Asian Economic and Financial Review

journal homepage: http://aessweb.com/journal-detail.php?id=5002

DIVIDEND POLICY AND INFORMATION ASYMMETRY FROM THE SIGNALING PERSPECTIVE

Reza Zare

Accounting Department, Marvdasht Branch, Islamic Azad University Marvdasht, Iran

Javad Moradi

Shiraz University,Shiraz, Iran

Hashem Valipour

Accounting Department, Marvdasht Branch, Islamic Azad University Marvdasht, Iran

ABSTRACT

This study attempts to examine the relevance of dividend policy and information asymmetry From the Signaling Perspective and Compare the relative information content of them. Based on sampling, 88 firms from Tehran Stock Exchange (TSE) were selected and examined during 2003 to 2010. The findings show that the profit division policy(Divisible profit proportion) has positive and significant relation with market data asymmetry namely when the profit division policy increases the data asymmetry increases, too. On the other side, the test findings indicate the investors are sensitive to the EPS changes and when the EPS changes are positive their divisible profit increases, but when the divisible profit of the company decreases the data boggles their mind and data asymmetry increases.

Keywords: Dividend policy, Information asymmetry, Signaling theory, Profitability

INTRODUCTION

Stock exchanges as a formed market provides the facilities necessary for the shares buyers and sellers in a manner that they may convert their money to stock exchange and vice versa. Considering stock exchange is an organization to equip the deposits and direct them to active investment and useful to the community and state economics it is very important to study it.

The profit gained by successful companies may be invested in operational assets, in gaining stock exchange, to repay the debts or distributed between the shareholders. Dividend policy is one of the

subject interesting in financial literature in recent years and until now different studies have been done concerning to justify the reasons and the way distributing the profit between the shareholders and their attention to dividend profit and the subject is proposed as the 'Dividend Profit Enigma' in financial literature (Amidu and Abor, 2006).

Cash shares profit has a special position for the company owners because of objectivity and tangibility and the company investors have a special interest in the subject in order to know the capacity creating liquidity and distributing it between the shareholders because the data not only present a clear figure of actual company situation, but also create the possibility to assess next situation. Also the subject is important to the companies managers because it provides important data about the company direction process and market assessment of their operation. Hence, the companies managers pay attention to it as 'Dividend Policy', but it is more important to find why the companies have a selected the 'Dividend Policy' than the 'Policy' itself; this may solve the problems concerning to take important economical decisions for different beneficent groups specially the investors because the defining reasons and factors from finding the root not only help to justify the companies behaviour, but also provides some device to foresee the next movement and direction in the field. The 'Dividend Policy' subject may be discussable in viewpoint of information asymmetry and signaling theory; in this regard information asymmetry is due to a potential contradiction between managers' and shareholders' profits; hence, when the managers who are owner sell some of their shares to the investors without any role in the management the information asymmetry increases (Rozeff, 1992).

Financial accounting and reporting may be considered as the strategies by which it is possible to solve the problems concerning representativeness and information asymmetry and convert the inter organizational data to the outer ones by contemplated ways. (Scott, 2003). But here the question is which accounting data incorporated into the financial reports to decrease the information asymmetry and receive the signs from the capital market should be considered more important? Hence, in this study the 'Dividend Policy' and information asymmetry are examined in viewpoint of the signaling theory.

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

In the study we are to test and examine the 'Dividend Policy' and information asymmetry in viewpoint of signaling theory in capital market. By virtue of some view the cash profits paid by a company is an appropriate criterion to foresee and shares market operation (Ball and Brown, 1986; Rapp, 2010). Also the company profitability is important as an important factor influencing the 'Dividend Policy' because the profitable companies have more tendency to pay more shares profit.

So it is expected that there would be a positive relation between the company profitability and shares profit payment (Change and Rhee, 1990; Aivazian *et al.*, 2003; Ho, 2003). On the other hand, information asymmetry in great companies have more investors and beneficent than the little ones and this makes the investors try more to have the data and the information advantage is not limited to someones and the inter organization people (Myers and Majluf, 1984; Scott, 2003) that is why the paid shares profit relationship is different in the great companies with the little ones. So information asymmetry may influence the relation (Rapp, 2010; Jong *et al.*, 2011). on the other hand, by virtue of actual literature it is supposed that the managers consider the 'Dividend Policy' as a device to signal to the market and transfer the data to the investors; for instance, Miller and Modigliani (1961) state that the joint stock companies follow dividend fixation and believe that any change in the 'Dividend Policy' is assessed exactly as a signal from next company profitability by the investors and if the income changes in any amount, it leads to a change in the 'Dividend Policy'.

Also McMenamin believe that practically a change in the 'Dividend Policy' influences the company shares price; any increase in the dividend shares profit increases the shares price and any decrease in the dividend shares profit decreases the shares price; in other words, a change in shares profit payment is considered as a signal for next profit view of the company by the shareholders and investors. Generally an increase in the shares profit payment is considered a positive signal and indicates that the positive data about next profit of the company increases the shares price. Also a decrease in the shares profit payment is considered as a negative signal for next company profit view and decreases the shares price. Previous studies concerning dividend policy, information asymmetry and signaling theory are as follows:

First of all by virtue of two experimental and measuring attitudes Lintner (1956) began to analyze the 'Dividend Policy'. His study led to present 15 variables influencing the 'Dividend Policy' including the company size, capital cost, tendency to support financially from out, share profit, profit and ownership fixation. The findings of the Lintner's study showed that the companies consider the profit payment amount as their goal and modify their 'Dividend Policy' on the basis of the amount. Besides, he found that the companies follow a fixed and defined 'Dividend Policy' and the managers believe that the investors prefer the companies with a fixed 'Dividend Policy' to ones without it. On this basis he concluded that even if the companies sustain a considerable decrease in their net profit, they do not like to decrease the dividend profit and they usually pay the same dividend profit as the previous year. Also he states that any change in the dividend profit amounts is done only on the basis of an essential change in the company operations and the company increases the dividend profit only if the managers believe that a permanent increase is created in the income.

(Aharony and Swary, 1980) show that the companies increase their cash shares profit when they expect an increase in next profits. So any increase in the casg shares profit is a message indicating an improvement in the company operation.

Zeckhauser and Pound (1990) state that the shares' and shareholders' profit is considered as a signal. The presence of great shareholders may decrease the shares profit use as a signal for a good operation of the company because the shareholders themselves are a valid signal. Miller and Modigliani(1961) state that any change in the 'Dividend Policy' is assessed as a signal for next company profitability by the investors because the companies follow a fixed 'Dividend Policy'. The best signaling model (Information asymmetry models) have been presented by Bhattacharyya (2008), Miller and Rock (1985), John and Williams (1985) and Ambarish *et al*. (1987). Experimental studies show that there are positive reaction to dividend profit increase and a negative one to dividend profit decrease. Also it should be noted that the market reaction to the dividend profit decrease is more than its increase. The relation between dividend policy and representativeness cost is a discussable subject in the companies financial literature and it is examined that how the 'Dividend Policy' may be used to decrease the representativeness costs.

Borokhovich *et al*. (2005) examined the relation between the independence of the board of directors and shares profit payment as a sample including 192 American companies in 1992-1999. Their findings were similar to the ones reported in the Bathala's and Rao's study.

Amidu and Abor (2006) examined and defined the proportion of shares profit payment based on the financial data from the companies accepted in African stock exchange during six years. In the study the organizational ownership was considered as a representative for representativeness cost and sale growth and market value to book value was considered as the representative of the investment occasions. The study findings indicate a positive relation between the shares profit payment and risk proportion, liquidity and tax flow and also a negative relation between shares profit payment and risk, organizational ownership, market growth and value proportion to the book value and showed that there is no significant relation between the risk and organizational ownership.

Basiddig and Hussainey (2010) in their study, "The Relation Between Information Asymmetry and Dividend Policy In Great Britain" used the multiple regression model. They found that there is a negative significant relation between the shares profit policy in GB and information asymmetry. The findings show that it may consider the information asymmetry as an important and essential factor to define the shares profit payment policy for GB companies. By virtue of a recent study by Walker and Hussainey (2009) some evidences were presented about the level of the information of

the companies and deciding about shares profit payment policy; the findings are by virtue of the signaling theory. Of course, the relation between these variables are not clear yet. Some researchers such as Al-Najjar and Hussainey (2010) found that there is a negative and significant relation between these two variables in viewpoint of statistics. In fact, the shares profit payment policy has a negative relation with different levels of company asymmetry information.

Al-Najjar and Hussaianey (2009) has examined the experimental relations between the shares profit payment and enjoyment, too. Their findings that the companies with more enjoyment probably pays more shares profit than the unprofitable companies. His findings show that there is a positive relation between these two variables.

Hae-young *et al.* (2011) examine the relation between the ownership concentration and information asymmetry between the well-informed and unaware managers and examine different mechanisms influencing the relations. Having examined a big sample of the Korean companies with an ownership intensely concentrative it was found that when the ownership concentration increases the information asymmetry increases, too. Also they found that the ownership concentration has a positive relation with the information asymmetry through increasing relative deliberate commerce system.

Valipour *et al.* (2009) examined the information asymmetry and dividend policy in Tehran stock exchange. Their findings show that there is an inverse and significant relation between he information asymmetry and dividend policy. Other findings show that there is a significant relation between the dividend Policy and shares output, but there is no significant relation between the dividend Policy and company size and there is not the proportion of book value to market value about the shareholders' rights proportion.

Twaijry (2007) studied the data from 300 companies in 2001-2005 selected from the companies accepted randomly in Kuala Lumpur order to know the variables expected to influence dividend policy and the shares profit payment proportion in an efficient market. The study findings showed that the shares profit has not an important influence on the next companies profit growth, but it has a negative and significant relation with the financial lever of the companies. Also he found that the profit of each share and book value of the shares have a positive and significant relation with the proportion of the shares profit payment.

Abdel salam *et al.* (2008) examined the dividend policy in 50 Egyptian companies in 2003–2005.They showed that there is a positive and significant relation between organizational ownership and company efficiency.

Bhattacharya (1979) and Williams (1985) believe that in the signaling theory in comparison with other ones(Investors) the managers have more information about the company value. Hence, the investors reviews exactly the actual changes in the shares dividend policy. Some researchers such as Deshmukh (2003) believe that notwithstanding higher information than the company asymmetry information the level of shares profit payment is higher than the income rate and vice versa. By virtue of the shares profit policy as a symbol for next company operation there is a positive symbol in the relations between the shares profit policy and information asymmetry which is foreseeable. Thus, it is possible to foresee a positive relation between the shares profit policy and the enjoyment.

Lee (2010) find empirical evidence of managers of Australian companies catering to the retail investors' preference for dividends when setting dividend policy, even when they are minority shareholders, so long as the proportion of these retail shareholders relative to the total shareholder base is high. your results are robust when controlled for the factors of size, profitability, financial leverage, signalling, agency costs and franking credits.

Wang *et al.* (2011) results are consistent with the dividend policies of developing economies in general. they also find that dividend payouts among dividend-paying firms, and the likelihood that a firm will pay a dividend, are increasing in State ownership. their findings are consistent with the State's need for cash flow as a partial motivation for continued State ownership of a significant portion of the corporate economy, and support the agency and tax clientele explanations for dividend policy.

Baba (2009) shows that a higher level of foreign ownership is associated with a significantly higher probability of dividend payouts. A choice-tochange model, estimated with a random-effects generalized ordered probit method, shows that a higher level of foreign ownership is associated with a significantly higher (lower) probability of an increase (no change) in dividends, while a larger 1-year increase is associated with a significantly higher (lower) probability of an increase (decrease). Chan *et al.* (2004) explain that in many of the behavioral finance theories return predictability stems from investors' over- or under-reaction to patterns, i.e., trends and consistency in recent financial information. Trends and consistency in financial performance are identified using time-series observations of quarterly and annual operating performance data. They distinguish financial performance from the firm's share-price performance, which is measured using stock returns.

Arosa *et al.* (2010) shows that for family firms, the relationship between ownership concentration and firm performance differs depending on which generation of the family manages the firms.

Venus and Quaddus (2011) show that sales growth is positively related to the use of electronic commerce and firm size. To understand how firm size affects firm performance, they use a structural equation model (SEM) to examine their structural relationships. They findings indicate that firm size positively influences sales growth. On the other hand, sales growth affects the profitability of a firm.

Eliyasiani and Jia (2010) find that there is a positive relationship between firm performance and institutional ownership stability, accounting for the shareholding proportion. This relationship is robust to the employment of ownership turnover measures used in the literature and consistent with the view that stable institutional investors play an effective role in monitoring. When they disaggregate institutional investors into pressure-insensitive and pressure-sensitive categories, they find that stable shareholding of each group has a positive impact on performance, with the first group exerting a larger effect. The channels of the effect include, but are not limited to, decreased information asymmetry and increased incentive-based compensation.

Wang (2010) show that the investment expenditures by Taiwan's firms positively affect financial performance and the increased borrowings jeopardize company's profits. However, the financing decisions of China's firms have a positively effect on their capital expenditures. The findings suggest that firms across the Strait adopt different strategies in financial decision environments.

Another strand of literature suggests that corporate risk management alleviates information asymmetry problems and hence positively affects firm value. Information asymmetry between managers and outside investors is one of the key market imperfections that make hedging potentially beneficial (Dionne and Ouederni, 2011).

Some proponents of this theory argue that stock price changes with dividend announcements occur because investors consider these announcements as signals of management's earnings forecasts. Thus, investors are less concerned with the actual dividend and are more concerned with the information content of the dividend announcements. This theory is known as the information content or signaling hypothesis (Besley and Brigham, 2008).

Signaling models contributed to the corporate finance literature by formalizing ''the informational content of dividends" hypothesis. However, these models are under criticism as the empirical literature found weak evidences supporting a central prediction: the positive relationship between changes in dividends and changes in earnings. they claim that the failure to verify this prediction does not invalidate the signaling approach. The models developed up to now assume or derive utility functions with the single-crossing property. they show that, in the absence of this property,

signaling is possible, and changes in dividends and changes in earnings can be positively or negatively related. Signaling models were the main tool that formalized the original intuition (Araujo *et al*., 2011).

Hypotheses Development and the Models

The signaling theory states that the shareholders and investors know that the managers have more information about next company views (information asymmetry) and use the dividend policy and the policy supporting financially by which to signal the shareholders and investors with little information (McMenamin, 1999).

In the study some evidences are presented in relation to the dividend policy and the strategies and models to use optimally the accounting data in order to assess dividend policies and information asymmetry in viewpoint of signaling theory while the previous findings showed that the dividend policies influence the information asymmetry during the case examination. By virtue of the dividend policy we may receive the management signals and decrease the information asymmetry. In other words, by virtue of dividend policy we may foresee the next operation of above companies and the shares of the investing companies were more interested in recent years; hence, H1(Hypothesis one) is proposed as follows:

H1: The signs concerning profitability and dividend sent to the market by the company influence the information asymmetry in the market.

We try to show the difference between different companies by hypothesis two so H2 of the study is as follows:

H2: There is a significant difference between the operations of the companies with different qualities in viewpoint of the information asymmetry.

The statistical society of the research was chosen among the manufacturing firms accepted in Tehran Stock Exchange during 2003 to 2010. The samples were chosen according to the following criterion:

1-The fiscal year end of the firms was 29th of Esfand and there is no change in the fiscal year.

2- They are not among financial investment and broker firms.

3-The data necessary to compute study operational parameters should be available.

4- It should be accepted in stock exchange at least since 2005 and be active in the stock exchange to the end of the study time.

Considering the abovementioned limitations, 88 firms were selected and examined. Having defined the statistical sample the study parameters data are examined, collected and computed for the companies selected for each year by virtue of mentioned limits as follows:

We use three following models to test our hypotheses:

Spread1=((AP-BP)/2)/(AP+BP)*100

Spread2=PEPS-EPS/EPS

Spread= $\alpha + \beta 1$ Sig1DR + $\beta 2$ Sig2DR + $\beta 3$ Sig3DR + $\beta 4$ FS + $\beta 5$ FL + $\beta 6$ GA + $\beta 7$ GO + $\beta 8$ FA + $\beta 9$ ROA

Spread1 (The difference between purchase and sale price) is used to estimate the asymmetry in the market. The model was designed by Venkatesh and Chiang (1986) to define the price range for the shares purchase and sale.

'AP' is the mean price to sell the 'i' company shares during 't' time.

'BP' is the mean price to buy the 'i' company shares during 't' time.

Spread2 is used to estimate the asymmetry between management and owners. The model was designed by Autore and Kovacs (2006).

'PEPS' is the 'i' company profit foreseen during 't' time.

'EPS' is the profit of each share of the 'i' company during 't' time.

The Sigs of the third model are categorized and defined as follows:

The 'EPS' and 'DPS' changes concerning the companies are estimated yearly.

The statistical sample is divided into four groups on the basis of the 'EPS' and 'DPS' changes.

The 'EPS' and 'DPS' changes are positive and negative, respectively (Code 1).

The 'EPS' and 'DPS' changes are positive (Code 2).

The 'EPS' and 'DPS' changes are negative (Code 3).

The 'EPS' and 'DPS' changes are negative and positive, respectively (Code 4).

Then by virtue of above categorization and the codes related to the each companies they are divided into three groups to be used in the regression model:

1– We consider Code 1 as Sig1. If the EPS changes are positive and the DPS ones are negative, it is one, otherwise, is zero.

2- We consider Code 4 as Sig2. If the EPS changes are negative and the DPS ones are positive, it is one, otherwise, is zero.

3– We consider Codes 2 and 3 as Sig3. If the EPS and DPS changes are in the same direction, it is one, otherwise, is zero.

Then by Wald Test the significance of the difference of the artificial variables coefficients is estimated and compare the relation between dividend policy and information asymmetry in viewpoint of signaling theory.

Finally we examine and compare the information asymmetry between the groups (Four groups) in

order to test the H2. The ANOVA Test will be used in this step.
The definitions of controlling variables are presented in table 1.

Data Analysis

Descriptive statistics of the variables are presented in table 2:
The $Spread_1$ and $Spread_2$ variables are to evaluation asymmetry in market and the data asymmetry between company investors and management, respectively. $Spread_1$ and $Spread_2$ were used to test the hypothesis; the general model to test the hypothesis is as follows:

$$Spread = \alpha + \beta 1\ Sig_1DR + \beta 2\ Sig_2DR + \beta 3\ Sig_3DR + \beta 4\ FS + \beta 5\ FL + \beta 6\ GA + \beta 7\ GO + \beta 8\ FA + \beta 9\ ROA$$

Tables and analyses related to $Spread_1$ are presented in tables 3 and 4:

By virtue of tables 3 and 4 we see the artificial and control variables coefficients of our model except financial level variable, growth occasions and assets output are significant. Also the regression model is significant and its definition coefficient is about 27 percent. Thus, final equation related to $Spread_1$ variable as market data asymmetry index is as follows:

$$Spread_1 = -13.1720 + 5.2155\ Sig_1DR + 3.9476\ Sig_2DR + 4.3890\ Sig_3DR + 1.5940\ FS + 2.2582\ GA + 4.3971\ FA$$

General finding indicate that the profit division policy(Divisible profit proportion) has positive and significant relation with market data asymmetry namely when the profit division policy increases the data asymmetry increases, too. Summarily the findings related to Wald-Test are shown in table 5 to compare the artificial variables coefficients:

Wald test in table 5 shows that the difference between the Sig1 and Sig2 variables coefficients is significant but not between the Sig1 and Sig3, and the Sig2 and Sig3; it shows that when data asymmetry increase in market we should send positive EPS and negative DPS to the market. Also by virtue of lack of relation between the variables of the groups 2 and 3 we find that negative EPS or positive DPS may not influence solely the data asymmetry between the investors; in other words, general finding indicates that the market investors do not pay attention to the signals from divisible profit policy and either same or opposite directions of EPS and DPS are not very effective. Considering the DR variable coefficient is positive when profitability is higher the data asymmetry is higher, too. On the other side, the test findings indicate the investors are sensitive to the EPS changes and when the EPS changes are positive their divisible profit increases, but when the divisible profit of the company decreases the data boggles their mind and data asymmetry increases. Now we examine the second part so the second model is presented as follows:

$Spread_2 = \alpha + \beta 1\ Sig_1DR + \beta 2\ Sig_2DR + \beta 3\ Sig_3DR + \beta 4\ FS + \beta 5\ FL + \beta 6\ GA + \beta 7\ GO + \beta 8\ FA + \beta 9\ ROA$

Tables and analyses related to $Spread_2$ are presented in tables 6 and 7:

By virtue of tables 6 and 7 we see the artificial and control variables coefficients of growth mean and its occasions are significant. Also the regression model is significant and its definition coefficient is about 32 percent. Thus, final equation related to the $Spread_2$ variable is as follows as the index assessing the data asymmetry between the company investors and management:

$Spread_2 = -2.9973 + 13.2147\ Sig_1DR + 9.5969\ Sig_2DR + 4.9832\ Sig_3DR + 2.2582\ GA + .028\ GO$

The Wald test is shown in table 8 to compare related artificial variables coefficients:

Wald test in table 8 shows that the difference between the Sig1 and Sig2 variables coefficients is significant but not between the Sig1 and Sig3, and the Sig2 and Sig3 variables have not become significant; it shows that when data asymmetry increases in market we should send positive EPS and negative DPS signals to the market. Also by virtue of lack of relation between the variables of the groups 2 and 3 we find that positive EPS or negative DPS solely may not influence the data asymmetry between the investors; in other words, general finding indicates that the market investors do not pay attention to the signals from divisible profit policy signal and either same or opposite directions of negative EPS and positive DPS are not very effective. Considering the DR variable coefficient is positive when profitability is higher the data asymmetry is higher, too. On the other hand, the test findings indicate the investors are sensitive to the EPS changes and when the EPS changes are positive their divisible profit increases, but when the divisible profit of the company decreases they are at a loss to understand and data asymmetry increases.

By our second hypothesis we try to show the data asymmetry difference between different groups by ANOVA table (table 9) and use both Spread indexes. The ANOVA table (table 9) significance shows that at least one of the groups differs from others and also Levin test in table 10 shows the groups variance is the same and we should benefit from LSD method to show the difference because the groups variance is the same. The groups difference is shown in table 11, figures 1 and 2: Based on $Spread_1$ comparison in the groups proposed in figure 1 we find that the group 2 data asymmetry is significantly more than other ones so when the EPS and DPS changes are positive the data asymmetry is more than in other conditions in other groups and generally it can be said that the profitability and profit division in companies influence the data asymmetry between the investors; in other words, when the ratio of each share profit to the divisible profit is higher the data asymmetry is higher, too.

By virtue of comparing $Spread_2$ in the groups proposed by figure 2 we find that the data asymmetry is significantly higher in the groups 3 and 4 than the 1 and 2.

Thus, when the EPS changes are negative (Regardless negative or positive DPS) it is possible to state that according to the profitability foreseen by the management and negative profitability of the company may send negative signs for the market and influence the data asymmetry between management and investors so it may conclude that when the EPS changes are negative the data asymmetry in and out of the company increases by changing profit division policy.

CONCLUSION

The findings show that the profit division policy(Divisible profit proportion) has positive and significant relation with market data asymmetry namely when the profit division policy increases the data asymmetry increases, too. Also the data indicate that the market investors do not pay attention to the quality signaling divisible profit policy and the either same or opposite directions of EPS and DPS are not very effective. Considering the DR variable coefficient is positive when profitability is higher the data asymmetry is higher, too. On the other side, the test findings indicate the investors are sensitive to the EPS changes and when the EPS changes are positive their divisible profit increases, but when the divisible profit of the company decreases the data boggles their mind and data asymmetry increases. By virtue of the findings it may conclude when EPS and DPS changes are not in the same direction the internal and external data asymmetry of the company increases by changing profit division policy. Having compared $Spread_1$ in the proposed groups when the EPS and DPS changes are positive the data asymmetry is more than other groups and generally it can be said that the profitability and profit division in the companies influence the data asymmetry between the investors; in other words, the ratio of each share profit to the divisible profit is higher the data asymmetry is higher, too.

By virtue of comparing $Spread_2$ in the groups proposed by above figure we find that the data asymmetry is significantly higher in the groups 3 and 4 than the 1 and 2. Thus, when the EPS changes are negative (Regardless negative or positive DPS) it is possible to state that according to the profitability foreseen by the management and negative profitability of the company may send negative signs for the market and influence the data asymmetry between management and investors so it may conclude that when the EPS changes are negative the data asymmetry in and out of the company increases by changing profit division policy.

REFERENCES

Abdel salam, O., A. Masry and S. Elsegini, 2008. Board composition, ownership structure and dividend policies in an emerging market. Managerial Finance, 34(12): 953-964.

Aharony, J. and I. Swary, 1980. Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis. Journal of Finance.

Aivazian, V., l. Booth and S. Cleary, 2003. Do emerging market firms follow different dividend policies from us firms? Journal of Financial Research, 26(3): 87-371.

Al-Najjar, B. and A. Hussaianey, 2009. The association between dividend payout and outside directorship. Journal of Applied Accounting Research, 10(1): 4-19.

Al-Najjar, B. and K. Hussainey, 2010. The joint determinants of capital structure and dividend policy. Working paper, Middlesex University, UK.

Ambarish, R., K. John and J. Williams, 1987. Efficient signaling with dividends and investments. Jounal of Finance, 32: 321-343.

Amidu, M. and J. Abor, 2006. Determinants of dividend payout rations in china. The journal of risk finance, 7(22): 136-145.

Araujo, A., H. Moreira and M. Tsuchida, 2011. Do dividend changes signal future earnings? Journal Finance Intermediation(20): 117-134.

Arosa, B., T. Iturrald and A. Maseda, 2010. Ownership structure and firm performance in non-listed firms: Evidence spain. Journal of Family Business Strategy 1: 88- 96.

Autore, D., and T. Kovacs, 2006. The pecking order theory and tim-varying adverse selection costs, Working paper, Virginia Tech University.

Baba, N., 2009. Increased presence of foreign investors and dividend policy of japanese firms. Pacific-Basin Finance Journal 17: 163-174.

Ball, R. and P. Brown, 1986. An empirical evaluation of accounting income numbers. Journal of Accounting Research, 6(2): 159–178.

Basiddig, H. and K. Hussainey, 2010. Is asymmetric information associated with uk dividend policy? Journal of Applied Accounting Research: 2-31.

Besley, S. and E.F. Brigham, 2008. Essentals of managerial finance. Orlando: The Dryden Press.

Bhattacharya, S., 1979. Imperfect information, dividend policy and the bird in the hand fallacy. Bell Journal of Economic, 10:259-270.

Bhattacharyya, N., 2008. Dividend policy: A review. Managerial Finance, 33(1): 4.

Borokhovich, K., K. Brunarski, Y. Harman and J. Kehr, 2005. Dividends, corporate monitors and agency costs. The Financial Review, 40: 37-65.

Chan, W.S., R. Frankel and S.P. Kothari, 2004. Testing behavioral finance theories using trends and consistency in financial performance. Journal of Accounting and Economics(38): 3-50.

Change, R.P. and S.G. Rhee, 1990. The impact of personal taxes on corporate dividend policy and capital structure decisions. Financial Management, 19(2): 21-31.

Deshmukh, S., 2003. Dividend initiations and asymmetric information: A hazard model. The Financial Review, 38: 351–368.

Dionne, G. and K. Ouederni, 2011. Corporate risk managment and dividend signaling theory. Finance Research Letters.

Eliyasiani, E. and J. Jia, 2010. Distribution of institutional ownership and corporate firm performance. Journal of Banking & Finance 34: 606-620.

Hae-young, B., H. Lee-Seok and L. Woo-Jong, 2011. How does ownership concentration exacerbate information asymmetry among equity investors? Pacific-Basin Finance Journal 19: 511-534.

Ho, H., 2003. Dividend policies in australia and japan. International Advances in Economic Research, 9(2): 91-100.

John, K. and J. Williams, 1985. Dividends, dilution, and taxes:A signaling equilibrium. Journal of Finance, 40: 1053-1070.

Jong, H.C., B.K. Jeong and J.J. Lee, 2011. Value relevance of discretionary accruals in the asian financial crisis of 1997-1998. Available from http://www.ssrn.com.

Lee, K., 2010. Retail minority shareholders and corporate reputation as determinant of dividend policy in australia. Pacific-Basin Finance Journal 18: 351-368.

Lintner, J., 1956. Distribution of corporations among dividends, retained earning, and taxes. American Economic Review 46: 97-113.

McMenamin, J., 1999. Financial Management.

Miller, M. and K. Rock, 1985. Dividend policy under asymmetric information. Journal of Finance, 40: 1031-1051.

Myers, S.C. and N.S. Majluf, 1984. Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13: 187-221.

Rapp, M.S., 2010. Information asymmetries and the value – relevance of cash flow and accounting figures empirical analysis and implications for managerial accounting. Available from http://ssrn.com/abstract=1555652.

Rozeff, M., 1992. How companies set their dividend-payout ratios. Oxford: Blackwell Publishers.

Scott, W., R., 2003. Financial accounting theory. 3 rd Edn.: Prentice Hall Pup.

Twaijry, A., 2007. Dividend policy and payout ratio: Evidence from the kualumpur stock exchange. Journal of Risk Finance, 8(4): 349-363.

Valipour, H., V. Rostami and M. Salehi, 2009. Asymmetric information and dividend policy in emerging markets: Empirical evidenses from iran. International Journal of Economics and Finance, 1(1): 203-212.

Venkatesh, P.C. and R. Chiang, 1986. Information asymmetry and the dealer's bid-ask spread: A case study of earnings and dividend announcements. The Journal of Finance 41(5): 1089-1102.

Venus, L., Y.H. and M.A. Quaddus, 2011. Firm size and performance: A study on the use of electronic commerce by container transport operators in hong-kong. Expert System With Applications 38: 7227-7234.

Walker, M. and K. Hussainey, 2009. The effects of voluntary disclosure and dividend propensity on prices leading earnings. Accounting and Business Research, 39(1): 37-55.

Wang, D.H.-M., 2010. Corporate investment, financing and dividend policies in the high-tech industry. Journal of Business Research 63: 486-489.

Wang, X., D. Manry and S. Wandler, 2011. The impact of government ownership on dividend policy in china. Advances in Accounting, in Corporating Advances in International Accounting 27: 336-372.

Williams, P., 1985. The relation between a prior earnings forecast by management and analyst response to a current management forecast. The Accounting Review 71: 103–113.

Zeckhauser, R.J. and J. Pound, 1990. Are large shareholders effective monitors? An investigation of share ownership and corporate performance. Chicago: University of Chicago Press.

BIBLIOGRAPHY

Aharony, J. and I. Swary, 1980. Quarterly dividend and earnings announcements and stockholders' returns: An empirical analysis. Journal of Finance.

Aggarwal, R. and N.N.A. Kyaw, 2010. Capital structure dividend policy, and multinationality: Theory versus emperical evidence. International Review of Financial Analysis 19: 140-150.

Bathala, C.T. and R.P. Rao, 1995. The determinants of board composition: An agency theory perspective. Managerial and Decision Economics, 16: 59-69.

Cui, H. and Y.T. Mak, 2002. The relationship between managerial ownership and firms performance in high r&d firms. Journal of Corporate Finance 8: 313-336.

Heaney, R., T. Naughton, T. Truong, S. Davidson, T. Fry and M. Mckenzie, 2007. The link between performance and changes in the size and stability of a firm's officers and directors. Journal of Multinational Financial Management 17: 16-29.

Miller, M. and F. Modigliani, 1961. Dividend policy, growth, and the valuation of shares. Journal of business, 34: 441-433.

Manos, R., V. Murinde and C.J. Green, 2012. Dividend policy and business groups: Evidence from indian firms. International Review of Economics and Finance 21: 42-56.

Wei, G. and J.Z. Xiao, 2009. Equity ownership segregation, shareholders preferences, and dividend policy in china. The British Accounting Review 41: 169-183.

Table-1. The controlling variables of the study and the calculation method

Type of the variable	Variable	Definition
Controlling var.	Financial Leverage(FL)	Financial Leverage was computed on the basis of the total debts in proportion to total assets (Heaney et al 2007)
Controlling var.	Firm size (FS)	Firm size was computed on the basis of yearly sale logarithm(Arosa et al 2010).
Controlling var.	Growth Average(GA)	Growth Average was computed on the basis of the assets growth average and sale growth average divided by two
Controlling var.	Growth Opportunities(GO)	Growth Opportunities are computed on the basis of the market value of each share in proportion to the book value (Aggarwal and Kyaw 2010)
Controlling var.	Fixed Assets Ratio(FA)	Fixed Assets Ratio was computed on the basis of book value of the fixed assets in proportion to total assets(PP&E/ total assets) (Cui and Mak 2002)
Controlling var.	ROA	Profit in proportion to total assets. In the study we used ROA because the most of the companies with high profitability pay more cash profit (Wei and Xiao 2009)
Controlling var.	Dividend Ratio(DR)	Dividend Ratio is computed on the basis of the cash profit of each share in proportion to the profit of each share (Manos et al 2012)

Table-2. Descriptive statistics of the research variables

Variable	Mean	Std	Min.	Max.	No.
$Spread_1$	-0.0938	5.6911	-24.12	17.53	616
$Speard_2$	0.5971	12.3594	-4.85	304.00	616
Financial Leverage	0.6649	0.15431	0.16	0.98	616
Firm Size	5.5315	0.58972	3.98	7.92	616
Growth Opportunities	2.9633	4.91223	-6.76	42.05	616
Fixed Assets Ratio	0.2469	0.16554	.00	0.94	616
ROA	0.1593	0.17448	-.70	2.71	616
Dividend Ratio	0.6261	0.28677	-.56	3.85	616
Growth Average	0.17	0.20920	-58	0.99	616
Beta	0.2549	1.20651	-7.52	6.90	616

Table-3.

Model	Spread 1		
Variable	Cofficient	t-statistic	Prob
C	-13.1720	-7.2816	0.00
FL	0.8416	0.5850	0.5587
FS	1.5940	5.053	0.00
GO	-0.0394	-0.8813	0.3785
FA	4.3971	3.8834	0.0001
ROA	-1.0208	-0.7667	0.4435
GA	2.2582	2.5569	0.0108
Sig_1DR	5.2155	4.7732	0.00
Sig_2DR	3.9476	5.2952	0.00
Sig_3DR	4.3890	8.5639	0.00

Table-4.

Spread 1		
F-statistic	R-squared	Durbin-Watson
0.00	0.2731	1.9726

Table-5. Wald Test

Model coefficient	Prob				
	F-statistic	Chi-Square	Std. Err	Value	Conclusion
first and second artificial variable coefficients	0.0261	.0260	1.1261	2.2678	the difference is significant
first and third artificial variable coefficients	0.4019	0.4015	0.9852	0.7037	the difference is not significant
second and third artificial variable coefficients	0.5230	0.5227	0.6907	0.4084	the difference is not significant

Table-6.

Model	Spread 2		
Variable	Cofficient	t-statistic	Prob
C	-2.9973	-4.0351	0.0001
FL	0.3696	0.6256	0.5318
FS	0.1866	1.4405	0.1502
GO	-0.0405	-2.2020	0.0280
FA	0.7258	1.5612	0.1190
ROA	-0.2943	-0.5384	0.5905
GA	1.0494	2.8937	0.0039
Sig_1DR	27810	13.2147	0.00
Sig_2DR	2.9379	9.5969	0.00
Sig_3DR	2.2358	4.9832	0.00

Table-7.

Spread 1		
F-statistic	R-squared	Durbin-Watson
0.00	0.3268	1.9673

Table-8. Wald Test

Model coefficient	Prob				
	F-statistic	Chi-Square	Std. Err	Value	Conclusion
first and second artificial variable coefficients	0.0295	0.290	.46240	2.9047	the difference is significant
first and third artificial variable coefficients	0.1783	0.1778	.40450	1.8156	the difference is not significant
second and third artificial variable coefficients	0.5805	0.5803	.28360	.30580	the difference is not significant

Table-9. ANOVA

	Mean Square	F	Sig
Spread 1	153.627	4.193	0.006
Spread 2	10.864	4.266	0.005

Table-10. Test of Homogeneity of Variances

	Levene Statistic	Df1	Df2	Sig
Spread 1	2.001	3	612	0.113
Spread 2	2.530	3	612	0.109

Table-11. Multiple comparisons LSD

Spread 1			Spread 2		
(I)Dummy	(J)Dummy	Mean Difference	(I)Dummy	(J)Dummy	Mean Difference
Group 1	Group 2	-1.5609*	Group 1	Group 2	0.1311
	Group 3	0.1675		Group 3	-0.3796
	Group 4	0.6200		Group 4	-0.3300
Group 2	Group 1	1.5609*	Group 2	Group 1	-0.1311
	Group 3	1.7285*		Group 3	-0.5107*
	Group 4	2.1809*		Group 4	-0.4611*
Group 3	Group 1	-0.1675	Group 3	Group 1	0.3796
	Group 2	-1.7285*		Group 2	0.5107*
	Group 4	0.4525		Group 4	0.0496
Group 4	Group 1	-0.6200	Group 4	Group 1	0.3300
	Group 2	-2.1809*		Group 2	0.4611*
	Group 3	-0.4525		Group 3	-0.0496

***.**The mean difference is significant at the.05 level

Figure-1.

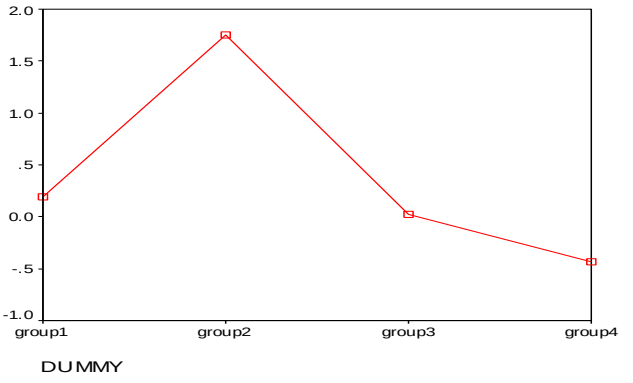

Figure-2.