.771	0.0000	Positive
Benefit changes	-0.000057	0.484	0.6284	Meaningless
Benefit changes × compulsory accruals quality	-0.000016	-0.053	0.9571	Meaningless
Benefit changes × optional accruals quality	0.000097	1.140	0.2546	Meaningless
Benefit changes × Variance of profit to stock returns	-0.000001	-0.189	0.8495	Meaningless
Benefit change × Market value to book value	-0.000026	-0.722	0.4702	Meaningless
Benefit change × benefit stability	0.000013	1.551	0.1212	Meaningless
Benefit change × Informational content of profit	0.225955	1.589	0.1123	Meaningless
Profit return	0.237731	2.207	0.0275	Positive
Stock returns × compulsory accruals quality	-1.52586	-1.062	0.2884	Meaningless
Stock returns × optional accruals quality	0.051250	0.495	0.6201	Meaningless
Stock returns × Variance of profit to Stock returns	-0.00001	-1.121	0.2624	Meaningless
Stock returns × Market value to book value	0.002894	0.206	0.8361	Meaningless
Stock returns × profit stability	-0.003996	-0.541	0.5881	Meaningless
Stock returns × informational content of profit	-25.25036	-1.666	0.0960	Meaningless
Compulsory accruals quality	294.3936	2.830	0.0048	Positive
Optional accruals quality	14.05955	2.141	0.0325	Positive
Variance of profit to Stock returns	0.000001	0.990	0.3224	Meaningless
Market value to book value	0.825254	0.534	0.5934	Meaningless
Profit stability	-0.234902	-0.478	0.6325	Meaningless
Informational content of profit	-109.5884	-0.128	0.8978	Meaningless
AR(1)	-0.261975	-7.608	0.000	Negative
Coefficients of determination model			0.085280	
<i>F</i> (P-Value)			(0.0000)	3.866

Therefore the second model of the research should be estimated by the combined method. In this case, according to the model based on the preliminary results, Durbin's Watson statistic value is out of range 1.5 and 2.5. Thus this model has the problem. To overcome this problem the variable residuals first-order auto correlated AR (1) model has been imported. Table (5) presents the results of the second model.

The model is also has been estimated using Eviews software as follows:

$$\Delta \text{LnComp}_{i,t} = 31.46863 + 0.237731 \text{RET}_{i,t} + 294.3936 \text{AQ_IN}_{i,t} \\ + 14.05955 \text{AQ_DIS}_{i,t} - 0.261975 \text{AR}(1)$$

Since the probability (P-VALUE) of F is less than 0.05 (0.0000) with 95% of the certainty, overall significance of the model is confirmed. According to the coefficients of determination model, only the 8.52 percent of change in reward of managers are in the model by variables. And also for the validity of the model and the assumptions of the classical regression, the results of Jarque-Bera test indicate that residues resulting from the estimating the model in the confidence level 95% don't have the normal distribution. Somehow the probability (P-VALUE) is less than 0.05. However, since the number of observations is higher than normal due to the central limit theorem can be ignored in the model residuals. The homogeneity of variance test that uses cutting - Pagan done, since the amount of probability is more than 0.05, the homogeneity of residual variance is approved. And also about its review of the remaining correlated with Durbin's Watson test, based on the preliminary results, Watson statistic Durbin was outside the range 1.5 and 2.5 and residual autocorrelation has been confirmed. In order to study this problem in the first variable auto correlated AR (1) model is imported. Since after this varies, the amount of the statistic Durbin - Watson was close to 2 (2.15), remaining independent model is also verified. In addition, to test whether the model is a linear model and also whether the case study is linear or not, the Ramsey test has been used. Since the importance level of the test is more than 0.05 (0.1548), Therefore, based on the zero hypothesis of correct specification of the model is verified and there is no error in model. Summary results of these tests are presented in Table 6:

Table 6: The Results of Testing the Assumptions of the Linear Regression, Second Model

Ramsey		Durbin-Watson	Breusch-Pagan		Jarque-Bera	
<i>P-Value</i>	<i>F</i>	D	<i>P-Value</i>	<i>F</i>	<i>P-Value</i>	χ^2
0.1548	2.027	2.15	1.0000	0.140	0.0000	131.864

The analysis of the second research hypothesis

In the second hypothesis the relationship between accruals quality and usefulness of benefit for companies been studied and the statistical hypothesis has been defined as:

- H_0 : Compulsory accruals quality isn't associated with profit usefulness in incentive contracts.
- H_1 : Optional accruals quality is associated with profit usefulness in incentive contracts

Based on the result presented in table 5, since the value of t-statistics associated with variable changes \times total accruals quality is more than 0.05 (0.9571), the H_1 hypothesis is refused and can be said that optional accruals quality is not related to incentive contracts. In conclusion the second research hypothesis is rejected with the 95% confidence level.

Result analysis of third hypothesis testing

In the third hypothesis the relationship between optional accruals quality and usefulness of benefit for companies been studied and the statistical hypothesis has been defined as:

- H_0 : Optional accruals quality isn't associated with profit usefulness in incentive contracts.
- H_1 : Compulsory accruals quality is associated with profit usefulness in incentive contracts

Based on the result presented in Table (5), since the value of t-statistics associated with variable changes \times total accruals quality is more than 0.05 (0.2546), the H_1 hypothesis is refused and can be said that optional accruals quality is not related to incentive contracts. In conclusion the third research hypothesis is rejected with the 95% confidence level.

Conclusion

This was an attempt to study in which the effect of accruals quality on the profit in incentive contracts has been examined. Empirical evidence derived from testing hypotheses using linear regression and combined data suggests that the quality of accruals in the overall level and also in its compulsory and optional components has no significant relationship with profit usefulness in incentive contracts. Nevertheless, benefit accruals quality irrespective of changes in it, both in general and in each optional and compulsory components are directly related to changes in executive bonuses. In addition the findings confirmed that stability of earnings and informational content of earnings have a direct relationship with usefulness of profit for incentive contracts and also with increasing the amount of profit stability or informational content of profit, the usefulness of profit for incentive contracts will increase. Thus it can be concluded that the Iranian capital market, the stability in corporate profitability and high earnings response coefficients are considered by the shareholders. Somehow that it is reflected in the increase of manager's reward. In addition, the results confirmed the direct relationship between stock returns and reward of executives. These results are consistent with the findings of Baber, Kang, and Kumar(1999) and it is a complementary of Namazi (2006) and Sajjadi et.al (2011)

Recommendations based on research findings

At this stage, according to the findings of the study, the following recommendations are offered:

1. To determine the amount of manager's reward the incentive plans based on performance indicators such as economic value added, market value and other capital market-based criteria might be used. It can be said that accrual profits represents management's expectations for the events of potential future. For this reason of the measurement have probably some errors.
2. The focus on profit alone cannot be a criterion for determining executive remuneration and incentive contracts and the quality of profits and cash flows caused it might be considered.

Recommendations regarding future research

1. It is suggested that in future the researchers do a comparative projects in reward plan Iran and other countries.
2. It is suggested that in a study incentive contracts between managers in different industries as well as public and private companies be compared.
3. It is suggested that in future research the performance evaluation of new tools such as Analytical Hierarchy Process (AHP) and Balanced Scorecard (BSC) in determining the amount of remuneration for Directors be examined and a model might be presented.

The limitations of the research

The limitations of this study that we have been encountered was lack of control in some circumstances, such as the political and economic conditions that have the effect on firm performance (split mode) and market performance (in macro mode). Therefore, in generalizing the results of this research, care must be taken.

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