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DIVIDEND POLICY AND INFORMATION ASYMMETRY FROM THE SIGNALING PERSPECTIVE

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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 2006 to 2013. 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
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 company's 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; 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 behavior, but also provides some device to foresee the next movement and direction in the field (Aggarwal and Kyaw, 2010).

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 (Walker and Hussainey, 2009).

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 interorganizational data to the outer ones by contemplated ways (Aharony and Swary, 1980).

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.

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 (Venkatesh and Chiang, 1986). 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 (Arosa *et al.,* 2010). 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

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to someone's and the inter organization people (Rozeff, 1992). 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 (Miller and Modigliani, 1961). 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 (Rapp, 2010). 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 (Myers and Majluf, 1984) 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.

Aharony and Sawary (Al-Najjar and Hussainey, 2010) show that the companies increase their cash shares profit when they expect an increase in net profits. So any increase in the cash 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.

By virtue of a recent study by Basiddig and Hussainey (Heaney *et al.,* 2006), 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 is not clear yet.

Some researchers such as Al-Najjar and Hussainey (Autore and Kovacs, 2006) 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.

Valipour et al. (Walker and Hussainey, 2009) examined the information asymmetry and dividend policy in Tehran stock exchange. Their findings show that there is an inverse and significant relation between the 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.

MATERIALS AND METHODS
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 (Myers and Majluf, 1984).

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.

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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.

We use three following models to test our hypotheses:

Spread1= ((AP-BP)/2)/(AP+BP)*100 (1)

Spread2=PEPS-EPS/EPS (2)

Spread= α + β1 Sig1DR + β2 Sig2DR + β3 Sig3DR + β4 FS + β5 FL + β6 GA + β7 GO + β8 FA + β9 ROA (3)

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 (Wei and Xiao, 2009) 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 (Cui and Mak, 2002).

"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.

1. The "EPS" and "DPS" changes are positive and negative.

2. The "EPS" and "DPS" changes are positive.

3. The "EPS" and "DPS" changes are negative.

4. The "EPS" and"DPS" changes are negative and positive

• 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. Artificial variable Sig1. If the EPS changes are positive and the DPS ones are negative, it is one, otherwise, is zero.

2- Artificial variable Sig2. If the EPS changes are negative and the DPS ones are positive, it is one, otherwise, is zero.

3– Artificial variable Sig3. If the EPS and DPS changes are in the same direction, it is one, otherwise, is zero.

Control variables used in the Third National is as follows: Company size (Firm Size) is calculated based on the log of annual sales, (Basiddig and Hussainey, 2010).

Financial leverage (Financial Leverage) is calculated based on the total debt to total assets (Mc Menamin, 1999).

Average growth (Growth Average) based on the average asset growth and average sales growth is calculated by dividing 2.

Growth opportunities (Growth Opportunities) based on the share market price to book value is calculated (Aivazian *et al.,* 2003). Ratio of fixed assets (Fixed Assets Ratio) Based on the book value of fixed assets to total assets ratio is calculated. Return on assets (ROA) ratio to total assets. We investigate the ROA because more companies with high profitability paid more cash dividends. Then by Wald Test the significance of the difference of the artificial variables coefficients is estimated and compares 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.

Conclusion

The Spread1 and Spread2 variables are to evaluation asymmetry in market and the data asymmetry between company investors and management, respectively. Spread1 and Spread2 were used to test the hypothesis; the general model to test the hypothesis is as follows:

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Spread= α + β1 Sig1DR + β2 Sig2DR + β3 Sig3DR + β4 FS + β5 FL + β6 GA + β7 GO + β8 FA + β9 ROA

Tables and analyses related to Spread1 are presented as follows:

Table 1: Analyses related to Spread1

Model	Spread 1		
Variables	Coefficient	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
Sig1DR	5.2155	4.7732	0.00
Sig2DR	3.9476	5.2952	0.00
DE3Sig	4.3890	8.5639	0.00

Table 2: Analyses related to Spread1

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

By virtue of tables 1 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 Spread1 variable as market data asymmetry index is as follows:

Spread1= -13.1720 + 5.2155 Sig1DR + 3.9476 Sig2DR + 4.3890 Sig3DR +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 3 to compare the artificial variables coefficients:

Table 3: Wald-Test

Prob					Coefficients model	
Result		Value	Std.Err	Chi-Square	F-statistic	
Difference is significant		2.2678	1.1261	.,.260	.,.261	artificial coefficients: 1&2	variables
Difference is no significant		.7037	.9852	.,4015	.,4019	artificial coefficients: 1&3	variables
Difference is no significant		.4084	.6907	.,5227	.,5230	artificial coefficients: 1&2	variables

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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; 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= α + β1 Sig1DR + β2 Sig2DR + β3 Sig3DR + β4 FS + β5 FL + β6 GA + β7 GO + β8 FA + β9 ROA

Tables and analyses related to Spread2 are presented as follows:

Table 4: Analyses related to Spread2

Model	Spread 2		
Variable	Coefficient	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	0.5905	-0.5384	0.5905
GA	1.0494	2.8937	0.0039
Sig1DR	27810	13.2147	0.00
Sig2DR	2.9379	9.5969	0.00
Sig3DR	2.2358	4.9832	0.00

Table 5: Analyses related to Spread2

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

By virtue of tables 4 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 Spread2 variable is as follows as the index assessing the data asymmetry between the company investors and management:

Spread2= -2.9973 + 13.2147 Sig1DR + 9.5969 Sig2DR + 4.9832 Sig3DR + 2.2582 GA +.028 GO

The Wald test is shown in table 7-4 to compare related artificial variables coefficients

Table 6: Wald Test

Prob					Model coefficient
Conclusion	Value	Std. Err	Chi-Square	F-statistic	
the difference is significant	.30580	.28360	0.5803	0.5805	first and second artificial variable coefficients
the difference is significant	1.8156	.40450	0.1778	0.1783	first and third artificial variable coefficients
the difference is significant	2.9047	.46240	0.290	0.0295	second and third artificial variable coefficients

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Wald test in table 6 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; 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.

Table 7: Anova

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

Table 8: Test of Homogeneity of Variances

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

Table 9: Multiple comparisons LSD

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

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 7) significance shows that at least one of the groups differs from others and also Levin test in table 8 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 group's difference is shown in table 9.

Based on Spread1 comparison in the groups proposed in table 9 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 Spread2 in the groups proposed by table 9 we find that the data asymmetry is significantly higher in the groups 3 and 4 than the 1.

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

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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.

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