

Evaluating the Relation between Earnings Distribution Policy and Quality of Accounting Profit in Companies with Financial Intermediation Activities: Evidence from Tehran Stock Exchange



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ABSTRACT

The purpose of this research is to evaluate the relationship between the earnings distribution policy and quality of accounting profit in companies with financial intermediation activities that accepted in Tehran Stock Exchange in period of 2010 to 2015. The research is an applied research, in terms of purpose, and it is descriptive–correlational research in terms model. The results of the Pearson’s correlation tests and fitting tests of multiple regression models showed a reversed significant relationship between the discretionary accruals and rate of profit sharing of the companies. This is a direct significant relationship between retained earnings to shareholders’ equity ratio and rate of dividends of companies and negative significant relationship between investment opportunities and the rate of dividends of companies. These results also were the same when the variables were controlled in the size of company and financial leverage.

JEL Classification: B16; C58; M40; M41.

Keywords: Earnings Distribution Policy; Accounting Profit; Accruals; Financial Intermediation; Tehran Stock Exchange.

1. INTRODUCTION

A basic and effective market in the economy in any country is the financial market. The stock market is a center for collecting cash and savings of the private section and considered as an important section of the financial markets (Setayesh and Nejad, 2010). The policy on profit sharing of stocks is a wide-spread subject to be researched in the finance field. In the field of financial management, the application of techniques, methods, and scientific models have increased in order to help companies and other organizations to take a rational decision in finance fields. It has caused a higher pace in the development of economic technology. On the other hand, the ever rising competitions between companies have caused a lower rate of profit which increases the chance of bankruptcy. Thus, financial decisions are more strategic compared to the past and regarding that, the multiple accounting and financial researches have been performed to make a model which can predict the financial and economic conditions of the companies.

Also, the profit sharing policy in companies and factors affecting them are subjects which have been focused from old days by investors, managers, experts, users of financial reports, and theorists in the financial and accounting field. Many of the financial theories have indicated and described them and many practical studies have been made concentrating on this topic. Previous studies about the informational content of dividends of companies tend to concentrate more on the issue whether a parallel change happens in accounting profit. A parallel reaction also happens from the market profit when dividend changes or not. Some of the recent researchers, instead of concentrating on the changes of dividends, studied the issue on the condition of profit sharing (sharing the profit or not) whether to broadcast any information about current and future profit of the company to the market or not. In the current research, a research regarding a recent branch of studies about the informational content of dividend was performed, particularly on the aspect of the informational content of dividends which are the quality of accounting profit in companies.

2. LITERATURE REVIEW

Profit is considered important and the principal item of the financial report which has different uses in different papers. Usually, profit is considered as the basis of tax calculation and it is the factor for the codification of payment policy of dividends, a guideline for investors, decision making and factors for prediction. In fact, it is confirmed that the values of profit in the past can be used to predict the values for every type of profits.

Profit includes “normal profit or operational” results and “non-operational cost and benefit due to unpredicted incidents or non-operational” results that their total will be equal to the net profit. The results of researchers when predicting future profits showed that normal or current profit has a priority compared to the net profit (Bolkpuyi, 2002). It was considered in the first statement of the financial accounting standards that accounting profit is a good criterion to evaluate the performance of business units and can be used to predict future cash flow. Other experts think that accounting profit generally considered information about the decision models of investors and creditors. Accounting profit plays a significant role to determine the value of a business unit. However, it should be noted that the profit of a business unit is the result of its performance in the past; thus, effective factors and conditions of making future profits can be studied in the past situation of a business unit. Major parts of these factors are reflected in the form of accounting numbers in financial accounting reports and show the effects of management decisions on future profits and consequently, they have the power of prediction.

Profit is considered a principal index in accounting used for different purposes. During recent years, most of the performed studies about profit effectiveness have not noted the quality of accounting profit. Recently due to the bankruptcy of great companies around the world, financial researchers and analysts studied the reasons of the bankruptcy of these companies and found out that the main reason of these incidents is the manipulation of profit and unrealistic and poor reports. In addition to the fact that companies went bankrupt, it made others feel pessimistic about the accounting and auditing profession. Therefore, emphasize should be put on the quality of accounting profit rather than income number. It is important to take into account in Iran so it is dealt with as a criterion of evaluation of the quality of accounting profit.

Tsai and Gu (2007) performed a research on American companies and studied the relationship between the policy on profit sharing and quality of accounting profit. The sample included 8809 American companies from 1988 to 2004. The results were as follows:

- Profit sharing has a reversed relationship with accruals.
- Profit sharing has a reversed relationship with standard deviation and remaining components of profit after deduction of cash items.
- Profit sharing has a direct relationship with the value relationship of accounting profit of companies.

They also found that the density of relationship between profit sharing and quality of accounting profit in cases with the higher (lower) rate of dividends is more (less). It means that the mentioned relationships get more intense according to the rate of dividends. Cornett, Marcus, Saunders, and Tehranian (2007) in a research, studied an American company from 2000 to 2006 which divided its profit. They studied the compared power of earnings and cash flows per share and found out that the dividend policy of companies can be made better by cash flow per share compared to earnings per share. However, they presented no comment about the superiority of cash flows per share compared to earnings per share in the prediction of dividends of companies. They explained that their findings either earnings per share or cash flows per share are considered suitable indices for the prediction of the rate of dividends of companies.

Some other related studies looked at the effective factors on distribution or lack of distribution of cash earnings by companies such as Cornell and Landsman (2003), White, Sondhi, and Fried (2003), Velury and Jenkins (2006) and Dechow, Richardson, and Sloan (2004). The difference between these studies with the current research is that the effect of the studied factors on the rate of distributed cash earnings by companies was tested in this research. Schipper and Vincent (2003) studied the relationship between short selling and quality of shares. He concluded that people who acted in the short selling of shares do not use much information on accruals about future profit. Moreover, short selling of shares in companies with the high accruals is costly. Bhattacharya and Graham (2007) concluded that non-exchange companies have less profit quality compared to the exchange companies due to the lower demand for financial reports. Ahmad Pour and Ghahremani Saghiri (2009) examined that profit quality has a reversed relationship with market reaction. Lougee and Marquardt (2004) studied the profit quality and coefficient of profit reaction when they were rising and profit and sale were stable. The results of their research showed that companies with growth in profit accompanied by sales increase have a higher profit quality and coefficient of profit reaction compared to companies with growth in profit accompanied by a reduction of costs.

Chan et al., (2001) studied the relationship between accruals (the difference between earnings and cash flows) and future stock returns and showed that the stock returns are reduced in companies with the high accruals in the period

after reporting their financial information. A comment about these results is that companies with the low-profit quality (which means companies with high accruals) face a reduction in the returns during the period after their profit reporting since investors understood the issue on the low-profit quality of companies and adjusted the stock prices according to them. Ebrahimi and Erabi (2010) investigated the effect of the unreliability of cash flows and also the ratio of retained earnings to equity of shareholders (as an index of the maturity level of companies) on profit sharing policy of the companies. They considered the rate on the investment of institutional owners and also investment opportunities for companies along with two main independent variables which were mentioned above and controlled the effect of the variables on the size of companies. The results of their research showed the unreliability of cash flows of the company and also rate of institutional ownership which affects the dividends. While the ratio of retained earnings to equity and also investment opportunity and company growth has no significant effect on the rate of dividends of the companies.

In a practical research, Nasrollahi and Aref Manesh (2010) tested the relationship between the changes of dividends, prediction ability, and signaling future cash flows. The results showed the effect of prediction ability of cash flows on the changes of dividends and future earnings of the company. It was determined in this research that a weak relationship exists between the ratio of the market value to the book value of the company and changes in dividends and future earnings. Finally, they found no relationship between the return of equity and changes in dividends and the future earnings of the studied companies. In his research, Barua (2005) studied the influence of effective factors on the rate of dividends by companies. The studied factors were growth and development, risk and financial leverage, agency costs, investment opportunities, signaling and random, size of company, structure of debts, loan and presell, liquidity and quality of earnings and changing management. Among the studied factors, only the following hypotheses are related to the effect of investment opportunities; hypotheses of signaling and random steps, the size of the company (only book value of equity of shareholders) and the ratio of financial facilities to total debt were confirmed. The difference between the previous and current research emphasizes on considering the effect of unreliability of cash flows, ratio of retained earnings to equity of shareholders, and ratio of institutional ownership and also a criterion to measure the amount of dividend by the company (ratio of cash earnings to net earnings of the company) in this research.

According to the literature review which mentioned above, conceptual framework of this study is presented in Figure 1.

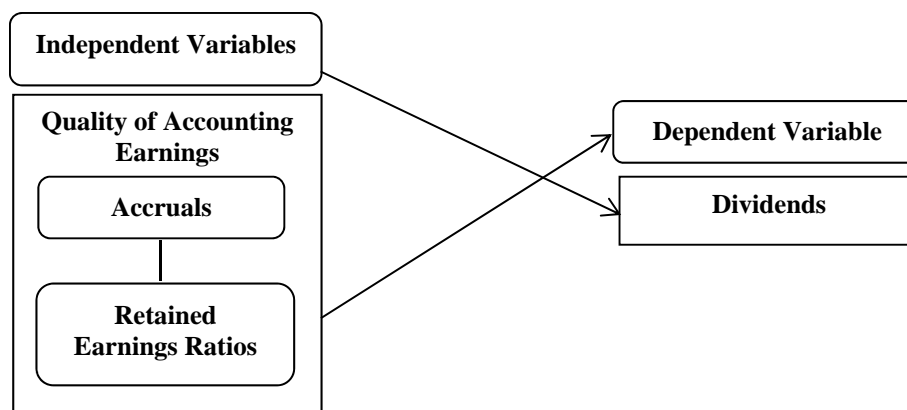


Figure 1.
Research Conceptual Model

Figure 1 shows the relationship between independent variables and dependent variables.

3. RESEARCH METHODOLOGY

Based on the conceptual method which mentioned above, the hypotheses of this research are as below:

H1: There is a relationship between the quality of accounting profit in companies with financial intermediation activities and profit sharing of companies.

H2: There is a relationship between the companies' accruals with the financial intermediation activities and profit sharing of companies.

Table 1. Correlation Coefficient between the Variables

Variable		Ratio of Dividend	Discretionary Accruals	Size of Company	Dividend during current Year
Ratio of Dividend	Pearson Correlation Coefficient	1	-0.035	-0.113	0.163
	Significance Level		0.43	0.011	0.000
	Number of Samples	500	500	500	500
Discretionary Accruals	Pearson Correlation Coefficient	-0.035	1	0.301	-0.020
	Significance Level	0.431		0.000	0.663
	Number of Samples	500	500	500	500
Retained earnings to Equity of Shareholders	Pearson Correlation Coefficient	0.092	0.051	0.033	0.265
	Significance Level	0.040	0.259	0.461	0.000
	Number of Samples	500	500	500	500
Investment Opportunities	Pearson Correlation Coefficient	0.148	-0.111	-0.083	0.384
	Significance Level	0.001	0.013	0.062	0.000
	Number of Samples	500	500	500	500
Size of Company	Pearson Correlation Coefficient	-0.113	0.301	1	0.30
	Significance Level	0.011	0.000		0.504
	Number of Samples	500	500	500	500
Dividends during current Year	Pearson Correlation Coefficient	0.163	-0.020	0.030	1
	Significance Level	0.000	0.663	0.504	
	Number of Samples	500	500	500	500

The statistical population of the research was the manufacturing companies accepted in the Tehran stock exchange from 2009 to 2014 with the following conditions:

1. Financial information of the company was available for the studied period.
2. Companies should not have faced loss and the end of their fiscal year should be the last day of the year (end of Esfand) and they should not have changed their fiscal year during the studied years.
3. They should not be banks or financial institutions (investment companies, financial intermediaries, holding companies and leasing companies).
4. The companies should have been accepted in Tehran stock exchange from 2008 and should not have been removed from the stock exchange between 2009 and 2014.
5. They should not have been inactive in an exchange during the research period more than four months since the calculating studied variables are related to the market about accepted companies and applying them in the research might cause undesirable results.

Consequently, 133 companies with the above-mentioned characteristics were selected. However, the period for this research is a seven-year based on the financial reports of the chosen companies from 2009 to 2014. In addition,

due to the fact that the changes in the year (t) is according to the year (t-1) then, testing the hypotheses of the research need to be calculated, the information of the year 2008 was also needed to calculate some variables.

4. FINDINGS

Using the Pearson's correlation coefficient is considered as a way of investigating the relationship between the research variables and correlation between them. Table 1 shows the correlation coefficient between research variables.

According to the results of the Pearson's statistic, the ratio of dividends showed a positive significant correlation with retained earnings to the dividends of shareholders, investment opportunities, and dividends during the current year. It also showed a negative significant correlation with the size of the company. Discretionary accruals also have a positive significant correlation with the size of the company and a negative significant correlation with investment opportunities. The ratio of retained earnings to equity of shareholders has a positive significant correlation with investment opportunities and dividends during the current year. The variable of investment opportunities also had a positive significant correlation with dividends during the current year.

The purpose of testing the research hypotheses is to study the relationship between discretionary accruals and amount of dividends of companies and its statistical hypothesis is defined as follows:

H_0 : There is no relationship between the companies' accruals with the financial intermediation activities and profit sharing of companies.

H_1 : There is a relationship between with companies' accruals with the financial intermediation activities and profit sharing of companies.

This hypothesis was calculated by using model (1) and it was confirmed when the coefficient of β_1 was significant at 95% reliability level.

$$\begin{cases} H_0 : \beta_1 = 0 \\ H_1 : \beta_1 \neq 0 \end{cases} \quad DV / E_{i,t} = \beta_0 + \beta_1 DAC_{i,t+1} + \beta_2 Log(TA)_{i,t} + \beta_3 EPS_{i,t} + \varepsilon_{i,t} \quad (1)$$

The Chow or F-test was used in order to determine whether using the panel data method is efficient in estimating the intended model, and in order to determine which method (fixed effects or random effects) are more suitable for estimating (determining whether the differences in the sectional units are fixed or random), the Hausman test was used. The results are shown in Table 2.

Table 2. The Results of Chow and Hausman Test

Test	Number	Statistics	Amount of Statistics	Degree of Freedom	P-Value
Chow	500	F	1.6263	439,111	0.0003
Hausman	500	χ^2	77.6543	9	0.000

According to the results of the Chow test and its p-value (0.0003), the hypothesis H_0 at 95% reliability level was rejected and showed that the panel data method can be used. Also, according to the results of the Hausman test and its p-value (0.0000) which was lower than 0.05, the hypothesis H_0 was rejected at 95% reliability level and hypothesis H_1 was confirmed. Thus, the model should be estimated using fixed effects. Regarding the significance level of this test which was lower than 0.05 (0.0000), hypothesis 0 was rejected due to the existence of homogeneity of variance and it can be said that this model has the problem of heterogeneity of variance. To solve this problem in the model, the method of Generalize Least Square (GLS) was used.

In order to test the non-correlation of residuals which is a supposition of regression analysis namely, auto correlation, the Durbin-Watson (D-W) test was used. According to the primary results of the estimating model,

the amount of Durbin-Watson was 2.34 and as it was between 1.5 and 2.5, it can be concluded that the residuals are independent of each other. Noting that the significance level of the Ramsey test (0.061) was higher than 0.05, the hypothesis H_0 which indicates that the model is linear is accepted and model does not have a correction error. A summary of the results of the above tests is presented in Table 3.

Table 3. Results of the Statistical Assumption of Model (1)

Ramsey Statistic		Durbin-Watson Statistic	Breusch-Pagan Statistic		Jarque-Bera Statistic	
<i>P-Value</i>	<i>F</i>	<i>D</i>	<i>P-Value</i>	<i>F</i>	<i>P-Value</i>	χ^2
0.061	1.8745	2.34	0.000	12.7258	0.4351	1.4952

According to the results of the Chow and Hausman test and also results of the statistical assumptions of classic regression, the model (1) of the research was estimated using the panel data method and in the form of fixed effects. The results of the calculation of the model are presented in Table 4. The estimated form of the model using *Eviews* software is given below:

$$DV / E_{i,t} = 0.0694 - 92810DAC_{i,t+1} - 0.0142Log(TA)_{i,t} + 0.0010EPS_{i,t} + \varepsilon_{i,t}$$

Table 4. Results of First Hypothesis by Using Fixed Effects Method

Dependent Variable: Amount of Dividends of Companies Number of Observations: 500 year-company				
Variable	Coefficient	Statistic t	P-Value	Relation
Fixed Component	38.2911	0.0694	0.000	Positive
Discretionary Accruals	-2.0037	-9.2810	0.0451	Negative
Size of Company	-2.7855	-0.0143	0.0053	Negative
Dividends During Current Year	3.7777	0.0010	0.0002	Positive
Determination Coefficient of the Model				0.2573
Statistic F				8.2954
<i>P-Value</i>				0.000

According to Table 4, since the chance of statistic t for the coefficient of the variable of discretionary accruals is lower than 0.05 (0.0451), the significant relationship between discretionary accruals and amount of dividends of companies was confirmed at 95% confidence level. Thus, the first research hypothesis was accepted with 95% of confidence, it can be said that there is a significant relationship between discretionary accruals and the rate of profit sharing of the companies. The negativity of coefficient of this variable (-9.2810) indicates a reversed relationship between discretionary accruals and number of dividends of companies in a way that with one unit increase in discretionary accruals, the amount of dividends of companies will be reduced by 9.2810 units. Thus, the first hypothesis of the research was confirmed.

5. CONCLUSION

The results of this study showed that in relation to the first hypothesis, there was a significant relationship between discretionary accruals and the rate of the profit sharing of companies. Being negativity of the coefficient of discretionary accruals indicates that there is a reversed and negative relationship between discretionary accruals and amount of dividends of companies. Therefore, we can confirm that the relationship between the earnings distribution policy and quality of accounting profit in companies with financial intermediation activities that accepted in Tehran Stock Exchange. Finally, The ratio of retained earnings to equity of shareholders has a positive

significant correlation with investment opportunities and dividends, also, the variable of investment opportunities had a positive significant correlation with dividends

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