Impact of Internal and External Information Shocks on the Value Relevance of Dividend Policy

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ABSTRACT

In this paper, the effect of internal and external information shocks on the value relevance of dividend policy is examined by considering the information asymmetry, which is one of the indicators of the information environment. It is argued that managers act on the information they have so that they maximize their profits at the expense of uninformed groups. In this way, managers adopt dividend policies by creating information shocks caused by asymmetry. To achieve the research goal, the data of 90 sample companies were collected for the period of 2012-2018 and analyzed by a descriptive-correlation approach using multiple regression and Wong tests. The findings showed that, among the internal information shock (fundamental changes in the institutional ownership and fundamental changes of the board of directors) and external shock, the internal information shock of fundamental changes in institutional ownership had more value relevance with the dividend policy, compared with two other information variables.

Keywords:

Value Relevance of Dividend Policy, External Information Shocks, Internal Information Shocks.

1. Introduction

Decisions related to investment in stocks are part of economic strategies aiming at maximizing the profit and capital welfare. One of the factors affecting companies' stock prices is signals and signs released from inside the companies and become available for investors as different information. Clearly, managers have the opportunity to control what information can be presented, and thus information disclosed in financial statements cannot reflect companies' actual status. The manager is the only one who has access to the company's private information, while other groups have only access to general information published publically.

Generally, informed groups pursue exploiting their information in financial markets directly or indirectly, and these efforts to earn a profit of private information increase agency costs (Jensen and Meckling, 1976) and decrease the present value of expected cash flows.

Managers may act based on information they access to maximize their profit by the cost of uninformed groups. For example, management can choose higher profit to disclose loss compensation maximally.

On the other hand, one of the important concepts in accounting and finance is profits causing dividend policy in financial management to be important. The excessive focus of capital markets on profits and related information causes profits to be one of the important factors affecting variations in stock prices and makes companies' value dependent on itself by creating abnormal returns. Dividend payouts are one of the companies' short-term strategies whose impact is seen in each fiscal year at companies' annual general meetings and based on which companies' performance is assessed. This policy has information content in the stock market, and its change contains information for shareholders.

In the area of value relevance, various information, including price and stock returns information, has been used as a criterion to assess the value relevance of accounting information. Value relevance of accounting items, particularly profits, means new and appropriate information it transfers to the market and information that changes the shareholders' expectations and consequently evokes shareholders' reactions. Therefore, dividend policy has always been one of the most controversial financial issues, and, generally, the relationship between dividend and profit per share reflects companies' dividend policy. Being aware of factors affecting dividend policy enables forecasting companies' future behavior, besides providing a clear image of their dividend payout power. Companies have different dividend policies, but, disregarding a particular policy of each company, managers try to set dividend value according to the information of the future so that they can avoid negative impacts of variations in dividend on shareholders.

From the managers' viewpoints, there is two opposite decision on dividend: 1) maintaining earnings in the company and avoiding dividend payout to allocate it to debt service and financing of investment projects, 2) dividend payout as cash dividend among shareholders. Each of the above decisions has different impacts on the company's value and stock prices. Therefore, it should be able to maximize shareholder wealth and act so that to obtain the most optimal mix of stock profit and stock prices. Indeed, paying or not paying dividends can be considered a positive or negative signal for companies' shareholders so that they may consider a company as a good or bad index. Even the companies, knowing this fact, may use this tool to direct their stock prices and shareholders. However, these signs may be false, and the companies' actual status may be adverse to what they are trying to show.

In perfect markets, companies' value is not influenced by dividend policy (Miller and Modigliani, 1961). Nevertheless, if the efficiency of the markets is low, in the presence of information asymmetry, taxes, or imperfect contracts, dividend payout can affect companies' value.

Companies can consider different policies for dividend payouts. Managers of companies know that shareholders wish to receive profit stably. Therefore, in cases where this trend is not sufficiently stable, its trading risk is higher, meaning that the company does not have adequate liquidity to pay dividends. Variations in dividends include information and signals to the capital market and lead to reactions corresponding to trade volumes and stock prices. Managers attempt to resolve the gap and boom the market by creating internal information shock (change in the board of directors and institutional ownership) and external shocks (excessive volatilities of the stock market). Accordingly, distributing information asymmetrically between managers and owners is one of the bases for describing dividend policies that are

recognized as information shocks (Hail et al., 2014). Since shocks have short-terms effects, managers use this policy as an opportunity to maintain their stock prices booming.

Dividend policy is one of the issues of interest in the financial literature, and the relevant research shows that various inter-organizational and intra-organizational factors affect how managers determine dividend policies. Each of these factors has a particular importance degree, and identifying these factors helps investors, creditors, managers, and analyzers in the capital market to adopt proper and appropriate decisions. Therefore, identification and explanation of factors affecting dividend policies and managers' decisions are of particular importance. Thus, a question is arises that is how internal and external shocks affect the value relevance of dividend policy.

2. Theoretical foundation

Besides investment and finance policies, the company's approach to dividend payout is an important economic decision. Dividends have been often used as an instrument to pay back a part of companies' net earnings to shareholders, and it is a cost a company pays to investors due to capitals they invest in the company. Thus, decisions related to dividends do not depend only on financial results and cash flows but correlate with information asymmetry caused by agency problems. Managers have access to more information due to being informed of confidential information, and they are informed of the company's information before the information is available to the market.

Brav et al. (2005) referred to information asymmetry and agency costs as the main factor of dividend policy. Information asymmetry between managers and shareholders and managers' opportunistic incentives are some factors of companies' information environment. According to the signaling theory, managers who have more information on the company's future transfer this information through dividend payouts to external shareholders. Therefore, the signaling theory shows that there is a positive relationship between information asymmetry and dividend policy. Particularly, creating a general information environment using more exact and suitable information and better corporate governance should reduce a part of information asymmetry between

managers and investors, and this itself affects dividend policy.

Information shocks emerge from information asymmetry between managers and potential and actual investors. Generally, information shocks can be considered as internal and external. Internal shocks are referred to as decisions made inside the company and affect the company's performance, while external shocks refer to decisions and events occurred outside the company. Each of these factors can affect the value relevance of dividend policy. Clearly, the institutional ownership percentage has a significant impact on the company's management, decisions, behavior, and stock prices. This fact is originated from the control and information activities carried out by the investors.

The role of institutional owners in dividend theories is emerged from their preferences about cash flow payouts to reduce agency costs. Due to their influencing positive, institutional investors are expected to affect the company's financial policies, including dividend policy. It is argued that reduction or increase in the ratio of institutional owners transmit messages to the market showing that agency costs arising from the control of activities of these investors are reduced or risen. In other words, companies having high volatility in their institutional ownership ratios experience high instability in dividend payouts. Therefore, according to agency theories, it is expected that there is a significant relationship between changes in institutional ownership as an internal shock and value relevance of dividends.

Recruitment and disposition of the board of directors are some of the important internal control mechanisms for companies (Fama, 1980). Besides preventing managers from being inactive, this mechanism plays the role of a stimulator to managers perform better and disclose information required. Therefore, investors are expected to react to such changes. Warner et al. (1988) pointed out that there is a significant relationship between companies' week performance and disclosure of information related to changes in the board of directors. Indeed, the shock arisen by news on top management changes is accompanied by a fall in the company's value. In other words, this information is a signal of the company's move along with efficiency or inefficiency. If the content of disclosed information is considered positive and useful, it certainly affects the company's financial performance positively. Conversely, if the news

disclosed is considered to be adverse in beneficiaries' perspectives, it surely has a detrimental impact on the company and reduces the company's value. Since decisions related to dividend payouts are ultimately made by the board of directors, it is expected that there is a significant relationship between changes in the board of directors as an internal shock and value relevance of dividend policy.

On the other hand, variations in stock prices are used as a criterion to define risks showing the rate of changes in securities prices in a specific period. Higher variations are associated with a higher probability of making profit or loss is in the short run. Therefore, the price of a highly volatile stock should vary greatly across time, and estimating its future price is highly difficult. On the other hand, investors prioritize lower risks. The lower the investment risk is, the better the investment is, i.e., the lower the volatility of a stock price is, the more the intention to invest in this stock is (Hejazi et al., 2011). Investors in the capital market expect to gain a return proportionate to the risk they endure. Therefore, stock price changes are important for companies to the extent to which they are important for investors. Thus, fundamental changes in the market returns can significantly affect companies' dividend policy.

3. Research background

Harakeh et al. (2018) studied the impact of information shocks on dividend payout and dividend value relevance. Their findings show that the approval of IFRS greatly helps to increase dividend payouts by reducing asymmetric information. In addition, improving the information environment helps investors to assess companies' financial performance more certainly using accounting numbers. This causes the dividend value relevance among important companies to decrease.

Koo et al. (2017) examined the impact of financial reporting quality on corporate dividend policy. Their findings indicate that financial reporting quality positively relates to dividends. This positive relationship is stronger among firms with free cash flows and institutional owners. Also, the quality of financial reporting reduces the underpayment of dividends. Finally, evidence shows that dividends are the result of enhanced monitoring due to the higher quality of financial reporting.

Ngo and Sakaki (2017) studied institutional ownership stability and dividend payout policy. They found that owners of large firms favor dividend payout. Also, there is a positive relationship between ownership stability and dividend payout. In contrast, firms that change their dividend payout frequently are engaged in greater deviations in institutional ownership. In addition, the presence of pressure-sensitive institutional investors significantly correlates with dividend policy. Conversely, pressure-insensitive institutional investors use alternative monitoring forms instead of requesting investee firms to pay dividends. This reduces agency problems.

Hail et al. (2014) investigated dividend payout and information shocks. They tested predictions via analyzing dividend payment behavior of a global sample of firms around the mandatory adoption of IFRS and initial execution of new internal trade laws. Both events act as proxies to improve the information environment and, consequently, corporate governance structure. They found that firms are less likely to pay dividends but more likely to cease such payments after these two events. These changes happen around the time of information shock and only in countries that are subject to monitoring changes. Moreover, these transitions are more take place when agency challenges or information shocks are stronger. Also, the information content of dividends decreases after it. The results also draw attention to the importance of agency costs of free cash flows (and their changes) on forming firms' payout policies.

Davallou and Jannati (2018) investigated the impact of information asymmetry on the market reaction to a dividend increase. Their results indicated that an increase in dividends of firms with high information asymmetry leads to an abnormal, positive, and stronger return. Moreover, firms decreasing the idiosyncratic volatility experience positive abnormal returns after increasing dividends. Further, a positive drift of returns after an increase in dividends is clear for firms having high information asymmetry.

Banimahd et al. (2017) studied the value content of dividends in firms. Their results indicate that dividends in Iran have value contents and create information contents for shareholders.

Dastgir et al. (2016) investigated the impact of dividend policies on stock price volatilities in firms listed at the Tehran Stock Exchange. Their results signified a significant relationship between stock price

volatility and earnings and dividend payout ratio. Generally, it was implied that there was a significant relationship between dividend policies and stock price volatilities.

Ghalibafasl and Valizadeh (2016) investigated how dividend policy relates to stock liquidity and information asymmetry. They found that dividend policy positively and significantly relates to stock liquidity and negatively and significantly correlates with information asymmetry in the Tehran Stock Exchange.

Foroghi et al. (2015) studied the market reaction to the timing of the forecasted earnings per share. They investigated the market reaction to a negative revision of forecasted earnings per share (bad news) and a late announcement of this news. Their results indicated that the market reacts negatively to bad news, but a late announcement faces a positive reaction. They also found that there is not a difference in the market reaction to good and bad news, but a late announcement of good news is always accompanied by a positive reaction.

Nazari et al. (2012) addressed the relationship between information asymmetry and dividend policy in firms. Their results confirm a direct relationship between information asymmetry and dividend policy. They also examined the impact of some other variables, including firm size, profitability, and risks, on dividends. Along with other factors, it is concluded that higher information asymmetry leads to higher dividend payouts.

According to what discussed above, the research hypotheses are as follows:

Hypothesis 1:
Internal information shocks affect the value relevance of dividend policy.

Hypothesis 2
External information shocks affect the value relevance of dividend policy.

4. Methodology

Data for this research has been extracted from audited financial statements of companies listed at the Tehran Stock Exchange and internet websites, including CODAL and the official site of the Stock Exchange. Some limitations were imposed on the selection of the sample. First, the fiscal year is finished at the end of March. Second, the company has not changed its fiscal year during these years. Third,

trading of the stocks in the company during the period mentioned should be at least six months. Forth, the company should not be of the type of investment and financial intermediation companies. Fifth, the information required for the research in the period studied should be accessed. Data for 90 companies having the above conditions were gathered over the period of 2012-2018 and analyzed.

5. Data analysis

After the screening and selection of the sample among companies listed in the Tehran Stock Exchange and collecting data for variables introduced in the operational definitions, the following process is implemented.

1. The regression model (1) is estimated to assess the value relevance of dividend policy. The value of the coefficient of determination (R^2) indicates the value relevance of dividend policy.

$$\text{Tobin' s } Q_{i,t} = \beta_0 + \beta_1 DPR_{it} + \text{€}_{it}$$

2. The changes in the coefficient of determination (R^2) is measured using the Wong test by incorporating the internal and external information shocks to fit the regression models of the research hypotheses.

The regression model for the first hypothesis:

$$\text{Tobin' s } Q_{i,t} = \beta_0 + \beta_1 DPR_{it} + \beta_2 DPR \times IIS_{1it} + \beta_3 CF_{it} + \beta_4 NIBE_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 Capex_{it} + \text{€}_{it}$$

$$\text{Tobin' s } Q_{i,t} = \beta_0 + \beta_1 DPR_{it} + \beta_2 DPR \times IIS_{2it} + \beta_3 CF_{it} + \beta_4 NIBE_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 Capex_{it} + \text{€}_{it}$$

The regression model for the second hypothesis:

$$\text{Tobin' s } Q_{i,t} = \beta_0 + \beta_1 DPR_{it} + \beta_2 DPR \times EIS_{it} + \beta_3 CF_{it} + \beta_4 NIBE_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 Capex_{it} + \text{€}_{it}$$

6. Research variables
6.1. Moderating variables

Internal information shock
Two indicators are used to measure internal information shock:

1) Fundamental changes in institutional ownership:
   Fundamental changes in institutional ownership (percentage of institutional owners from the total stocks) are classified based on the standard classification No. 15 (for percentages not greater than 20, there is no

influence or it is very low; for percentages between 20 and 50, there is a significant influence; and for greater than 50, there is control). Accordingly, if a company's institutional ownership varies in the above classification, compared with the previous year, this change is considered a fundamental change in institutional ownership. In this case, a dummy variable with a value of 1 is considered, and otherwise, the dummy variable takes a value of zero.

2) Fundamental changes in the board of directors: In the cases where more than three of the members of boards of directors have changed related to the previous year, a dummy variable with the value of 1 is used. Otherwise, the dummy variable takes the value of zero.

External information shock

Fundamental changes in the market return volatilities are inspected by constrained (model (*)) and unconstrained (model (**)) tests.

$$R_{it} = \beta_0 + \beta_1 R_{Mt} + \epsilon_{it}$$

$$R_{it} = \alpha_0 + \alpha_i R_{Mt} + \sum_{n=1}^{4} \delta_{in} R_{Mtn} + \pounds_{it}$$

where R_{it} represents monthly stock returns of firm i in month t, and R_{mt} denotes monthly stock returns of the market (percentage change in the price and cash index) that is present in the above model with lags 1-4.

External information shock occurs when the fluctuation domain of the model error is out of the standard domain. The difference in errors of the two above models, the annual standard deviation of companies across the industries, and the first and third quartiles of the members of industries are measured. Industries in the research were gathered into four different groups according to the coding of industries in the Tehran Stock Exchange. These groups include food, pharmaceutical, car, chemical group, and other industries. Due to the limited number of sample size, those industries producing similar types of products were categorized into the other industries group. Accordingly, for the extent of deviation from the interquartile domain, the external information shock is considered, and the corresponding dummy variable is assumed to be 1, and otherwise, it is assumed zero.

6.2. Independent variable— dividends
The ratio of dividend to earnings per share (EPS)

6.3. Dependent variable— Tobin's Q:
The Tobin's Q ratio equals the market value divided by the book value:

$$\text{Tobin's } Q_{it} = \frac{MVS + BVD}{BVA}$$

In this equation, MVS stands for market value per share, BVD represents the book value of debts, and BVA is the book value of assets (Moutinho et al., 2012)

6.4. Control variables
Operating cash flow: Net cash flow from operating activities divided by operating income
Returns on assets: Net earnings per share divided by total assets
Financial leverage: Total debts divided by total assets
Debt capacity:

$$\text{Capex} = \frac{TFA_T - TFA_{t-1}}{NA} \qquad \begin{matrix} (*) \\ (**) \end{matrix}$$

where TFA_t represents tangible fixed assets in the current year, and TFA_{t-1} shows tangible fixed assets of the previous year.
Profitability volatility: The standard deviation of net earnings divided by average assets over the three past years

7. Findings
Tables 1 and 2 presents descriptive statistics of the sample companies. Due to virtual internal information shock (fundamental changes in institutional ownership) and an average of 0.083, it can be found that the percentage of year-companies whose fundamental institutional ownership changes contribute to only 8.3% of the sample companies. The internal shock variable (fundamental changes in the board of directors) with an average of 0.146 shows that about 15% of the sample companies have experienced changing more than three members of the board of directors related to the previous year. Also, external information shock with an average of 0.484 means that less than half of the sample companies have experienced external information shock.

Table 1: Descriptive statistics of dummy variables

Variable	Symbol	Dummy value	Frequency	Percent	Number of observations
Internal information shock	IIS1	0	578	0.917	630
		1	52	0.083	
	IIS2	0	538	0.854	
		1	92	0.146	
External information shock	EIS	0	325	0.516	
		1	305	0.484	

The average dividend payout ratio of 0.631 shows that about 63% of sample year-companies pay cash dividends. Tobin's Q ratio is 0.582, which is less than 1. The ratio of investment returns to the rate of the cost of capital shows that companies do not have an incentive for investment and favorable growth opportunities. Indeed, a higher value of this index indicates better performance and a more appropriate situation for investment.

Variable	Symbol	Average	Standard deviation	Kortosis	Skewness	Minimum	Maximum	Number of observation
Tobin's Q	Tobin Q	0582	0.221	2.838	0.040	0.082	1.323	630
Dividend	DDR	0.631	1.208	7.449	1.556	-4.855	7.525	
Financial leverage	LEV	0.579	0.217	2.639	-0.034	0.082	1.252	
Profitability volatility	NIBE	0.066	0.066	2.629	2.272	0.0003	0.411	
Operating cash flow ratio	CF	0.713	1.276	6.765	-0.404	-5.778	5.603	
Return on assets	ROA	0.116	0.137	4.292	0.741	-0.370	0.631	
Debt capacity	CAPEX	0.035	0.113	6.062	1.173	-0.479	0.751	

7.1. Results of the first step

Table 3 represents the results of estimating the regression model (1). The coefficient of determination (R^2) is used to measure the explanatory power of the model. As seen from the results, the value of the F statistic indicates that the regression is significant at a significance level lower than 5%. Therefore, the goodness-of-fit and its significance are confirmed. The coefficient of determination (R^2) equaling with 0.947 shows the value relevance of dividend policy. Therefore, the dividend payout ratio has high explanatory power in value relevance of dividend policy.

Table 3: Results of assessing the value relevance of dividend policy

Symbol		Coefficient	T statistic	Probability
C		0.069	5.170	0.000
DDR		-0.002	-0.668	0.025
CF		-0.001	-0.002	0.281
CAPEX		-0.011	-0.456	0.649
LEV		0.892	45.579	0.000
NIBE		0.021	0.431	0.667
ROA		-0.024	-0.740	0.460
	Value	Test	Value	Probability
R^2	0.943	Limmer F	1.272	0.052
Hausman test			29.459	0.000
Durbin-Watson	2.466	Fisher F	76.204	0.000

7.2. Results of the second step

To test the difference between the coefficients before and after incorporating internal and external information shock, we use the Wong test at the level of sample companies. Table 4 presents the results. As seen, the results of the Wong test show that there is a significant difference between the coefficients of determination before and after including internal information shock (fundamental changes of institutional ownership). Further, there is not a significant difference between the coefficients of determination before and after entering external information shock (fundamental changes of the board of directors).

The value of the coefficient of determination (R^2) after incorporating internal information shock of fundamental changes of institutional ownership into the model is 0.335, showing the explanatory power for value relevance of dividend policy. As seen, internal information shock of fundamental changes of institutional ownership, as a moderating variable related to internal information shock of fundamental changes of the board of directors and external shock, increases the coefficient of determination after its incorporation into the model, and thus there is a significant difference.

Table 4: Results of Wong test for research models

Model	Coefficient of determination	Results	
		V12	Significance level
Model before including internal information shock of fundamental changes of institutional ownership	0.280	-2.062	0.040
Model after including internal information shock of fundamental changes of institutional ownership	0.335		
Model before including internal information shock of fundamental changes of boards of directors	0.321	-0.920	0.358
Model after including internal information shock of fundamental changes of boards of directors	0.320		
Model before including external information shock	0.338	-0.552	0.581
Model after including external information shock	0.302		

8. Conclusion and recommendations

One of the most important instruments used in decisions made by investors is the news and information related to the performance and profitability of the companies listed at the Stock Exchange published to their investors. Regarding the disparity of ownership from management, it has been well known that managers often do not act in line with the investors' interests, and this conflict of interests causes the information asymmetry between managers and shareholders to be intensified.

Therefore, managers may use information asymmetry, arisen by information shock, in dividend decisions. Decisions made by managers related to dividends are very critical and important. Comprehensive attention to factors and restrictions affecting dividend policies helps the maintenance and survival of the company, besides maximization of shareholders' wealth. Regarding the importance of this issue, this research studied the impact of internal and

external information shocks on the value relevance of dividend policy among 90 companies listed at the Tehran Stock Exchange over the period of 2012-2018.

According to the results of the tests and inspections of the changes in the explanatory power of the models, changes in dividend policies happen around the information shocks. It seems that among the internal information shocks (fundamental changes in the institutional ownership and fundamental changes in the board of directors) and external information shocks, the internal information shock of fundamental changes in the institutional ownership has more value relevance of dividend policy, compared with two other information shocks. Since dividend policy adopted by mangers may convey some information and signals to the market, information asymmetry may emerge. Therefore, a change in the companies' information environment leads to a change in its dividend policy. As a result, the hypothesis of dividend policy irrelevance is not confirmed because it leads to a change in the market price of shares by changing the

information environment caused by information shock, particularly internal information shock of fundamental changes in institutional ownership. In this way, by creating information shock caused by information asymmetry, managers keep the boom in the stock market, and this policy is adequately effective in companies listed at the Stock Exchange. The results of the present research are somewhat consistent with the results obtained by some previous studies such as Dastgir et al. (2016), Hail et al. (2014), and Ghalibafasl and Valizadeh (2016).

Regarding the results found, official organizations such as the Securities and Exchange Organization are recommended to reduce information asymmetry and provide schemes to develop the capital market by implementing a governance system and strict regulations on companies. Investors and shareholders in companies listed at the Tehran Stock Exchange are suggested to pay attention to information asymmetry and consider its potential effects.

Some proposals for future research are presented as follows.

1) In this research, external information shock was used based on the market rate of returns. It is suggested to use the changes in tax laws and accounting standards.

2) In this study, the dependent variable of Tobin's Q was used. It is suggested to use some other variables such as accumulated abnormal return, dividend yields, etc.

References

1) Banimahd B., Rahmannejad G. (2017). Information content of dividends in companies, The Financial Accounting and Auditing Research, 9(33), 17-28.

2) Hejazi, R., Ghitasi, R., Mosajed Mousavi, M. S., Rezaei, S. (2011). Effect of dividend policy on stock price variability. The Financial Accounting and Auditing Research, 3(11), 25-45.

3) Dastgir, M., Chavoshi, M., Azimi, M. (2016). The Influence of Dividend Policy on Share Price Volatility of the Companies Listed in Tehran Stock Exchange. Journal of Iranian Accounting Review, 3(11), 65-76.

4) Davallou M, Jannati A. (2019). Investigation of Information Asymmetry Effect on Market Reaction Relative to Dividend Increase. quarterly financial accounting journal, 10 (39), 1-30.

5) Forooghi, D., Mehrdad Ayask, S. (2015). Market Reaction to the Timing of EPS Forecast. Empirical Research in Accounting, 5(1), 139-162.

6) Ghalibafasl, H., Valizadeh, F. (2016). The Relationship between Dividend Policy with Information Asymmetry and Stock Liquidity in Tehran Stock Exchange. Financial Management Strategy, 4(3), 1-23.

7) Nazari, M., Parsaee, M., Nasiri, S. (2012). The relation between information asymmetry and divided policy in Tehran stock exchange. Journal of Management Accounting and Auditing Knowledge, 1, 103-114.

8) Brav, A., Graham, J., Harvey C., Michaely, R. (2005). Payout policy in the 21st Century. Journal of Financial Economics, 77, 483-527.

9) Fama, E. (1980), Agency problems and the theory of the firm, Journal of Political Economy, 88(2), 288-307.

10) Hail, L., Tahoun, A., Wang, C., (2014). Dividend payouts and information shocks. J. Account. Res. 52, 403–456.

11) Jensen, M., Meckling ,W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure, Journal of Financial Economics, 48, 831-80.

12) Koo, D.S., R. Santhosh, and Y. Yong. (2017). The effect of financial reporting quality on corporate dividend policy, Review of Accounting studies.

13) Mostafa Harakeh, Edward Lee, Martin Walker , The effect of information shocks on dividend payout and dividend value relevance. Finana (2018), doi:10.1016/j.irfa.2018.10.0099.

14) Moutinho, Vânia and Cerqueira, António and Brandao, Elisio. (2012).Audit Fees and Firm Performance. Available at Ssrn: Http://Ssrn.Com/Abstract=2180020.

15) Miller, M.H, Modigliani ,F.(1961). Dividend Policy, Growth and the valuation 20 of shares: Journal of Business , 34:411-33.

16) Ngo Thanh , Hamid Sakaki.(2017). Institutional Ownership Stability and Dividend Payout Policy. Managerial Finance 43(03) . DOI: 10.1108/MF-09-2016-0272

17) Warner, J.B., R.L. Watts, and K.H. Wruck, 1988, Stock price and top managenent changes, Journal of Financial Economics 20,461-492.