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Research Article

EXAMINIG THE DETERMINANTS OF DIVIDEND IN THE LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

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ABSTRACT
In this study, determinants of dividend in the listed companies in Tehran stock exchange are investigated. This study is applied in term of purposes and is correlation in term of nature and method. Statistical society in this study includes all listed companies in the Tehran stock exchange and number of them (before 2013 is listed in the Tehran stock exchange list; companies which were generating profits during 2008-2014 and have not experienced loss and have paid cash profit during four studies), in 2013, the number of companies increased to 183 companies. 124 companies were selected as sample using Kokran formula randomly. Data was analyzed by descriptive and deductive statistic like Pearson correlation test and linear regression analysis. Kolmogorov–Smirnov test was used to investigate normality of the data. The findings showed significant and negative correlation between earnings volatility and dividend. There is no significant correlation between the degree of financial leverage and dividend. There is significant and negative correlation between profitable investment opportunities and dividend in the Tehran stock exchange. Finally, there is positive and significant correlation between liquidity situations and dividends in the Tehran stock exchange.

Keywords: *Liquidity Situation, Dividend, Degree of Financial Leverage, Volatility of Earnings and Profitable Investment Opportunities*

INTRODUCTION

Managers in the companies have to adopt four kinds of decision-making like financial supply, investment, operating and finally dividend to maximize stockholders. Among above decisions, dividend is one of most important decisions for managers and it means allocating earning of each share in two dividends and retained earnings. Dividend decision-making for managers and trader in the stock is so important (Ebrahimi and Saeedi, 2011).

Earning management means attainting earning by managers within generally accepted accounting principles to supply their purposes.

Earning management is defined as conscious actions within generally accepted accounting principles to maximize reported earning to the intended level. Managers abuse management to attain financial information. They are free in financial performance reporting and maybe abuse earning management or transfer specific information about future performance of the company (Yazdani, 2006).

Accounting affairs have been increased by distinguishing ownership of management. Accounting play important role to rely financial statement users and leads to reliance to accounted financial statements. Management in a conscious process within generally accepted accounting principles tries to attain company earning and maximize it to the target level. Accountant can discloses earning management by increasing time of accounting and investigating financial statements (Soleimani and Nabiyee, 2011).

Decision-making about dividend is so important for managers because influence on financial supply and investment indirectly. By increasing dividend, an internal resource is reduced and managers have to supply investment project outside the company or deny part of investment (Saeedi and Keyhan, 2009).

Dividend is important for stock trader too, because dividend is main principle of evaluation. Cash dividend is first factor to evaluation models based on discounted cash flow and trader can use it. Also, dividend can influence on capital structure and stock risk in the companies. These two impacts are reflected in the stock price of companies in the market. In addition, most of market trader and investors in the pension funds are interested cash dividend to spend their life (Talaneh and Shemirani, 2011).

Sensitivity of dividend for managers and traders and factors influencing on dividend are main motivation to conduct this study.

The Study Literature

Dividend

There is no definition in the literature about earning management. Luyt, Former chairman of the Securities and Exchange Commission America defines earning management as an action caused to reflect reported earning based on management demands rather basic financial performance of the company. Schipper (1986) defines earning management as a purposeful action in the financial reporting process or meeting some of personal advantages (Izadinia *et al.,* 2009).

These two definitions focus on management opportunistic aspect; means management is motivated to implement earning management to earn profits and implies earning management leads to reduce informational content of accounting numbers. In other hand, some of researchers know earning management as an informing approach and defines it as attaining numbers by managers, so private information of management about future performance of company will be transferred to investors. It is expected that earning management not only reduce earning informational content, but assist investors to interpret reported statements. Anyway, opportunistic aspect of earning management in the literature is accepted (Saghafi and Ghasem, 2009).

Earning management has been studied several decades. In 1970 and 1980, most of researchers focus on determining accounting selections. The evidences are consistent to this issue which managers select earning changing due to economic motivation. Companies cannot change accounting, because selecting accounting principles will be an expensive method to attain earning.

Hence, since the mid-1980s, earnings management studies focused on manager using of accrual to influence on the earning. Principles of accrual accounting compared to cash have higher flexibility for manager to change accounting number. Using accrual compared to accounting events is simpler for earning management, but is make difficult earning disclose (Saghafi and Ghasem, 2009).

Impact of Dividend on the Market

Most of the studies about dividend changing focused on dividend announcement and messaging theory test.

Signaling models of Bhattacharya (1979) and Miller and Rock (1985) defined dividend as a signaling tool and used it to disclose confidential information to the market. There are various studies showed dividend changing is valuable. Cause of such event is that significant increasing is done in the earning.

Modigliani and Miller know cause of this issue as capital fault and assumed it in their theory. Informational content of dividend is one of most important issues which cause to emphasize on dividend and stock value. Policy of dividend has informational loading and is known and management decision-making and confidence. In fact, performance of the company leads to increasing stock price, not dividend.

Other theory which justifies effect of dividend on the market price is representative theory. Easterbrook representative models (1984) extracts dividend policy of other involved interaction. So, dividend could discounts representative differences and this is related to increasing value of company. Messaging theory and representative price predict changes of stock market and dividend decision. In both methods, dividend is allocated to increase value of the market. So, dividend is not meant good news (messaging). In both states, price of stock after increasing dividend is shown.

Welcoming theory of Baker and Wargler (2004) shows relationship between dividend and market performance. Based on this theory, irrational investors maybe create a gap between price of companies which pay dividend and companies which don't pay dividend. In the certain situation, when the stock is dealing with irrational investors, managers encourage such investors to increase dividend and welcoming them. Based on this theory, increasing dividend is created by increasing market value in the same year or later year (Alizadeh, 2001).

Impact of Market on Dividend

Recent studies have focused on the impacts of dividend on the stock price and impact of market situation on dividend decisions of managers. Some of new studies like Savav and Veber (2006), studied impact of market situation on dividend. The recent approach, dividend to the market level data has been investigated. The recent approach focuses on dividend to market data as factor influencing on manager dividend decisions. In fact, dividend increasing is raised insufficient return of stockholders. If performance of a stock in the market is not satisfier, dividend is a tool to increase stockholder return and maintain them satisfied (Tlaneh and Shemirani, 2011).

Factors Influencing on Dividend

Based on the studies, factor influencing on dividend are

Earning Volatility

Earning volatility is one of time-series variables. More volatility has high risk and is raised by various factors. There are two causes to create volatility which are based on economic factor and way of accounting action (Donelson *et al*., 2011).

Companies are working in the economic climate. If economic climate be a sea and company be a ship, ships are challenging by sea storming. So economic shocks can influences on economic unit. There are few studies in this field. Accounting factors about identifying incomes and earning of economic unit can influence this field. Factors like dealing with costs and earning, surrounded problems, price allocating to financial period, identifying income are factors influence on estimating earning and relationship between previous earing. One of accounting factors which influence on earning volition is weak adaptation of price and earning.

These Weak Adoptions include

A) Commercial unavoidable factors (such as the interception of the issue price fixed costs)

B) Providing management issues in financial reporting (including large washing, opportunities for smooth management and development as current expenses without regard to its ability to intercept and nature)

C) Accounting rules and principles (such as real-time recognition of R & D expenditures as current expenses without regard to its ability to intercept and nature) (Mashayekhi and Menati, 2014).

Degree of Financial Leverage

Simplest definition of financial leverage is that amount of debt which a company accepts to purchase more assets.

1. Financial Leverage Rate is

Total liabilities divided by total assets.

However, this ratio is greater shows company's financial leverage. Financial leverage is useful when comparing the various alternative financing methods. Obviously, the return on loan is higher than the interest that is more favorable. Many companies finance their projects of financial average (loans and bonds) instead of issuing shares that it may reduce earnings per share to existing share holders (Hashemi and Kamali, 2010).

The primary advantage of using financial leverage is:

1- increasing returns on assets:

Uses of financial leverage can allow companies to invest in their assets more efficiently achieved. Generally, interest of market is lower than expected amount of stockholders, so company should gain opportunities to increase net assets (Hashemi and Kamali, 2010).

2. Tax Advantages

In many tax laws, the tax is considered acceptable cost component costs and hence the use of financial leverage in financing cash flows corporate income tax will be reduced. However, one of the main dangers in the use of financial leverage in the financing of projects is possibly causing major losses in operations and bankruptcy. If financial leverage is more in the company, profit is loosed and this leads to decrease price of stock. This is a challenge for accounting, because company have to compensate these prices (Hashemi and Samadi, 2009).

it should be noted that sales and profitability of the companies that are highly dependent on environmental conditions and issues outside the company (such as companies, agricultural products, etc.), the risk of bankruptcy increase the risk of the financial levers We recommend using these levers industries that have strong profitability and hamper the process its possible to easily (Hashemi and Kamali, 2010).

3. Investment Earnings

Many companies will follow from the theory of surplus dividend, when the decision to pay dividends on investments which are expected to have surplus cash. In fact, companies are beginning retained earnings of the funds needed to determine its long-term research, and then distribute the surplus funds to the shareholders. The opportunities for profitable investment can affect the dividend policy of the institution. Companies that are profitable investment opportunities and greater growth opportunities for the future growth of smaller percentage of its profits redistributed among the shareholders. The profitable investment opportunities can be inversely correlated with the distribution of profits (NabiZadeh, 2000).

4. The Company's Liquidity Position

Company's liquidity position is one of the important factors in determining the amount of the dividend, the company's liquidity restriction in the management of the Earnings distribution. Therefore, liquidity situation influences on dividend and can decrease stock distribution of the company.

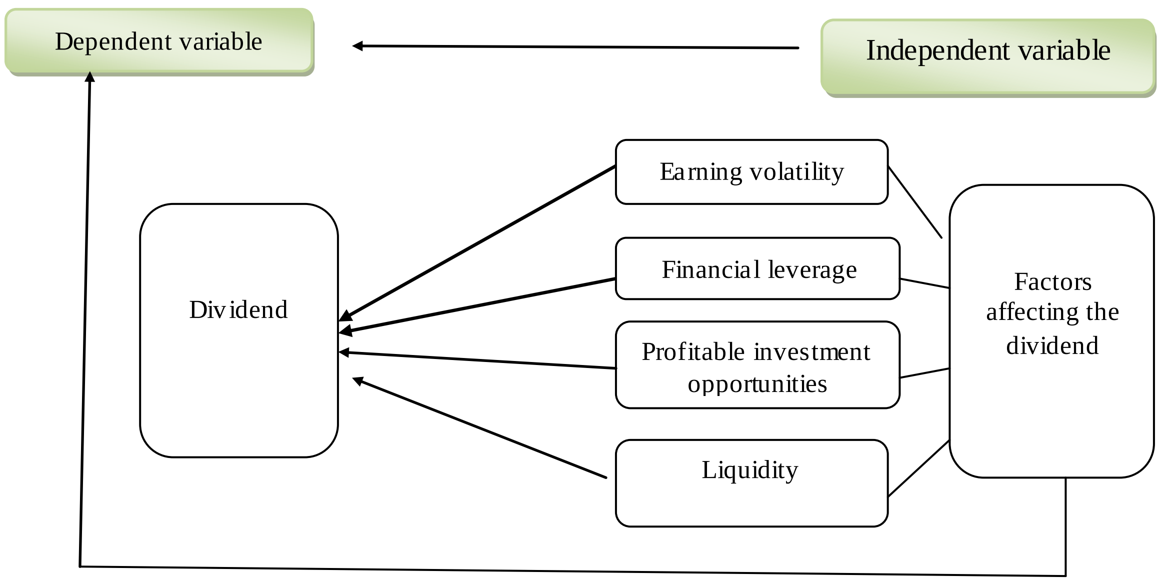

Figure 1: Research Analytical Model

Research Hypotheses

The Main Hypothesis

There is significant correlation between the factors affecting the dividend and the dividend percent in the Tehran Stock Exchange.

Sub-hypothesis

There is significant correlation between earning volatility and dividend percent in the Tehran stock exchange.

There is significant correlation between financial leverage and dividend percent in the Tehran stock exchange.

There is significant correlation between profitable investment opportunities and dividend percent in the Tehran stock exchange.

There is significant correlation between liquidity and dividend percent in the Tehran stock exchange.

MATERIALS AND METHODS

This study is applicative and the obtained results are applied in the Tehran stock exchange. This study is time-series in term of nature. Statistical society of this study included all listed companies in the Tehran stock exchange and number of them is 473 at the moment.

The sample should include the following inclusion criteria:

1. The company has been accepted before 2013 in the Tehran Stock
2. The company has been profitable during the years 2008 to 2014 and has not suffered loss.
3. The company has paid dividends during the four years of the study.
4. Companies that have divided their profits.
5. Companies that have invested in financial assets.
6. Companies that dates back to 5 years.

Number of companies was 183.

Needed data were gathered using organization meeting and Tehran stock exchange as well as accounting software including (Rah Avard Novin, Sahra and Tadbir Pardaz).

in this study, Pearson correlation model was used first to evaluate validity between variables and in the next stage, regression model was used to estimate predictor value of earning management based on factor influencing on dividend (volatility, leverage, profitable investment and liquidity. in the final stage, recognition remainder test was conducted for per hypothesis. this recognition was done by Durbin and Watson. correlation is lower when this statistic is near 2.

Data Analysis

In this study, Kolmogorov- Simonov test was used to evaluate normality of the variables. The results show all variables are normal except profitable investment opportunities, because significant level is more than 0.05. Therefore, in this study, Pearson and Regression coefficient were used.

Table1: Results of the Shapiro-Wilkie test to check the normality of data distribution

Remainders	**Shapiro-Wilkie**		
	Statistic value	**Freedom degree**	**Significant level**
Percent of dividend distribution	0.785	124	0.176
Liquidity situation	0.787	124	0.057
Earning volatility	0.135	124	0.065
Financial leverage degree	0.912	124	0.091
Profitable investment opportunities	0.198	124	0.045

Hypotheses

First Sub Hypothesis

H0: there is not significant correlation between earning volatility and dividend percent in the Tehran stock exchange.

H1: there is significant correlation between earning volatility and dividend percent in the Tehran stock exchange

the results of this test are shown in table (2).The results showed Pearson correlation coefficient between earning volatility and dividend in the Tehran stock exchange is -0.231 with value of P (Significance) is 0.001, significant level is less than $\alpha = 0.05$ So, H_0 means lack of correlation is denied and as result there is significant direct and reveres correlation between earning volatility and dividend in the Tehran stock exchange. Determinant coefficient between two variables is $R^2 = 0.53$, in other word, 2.9% of changes between two variables are common. This hypothesis is accepted in 99% confident level with p = 0.001.

Table 2: Statistic of Pearson correlation test related to earning volatility and dividend percent

Variable	**Dividend percent**					
	Pearson			**Exist of correlation**	**Kind of correlation**	**R^2**
	Correlation coefficient	sig	Number			
Earning volatility	0.231-	0.001	124	Yes	reverse	0.053

Second Sub Hypothesis

H0: there is not significant correlation between financial leverage degree and dividend percent in the Tehran stock exchange.
H1: there is significant correlation between financial leverage degree and dividend percent in the Tehran stock exchange
the results of this test are shown in table (3).The results showed Pearson correlation coefficient between financial leverage degree and dividend in the Tehran stock exchange is 0.101 with value of P (Significance) is 0.21, significant level is higher than $\alpha = 0.05$ So, H1 means exist of correlation is denied and as result there is not significant correlation between financial leverage degree and dividend in the Tehran stock exchange and 1% of changes between two variables are common.

Table 3: Statistic of Pearson correlation test related to financial leverage degree and dividend percent

Variable	Pearson			Dividend percent Exist of correlation	Kind of correlation	R^2
	Correlation coefficient	sig	Number			
financial leverage degree	0.101	0.21	124	No	-	0.01

Third Sub Hypothesis

H0: there is not significant correlation between profitable investment opportunities and dividend percent in the Tehran stock exchange.
H1: there is significant correlation between profitable investment opportunities and dividend percent in the Tehran stock exchange
the results of this test are shown in table (4).The results showed Pearson correlation coefficient between profitable investment opportunities and dividend in the Tehran stock exchange is -0.171 with value of P (Significance) is 0.001, significant level is less than $\alpha = 0.05$ So, H_0 means lack of correlation is denied and as result there is significant direct and revers correlation between profitable investment opportunities and dividend in the Tehran stock exchange and 2.9% of changes between two variables are common. This hypothesis is accepted in 99% confident level with p = 0.001.

Table 4: Statistic of Pearson correlation test related to Profitable investment opportunities and dividend percent

Variable	Pearson			Dividend percent Exist of correlation	Kind of correlation	R^2
	Correlation coefficient	sig	Number			
Profitable investment opportunities	-0.171	0.001	124	yes	Reverse	0.029

Fourth Sub Hypothesis

H0: there is not significant correlation between liquidity and dividend percent in the Tehran stock exchange.
H1: there is not significant correlation between liquidity and dividend percent in the Tehran stock exchange
the results of this test are shown in table (5).The results showed Pearson correlation coefficient between liquidity and dividend in the Tehran stock exchange is 0.249 with value of P (Significance) is 0.031, significant level is higher than $\alpha = 0.05$ So, H0 means lack of correlation is denied and as result there is

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significant direct correlation between liquidity and dividend in the Tehran stock exchange and 7% of changes between two variables are common. This hypothesis is accepted in 95% confident level with p = 0.001.

Table 5: Statistic of Pearson correlation test related to liquidity situation and dividend percent

Variable	**Pearson**			**Dividend percent**		
				Exist of correlation	**Kind of correlation**	**R^2**
Liquidity situation	Correlation coefficient	sig	Number	Yes	Direct	0.07
	0.249	0.031	124			

Main Hypothesis
H0: there is significant correlation between factors influencing on dividend and dividend percent in the Tehran stock exchange.
H1: there is not significant correlation between factors influencing on dividend and dividend percent in the Tehran stock exchange
Multi regression was used simultaneously to investigate factors influencing on dividend as predictor variable and standard variable (dividend). Before implementing regression, correlation between predictor and standard variables have been estimated to test significance of regression in the next step. Watson Durbin statistics were 1.5 and 2.5, so errors are not correlated. Also, the results of variance analysis show that regression model is significant (significant level less than 0.05). The results of regression analysis are shown in tables (6), (7) and (8).

Table 6: Summarize of the model

Watson Durbin	**$R^2_{(adj)}$**	**R^2**	**R**
2.07	0.054	0.063	0.25

Predictors: liquidity situation, earning volatility, financial leverage degree, profitable investment opportunities
Criterion variables: dividendpercent

Table 7: Variance analysis

Model	**Total of square**	**Freedom degree**	**Average of square**	**F**	**sig**
Regression	267.66	4	66.91	277.63	*0.02
Remainder	29.244	119	0.241		
Total	296.86	123			

*Criterion variables: dividend percent*significant at 0.05*
Payout Ratioit= β0 + β1LIQit + β2VAREit + β3LEVit+ β4PIOit + eit

Table 8: Coefficient

Predict variable		**Not standardized coefficient**		**standardized coefficient**	**t**	**P**
		B coefficient	**Standard error**	**Beta**		
Fixed	Liquidity	0.679	19.952		0.000	
	Earning volatility	0.008	0.034	0.017	2.349	*0.040
Dividend	Financial leverage degree	0.620	1.72	-0.149	-0.496	*0.020
	Profitable investment opportunities	0.400	0.066	0.209	0.433	0.054

*Criterion variables: dividend percent*significantat0.05*

Based on simultaneous regression results, liquidity situation predict dividend positively and has increasing effect (Beta = 0.017, $p< 0.05$). Also, earning volatility predict earning volatility negatively and has decrease effect (Beta = - 0.149, $p< 0.05$). Profitable investment opportunity predicts dividend negatively and has decrease effect (Beta = - 0.010, $p< 0.05$). Finally, based on the modified R^2, 5.4% of changes of dependent variable (dividend percent) are determined by independent variable (liquidity, earning volatility, financial leverage degree, profitable investment opportunities.

RESULTS AND DISCUSSION

First Hypothesis

The results showed Pearson correlation coefficient between earning volatility and dividend in the Tehran stock exchange is -0.231 with value of P (Significance) is 0.001, significant level is less than $\alpha = 0.05$ So, H0 means lack of correlation is denied and as result there is significant and reverse correlation between earning volatility and dividend in the Tehran stock exchange.

Second Hypothesis

The results showed Pearson correlation coefficient between degree of financial leverage and dividend in the Tehran stock exchange is 0.101 with value of P (Significance) is 0.21, significant level is higher than $\alpha = 0.05$ So, H1 means exist of correlation is denied and as result there is no significant correlation between degree of financial leverage and dividend in the Tehran stock exchange and 1% of changes between two variables are common.

Third Hypothesis

The results showed Pearson correlation coefficient between profitable investment opportunities and dividend in the Tehran stock exchange is -0.171 with value of P (Significance) is 0.001, significant level is less than $\alpha = 0.05$ So, H0 means lack of correlation is denied and as result there is significant and reverse correlation between profitable investment opportunities and dividend in the Tehran stock exchange. By increasing profitable investment opportunities in the Tehran stock exchange, dividend is decreased and 2.9 % of changes between two variables are common.

Fourth Hypothesis

The results showed, Pearson correlation coefficient between Liquidity and dividend in the Tehran stock exchange is 0.249 with value of P (Significance) is 0.031, significant level is less than $\alpha = 0.05$ So, H0 means lack of correlation is denied and as result there is significant and direct correlation between liquidity and dividend in the Tehran stock exchange. Determinant coefficient between two variables is R^2=0.07. In other word, 7% of changes between two variables are common.

Fifth Hypothesis

Before implementing regression, correlation between predicting and standard variable have been estimated to test significance of regression in the next step. Watson Durbin statistics were 1.5 and 2.5, so errors are not correlated. Also, the results of variance analysis shows that this regression model is significant (significant level less than 0.05)

Also, based on simultaneous regression results, liquidity situation predict dividend positively and has increasing effect (Beta = 0.017, $p< 0.05$). Also, earning volatility predict earning volatility negatively and has decrease effect (Beta = 0.149, $p<0.05$). Profitable investment opportunity predicts dividend negatively and has decrease effect (Beta = - 0.010, $p< 0.05$). Finally, based on the modified R^2, 5.4% of changes of dependent variable (dividend percent) are determined by independent variable (liquidity, earning volatility, financial leverage degree, profitable investment opportunities.

Recommendation

Based on the results of study and negative correlation between earning volatility and dividend, it is recommended to manager note to risk of future dividend and volatility of the earning. Based on the results and lack of correlation between financial leverage and percent of company's dividend, it is recommended to manager note to problems and barriers of financial supply in the company and distribute dividend between stockholders instead of financial supply by debt and increasing leverage degree (increasing financial risk)

Based on negative correlation between profitable investment opportunities and dividend, it is recommended to managers to distribute dividend through increasing stock attractiveness and credibility with investors.

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