THE EFFECTIVE FACTORS ON DIVIDEND POLICY IN COMPANIES LISTED ON TSE

Tofigh Haji¹, Sirvan Haji² and Farough Rasouli³

Abstract: The main purpose of this study is to investigate the impact of effective factors on Dividend policy of the companies listed on Tehran Stock Exchange. This study identifies the effective factors on dividend policy, as important factors are liquidity and liquidity variables include liquidity ratio, stock trading volume, stock trade value, Stock Turnover and investment opportunities, ownership concentration and firm size attempted to take the best policy to create investment opportunities of companies and growth of stock market and economic growth of country. The study population is 132 companies during the period 2008 to 2013. To investigate the effect of these factors on Dividend policy, simple linear regression model has been used. The results also indicate that investment opportunities and ownership concentration have a significant effect on dividend policy. Liquidity, stock turnover, firm size, trading volume, trading value and liquidity ratio have not significant effect on dividend policy.

Keywords: Dividend policy, Investment Opportunities, Ownership Concentration, Liquidity, Liquidity ratio

Statement of Problem

Dividend policy is one of the most important issues in financial management as dividend indicates major cash payment of companies and is one of the most important choices and decisions of managers. The manager should decide how much of profit of company is divided and how much is accumulated in the form of profit is investment in company. Dividend causes that shareholders can take benefit and the ability of company in profit accumulation to take benefit of growth opportunities is affected (Baker and Powell, 2005). A part of attention of managers of companies is taken to the item mentioned as "dividend policy". We can say dividend policy change of company gives message to shareholders and investors regarding the financial condition of company. Most important item than dividend policy is finding the reasons of taking a defined dividend policy by companies. This issue can be a solution for important economic decisions for various stakeholder groups namely investors. The reasons and factors of this reason not only help the

^{1-3.} Department of accounting Piranshahr Branch Islamic Azad University Piranshahr Iran. *Tofigh. Email: Haji@gmail.com*

explanation of behavior of companies in the past but also provide a tool to predict their future path in this field (Jahankhani, 1993). The above explanation shows the importance of dividend policy and mental effect of profit on stock price and shareholder expectations. Companies have various policies for dividend. Ignoring the special policy of each company, managers attempt to regulate dividend based on the information of company future as avoiding negative effects of dividend changes on shareholders. Based on the importance of dividend policy and the reasons, we investigate the effective factors on dividend policy of companies listed on TSE. Based on the presented model, we attempt to define investment opportunities, ownership concentration, firm size, liquidity, liquidity ratio, stock turnover, stock trading volume, stock trading value are effective on dividend policy of companies listed on TSE? Dividend policy is considered as independent variable and investment opportunities, ownership concentration, firm size, liquidity, liquidity ratio, stock turnover, stock trading volume, stock trading value are considered as dependent variables.

Theoretical Basics and Review of Literature

There are various reasons for dividing and non-dividing profit. Exact detection of effective factors on dividend policy is one of the challenging issues in financial management of companies. Company management should consider various variables before decision making about dividend method. Effective factors on dividend and their effect should be defined. Managers achieve an attitude about the situation of their company in terms of dividend and they can decide better. One of the first papers about divided as "Evaluation of dividend policy, growth and changes of incomes" was presented by Lintner (1965). He received a set of views of managers of companies about effective factors on dividend policy and found that dividend was dependent mostly upon current income of company and dividend of the past year (Frank Forter & wood, 2002). In evaluation of dividend policy theories, they found that the factors affecting stock price can affect dividend policy. For better justification of dividend policy, we should use a combination of financial theories, psychological and behavioral works, otherwise theoretical tests of dividend policy without definite and heterogeneous result. Chay and Suh (2009) conducted a study "payout policy relationship with uncertainty to liquidity, retained earnings to equity, agency conflict and growth opportunities. Their study was performed during 1995-2005 in selected companies of Australia, America, Japan, France, Germany and England. They found that uncertainty to cash flows was one of the effective factors on dividend. They found that effective of retaining earnings to equity was more than other factors. Anil & Kapoor (2008) in the study "Determinants of Dividend Payout Ratios" performed a study in India IT industry during 2000-2006 and investigated the effect of some factors on dividend ratio.

They shows that dividend payout ratio is positively related to profits, cash flows and it has inverse relationship with corporate taxes, sales growth. Amid and Abvar (2006) in a paper "determinants of dividend ratio in Gana" conducted a study during 1998-2003 in Gana. The results of their study showed that there was a positive association between dividend ratio and profitability, liquidity and tax and there was a negative association between dividend and institutional investors' risk and growth opportunities.

Saaedi (2003) performed a study as evaluation of effective factors on cash dividend policies of companies listed on TSE during 1993-1999 and the result of study supported the positive relationship between cash dividend and four variables of liquidity ratio of companies, profitability, ownership control and major shareholders percentage of companies and there was a negative association between cash profit and final ratio of tax. MOvakher (2001) investigated the relationship between dividend policy and stock price changes of companies listed on TSE and found that dividend policy had no effect on stock price and stock price followed other factors. Bashiri (1999) investigated the effect of liquidity condition on dividend in partnership companies (textile industry). The results of study showed significant association between liquidity and dividend of companies.

Study Hypotheses

- 1. Investment opportunities were effective on dividend policy in companies listed on TSE.
- 2. Liquidity was effective on dividend policy in companies listed on TSE.
- 3. Ownership concentration effective on dividend policy in companies listed on TSE.
- 4. Stock turnover was effective on dividend policy in companies listed on TSE.
- 5. Firm size was effective on dividend policy in companies listed on TSE.
- 6. Stock trading volume was effective on dividend policy in companies listed on TSE.
- 7. Stock trading value was effective on dividend policy in companies listed on TSE.
- 8. Liquidity ratio was effective on dividend policy in companies listed on TSE.

Study Scope

The study scope of present study is the relationship between information asymmetry and dividend policy. The study time is during 2008-2013 as six years and study scope is TSE.

Study Population and Sample Size

The study population is all companies listed on TSE. The studied companies include 132 companies. The companies meeting the criteria are as followings:

- 1. Be present from 2008 to 2013 in stock market.
- 2. Are not financial brokerage companies
- 3. For information comparison, their fiscal year ends to the end of Esfand
- 4. There is no fiscal year during the studied period
- 5. There is no operating pause during the studied period
- 6. In each year, there is at least once dividend

Data Analysis Method

The required data of companies is taken via data basis of Tadbirpardaz and formal site of TSE and then by conclusion and computation in Excel, the data are analyzed. The final analysis is done by SPSS statistical software, version 20 via simple linear regression. Kolmogrov-Smirnov test is used to test normality of data distribution.

Study Variables and their Measurement Method

Independent variable

Independent variable of study is dividend policy. The criterion applied as dividend policy is payout ratio as achieved by DPS division by EPS (earnings per share) and it is denoted by DR. This ratio shows which value of EPS is paid to shareholders and it plays the basic role in company growth as company growth has inverse relationship with this ratio. It means that the lower the ratio, the higher the growth and vice versa.

Dependent variables

- 1. Investment opportunities: Normally, investment opportunities show a set of investment policies and are always revised by company over time. The higher the investment opportunities of a company, the higher the market value compared to its book value. In this study, market value ratio to book value is used as the agency of growth opportunity (Shorvarzi, 2008).
- 2. Liquidity: Liquidity indicates solvency of company in current debts. If the company has high liquidity, its assets are turned rapidly to cash flow (Jahankhani and Parsian, 2007). In other words, the higher the current assets of company and the lower its current debts, the higher the liquidity of company. To measure this feature, we can use the ratio of current assets to current debts (Valasumura, 1994).

$$LIQ_{it} = \frac{CA_{it}}{CL_{it}}$$

LIQ,: Stock liquidity of company i in period t

*CA*_{*ii*}: Current assets of company I in period t

CL_{ii}: Current debts of company i in period t

- **3. Ownership concentration:** One of the criteria of external organization ownership concentration is the percent of share available of block holders 5% above in company. External organizational ownership concentration improves earnings quality and it is one of the aspects of theoretical framework of accounting standards(Ebrahimi Kordlar, 2010). In this study, stock percent available to all block holders 5% above at the end of fiscal year in company is used.
- **4. Stock turnover:** This variable is achieved by dividing the trading stock on the number of issued stocks of company during a definite period (Rahmani, 2010). This criterion is computed as annual as followings:

Stock turnover= Number of issued stocks/Number of traded stock

5. Firm size: The most common criterion for firm size is total sale and total assets of company. It means that the higher the assets and corporate sale, the higher the size of company and vice versa. However, the total book value of assets for companies with high inflation rate can be problematic (Itiridis, 2008). In this study, national logarithm of sale price is used as firm size.

Sizeit = Ln (assetit)

Sizeit: Firm size of company I in period t

Saleit: Sale of company i in period t

- 6. Stock trading volume: The number of trading stocks in a period. The trading volume for each company in period 1 year is extracted from databases (Rahmani, 2010).
- **7. Stock trading value:** It is achieved by multiplication of price of stock trading by trading volume. This criterion is used for one year period (Rahmani, 2010).
- **8.** Stock liquidity ratio: This criterion computes the trading value of a share for price change in a period and is achieved by dividing trading value by return absolute value (Rahmani, 2010).

Study Results

In descriptive statistics, data analysis is performed by central measures as mean, dispersion, standard deviation, skewness and kurtosis. The mean value as the

main and common central index shows the average data. Also, standard deviation shows data dispersion. The lowest standard deviation is regarding dividend policy and highest standard deviation is dedicated to stock liquidity.

Descriptive statistics										
Kurtosis	Skewness	SD error	SD	Mean	Ν	Variable				
184/51	10/65	0/029	0/83 0/73		792	Dividend policy				
8/16	2/10	0/08	2/26	2/70	792	Investment opportunity				
730/1	26/55	0/186	5/23	1/31	792	Liquidity				
-0/82	-0/60	0/010	0/30	0/57	792	Ownership concentration				
8/79	3/09	0/0073	0/207 0/073 792		Stock turnover					
1/56	0/70	0/018	0/52	5/60	792	Firm size				
299/8	16/60	219028/43	6164006/5	623457/3	792	Trading volume				
638/8	24/38	804551801	2264209469	14669798	792	Trading value				
678	25/43	341749925	961769541	52520366	792	Liquidity ratio				

Table 1 Descriptive statistics

Normality Test of Dependent Variable

At first we evaluate normality of independent variable (dividend policy). To do this, Kolmogrov-Smirnov test is used. As shown in Table 2, based on the results, significance level of test is 0.000 and it shows its non-normality. Thus, logarithm linear conversion is used for independent variable distribution and after computation of independent variable, significance level of stock price is 0.147 and by confidence 95%, we can say independent variable (dividend policy) has normal distribution.

Table 2
Results of Kolmogrov-Smirnov test for fitting normal distribution

Logarithm of dividend policy	Dividend policy	
1/143	370/5	Kolmogorov-Smirnov statistics
0/147	000/0	Two-way significance level
792	792	Number

Table 3Results of hypotheses test

Result	Sig	T statistics	SD	Coefficient	Hypotheses and measurement model	
Significance	0.0000	4/914	0/007	0/034	Investment opportunities and dividend policy	H1
Insignificance	0.0000	0/449	0/003	0/001	Liquidity and dividend policy	H2
Significance	0/000	4/559	0/053	0/240	Ownership concentration and dividend policy	H3
Insignificance	0/715	0/365	0/077	0/028	Stock turnover and dividend policy	H4
Insignificance	0/793	-0/263	0/030	-0/008	Firms size and dividend policy	H5
Insignificance	0/253	-1/144	-2.974	0/000	Trading volume and dividend policy	H6
Insignificance	0/713	-0/368	-2.60	0/000	Trading value and dividend policy	H7
Insignificance	0/124	-0/538	-2.56	0/000	Liquidity ratio and dividend policy	H8

Hypotheses Test Results

First hypothesis test results

As probability of t statistics (significance level) for investment opportunity is 0.000 and is less than error level 5%, regression coefficient of independent variable of investment opportunities is significant statistically. Thus, H0 is rejected and H1 is supported. Thus, investment opportunity of companies listed on TSE has significant effect on dividend policy and for each unit of increase in investment opportunity, the companies can increased as 0.034 units in payout. In most of the

studies, the relationship between investment opportunities and dividend policy is as followings:

Vidhan et al.,(2001) in the study " The relationship between investment opportunities and funding policies" showed that investment opportunities played important role in funding theory and policy of companies and it was expected that companies with high opportunities had low debt and these companies applied short-term debts instead of long-term debts. There was an inverse relationship between investment opportunities with dividend. Zamanpour (2003) in the study "relationship of investment opportunities and financial policies" showed that there was a negative association between investment opportunities and borrowing and there was a positive relationship between investment opportunities and dividend policy. Identification of the effect of investment opportunities and dividend policy of companies and its explanation for theorists in terms of future theoretical researches and on the other hand before investors, shareholders and financial analysts and managers of companies for taking decisions were of great importance.

Results of second hypothesis test

As t statistics probability (significance level) for liquidity is 0.449 and is less than error level 5%. Thus, regression coefficient of independent liquidity variable is significant statistically. Thus, H0 is rejected and H1 is supported. Thus, liquidity is effective on dividend policy of companies listed on TSE. Based on the results of study (Linter, 1965), (Azimi, 2006), (Bashiri, 1999), (Saeedi, 2003) regarding positive results of the association between liquidity and dividend policy, the results of present study regarding the effect of liquidity on dividend policy is significant and liquidity is effective on dividend policy and the results of other studies are supported.

Results of third hypothesis test

As t statistics probability (significance level) for ownership concentration is 0.000 and is less than error level 5%. Thus, regression coefficient of independent ownership concentration variable is significant statistically. Thus, H0 is rejected and H1 is supported. Thus, ownership concentration is effective on dividend policy of companies listed on TSE. For each unit of increase in ownership concentration, the companies are faced with the increase of 0.24 units in payout. Agency issue is based on separation of ownership from management. Based on the most of studies, ownership concentration improved performance and financial policies of business units and agency issue was reduced. Based on agency theory, benefits conflict between owners and managers of agency costs were considered. The regulations

of corporate governance attempted to reduce the costs. One of the important tools in this field is ownership concentration and performance control of managers (Ahmadvand, 2006). The results of study were significant regarding the effect of ownership concentration on dividend policy and the results of previous studies were supported.

Results of fourth hypothesis test

As t statistics probability (significance level) for stock turnover is 0.715 and is bigger than error level 5%. Thus, regression coefficient of independent stock turnover variable is not significant statistically. Thus, H0 is supported and H1 is rejected. Thus, stock turnover is not effective on dividend policy of companies listed on TSE.

Results of fifth hypothesis test

As t statistics probability (significance level) for firm size is 0.793 and is bigger than error level 5%. Thus, regression coefficient of independent firm size variable is not significant statistically. Thus, H0 is supported and H1 is rejected. Thus, firm size is not effective on dividend policy of companies listed on TSE.

Results of sixth hypothesis test

As t statistics probability (significance level) for stock trading volume is 0.253 and is bigger than error level 5%. Thus, regression coefficient of independent stock trading volume variable is not significant statistically. Thus, H0 is supported and H1 is rejected. Thus, stock trading volume is not effective on dividend policy of companies listed on TSE.

Results of seventh hypothesis test

As t statistics probability (significance level) for stock trading value is 0.713 and is bigger than error level 5%. Thus, regression coefficient of independent stock trading value variable is not significant statistically. Thus, H0 is supported and H1 is rejected. Thus, stock trading value is not effective on dividend policy of companies listed on TSE.

Results of eights hypothesis test

As t statistics probability (significance level) for liquidity ratio is 0.124 and is bigger than error level 5%. Thus, regression coefficient of independent liquidity ratio variable is not significant statistically. Thus, H0 is supported and H1 is rejected. Thus, liquidity ratio is not effective on dividend policy of companies listed on TSE.

CONCLUSION AND RECOMMENDATIONS

The results of study showed that investment opportunities were effective on dividend policy of companies listed on TSE. Normally, an investment opportunity showed a set of investment policies and was revised by company over time. Identification of the effect of investment opportunities and dividend policy of companies and its explanation for theorists in terms of future theoretical researches and on the other hand before investors, shareholders and financial analysts and managers of companies for taking decisions were of great importance. On the other hand, the results of study showed that ownership concentration was effective on dividend policy of companies listed on TSE. Based on most of studies, ownership concentration improved performance and financial policies of business units and reduced agency issue and the lower the share of a shareholder of company, the lower the benefits of supervision on manager behavior. Thus, concentration in stock led into high control of manager behavior and reduction of opportunistic abilities. It means that block holders applied their voting power for active supervision on operation of company and decision making as ownership right by managers and supervision by great shareholders is a dilemma that potentially can reduce agency problems and increase institution value. The basic ownership right by managers can adapt their benefits with the benefits of other shareholders and it leads to better performance of institution (Gotirzopombo, 2008). The results of study showed that liquidity ratio, trading volume, trading value and stock turnover had no effect on dividend policy in companies listed on TSE. The results of studies showed that the companies with high profitability and liquidity by disclosure could aware others of their ability (Durnev and Kim, 2005). On the other hand, the companies attempt to maintain the share of market and profitability and they should present the information about their plans and goals to customers and market members to attract their trust. In addition, as reward of managers is associated with profitability and performance of company, managers disclose information widely for their personal benefits (Zemmerman, 1983). The results of study showed that liquidity was effective on dividend policy and their relationship was significant. Based on these studies and support of these studies and trust to the results, we can increase awareness of investors to TSE and provide competition and investment in this market for all people in society. On the other hand, based on the important role of information in decision making of people and selection of suitable solutions in relationship with dividend policies of companies and our agency issues, we investigate the most effective variables on dividend policy and try to help domestic and international users of the information of this study. In addition of above items, perception of effective factors on dividend policy besides keeping the benefits of investors led into the growth of company and increase of profitability and attracted the satisfaction of shareholders of company

policies. The results of this study are important for potential and actual investors of stock market, financial analysts, government as controlling role and managers and other stakeholders of companies listed on TSE. This study can be also useful in Universities and research centers.

Recommendations For Further Studies

- 1. This study can be conducted in another community of TSE and its results can be adapted with the findings of this study.
- 2. Effective factors on policy dividend based on separation of TSE into different growth periods can be applied based on entire index of TSE.

References

- 1. Araskat. (2003). "Financial accounting theory". Translated by Mohsen Mambeigi, higher institution of education of management and planning.
- 2. Etemadi, H., Chalaki, P. (2005). "The relationship between performance and dividend in companies listed on TSE during 1999-2002. *Accounting and Audit*, No, 39, 12.
- 3. Bashir, Jafari. (2000). "The effect of liquidity on dividend in stock companies (Textile industry). MA thesis, Sciences and Techniques University of Mazandaran.
- 4. TSE. (2010). Report of pathology of dividend.
- 5. Banimahd, B., Asghar., A. (2011). "The evaluation of the impact of company leverage on dividend policy of companies Listed on TSE. *Journal of financial knowledge of stock market*, No, 10.
- 6. Talane, A., Mehrani, S. (1998). "Companies dividend". Accounting, No, 125.
- 7. Jahankhani, A., Qorbani, S. (2005). Identification of determinants of dividend policy in companies listed on TSE. *Journal of financial researches*, No, 20.
- 8. Hajian, N., Khoshtinat, M. (2009). "The impact of increasing dividend on behavior of investors. *Journal of accounting and Audit, Period* 15, No, 2.
- 9. Hafeznia, M. (2006). "An introduction to research method in human resources". 12th ed., Tehran, SAMT publications.
- 10. Habibpour, K., Safari, R. (2011). The comprehensive guidance book of SPSS in survey researches". Motefakeran publications, 3rd edition.
- 11. Ras, S., Randolf, V., Bardford, J. (2003). "New financial management" (2nd Vol). Translated by Ali Jahankhani, Mojtaba Shora. 2nd edition, Tehran, SAMT publications.
- 12. Rai, R., Ahmadpoyanfar. (2011). Advanced investment management. Tehran, SAMT.
- 13. Rasayian, A. (2008). "Bid-Ask spread as a factor for stock liquidity. Accountant.

- 14. Rasayian, A. (2008). The relationship between financial information and bid-ask spread in TSE. MA thesis, Mazandaran University.
- 15. Rahnamayerudposhti, F., Nikomaram, H., Shahverdiani, Sh. (2006). *Strategic financial management* (value creation). 1st ed., Tehran.
- 16. Rahnamayerudposhti, F., Allahkaram, S. (2010). *Financial and accounting theories and schools*. First edition, Islamic Azad University of Tehran Markaz.
- 17. Veston, Berigam, Y. (2007). *"Financial management"*. 2nd Vol, Translated by Hossein Abde Tabrizi, Farhad Hanifi. 2nd edition. Tehran. Agah publications.
- Acker, D., Stalker, M., Tonks, I. (2002)." Daily closing inside spread and trading volumes around earnings announcements". *Journal of Business Finance and Accounting*, No, 29 (10), 1149-1179.
- 19. Akerlof, G., Michael Spence and Joseph Stiglitz. (1970). "Markets with Asymmetric information". At URL: http://www. Nobelprize.Org\Economist.
- Bollen, N., Smith and Whaley. (2004). "Modeling the Bid-Ask Spread: Measuring the Inventory-Holding Premium". *Journal of Financial Economics*. Vol, 32.159-163.
- 21. Aharony J., and Swary, I. (1980). Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis, *Journal of Finance*, 5: 1-12.
- 22. Allen, D. E. & Rachim, V. S., (1996). "Dividend policy and stock price volatility: Australian evidence", *Journal of Applied Economics*, Vol. 6, pp. 175-88.
- Al- Malkiwi H. N. (2007) "Determinants of corporate dividend policy in Jordan: an application of the Tobit Model", *Journal of Applied Accounting Research*, Vol. 23, pp. 44-70.
- 24. Baskin, J., (1989), "Dividend Policy and the Volatility of Common Stock", *Journal of Portfolio Management*, 15(3): 19-25.
- 25. Barclay, M. J. et al., (Winter 1995). "The Determinants of Corporate Leverage and Dividend Policies", *Journal of Applied Corporate Finance*.
- 26. Dechow, P., Dichev, I. (2002). "The quality of accruals and earnings: The role of accrual estimation errors", *The Accounting Review*, 77, 35-59.
- 27. Jensen, M. C. and Meckling, W. (1976) Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, *Journal of Financial Economics*, 3: 305-360.
- LaPorta, R., Lo' pez-de-Silanes, F., Shleifer, A. and Vishny, R., (2000). Agency Problems and Dividend Policies around the World. *Journal of Finance*, 55: 1–33.
- 29. Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth and the valuation of shares. *The Journal of Business*, 34(4), 411-433.

- 30. Orfanos, Vassilis & Evripiotis, Mihalist, (2009), "The effect of companies dividend and economic policy of FTSE/ASE-20 indicator in the configuration of their stock", 2nd International Conference: Quantitative and Qualitative Methodologies in the Economic and Administrative Science TEI of Athens 25-27 May 2009.
- 31. Rozeff, M., (1992). "How Companies set their Dividend-Payout Ratios," in: Stern, J. M.and Chew, D.H., *The Revolution in Corporate Finance*, Blackwell Publishers, Oxford.