The Effect of Group Affiliation on Decisions to Pay Dividends in the Tehran Security Exchange

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Abstract
This study investigates the effect of group affiliation on decisions to pay dividends in the Tehran Security
Exchange. Therefore, the relationship between policy dividends and factors such as information asymmetry,
dependence on external financing (sources outside the institution) is checked.The research data is collected from
50 firms in the Tehran Security Exchange (TSE) during 2005-2013.The statistical technique is used to examine
the assumption of multiple regressions. In order to examine the hypotheses, data is collected from the annual
reports of the companies using official bulletins of the Tehran stock exchange, mainly, through Novin software,
Tadbir Pardaz software, and stock sites such as www.rdis.ir. The results indicate that between the payment of
dividends and the amount of capital and thus the dependence on external financing has a positive and significant
relationship with information asymmetry.
Keywords: Payment of dividends, Dependence on external financing, information asymmetry, The Tehran
Security Exchange

Introduction

 Dividend Policy refers to a company's policy which determines the amount of dividend payments and the
amounts of retained earnings for reinvesting in new projects. This policy is related to dividing the firm's earning
between payment to shareholders and reinvestment in new opportunities. In corporate finance, one of the most
important decisions is concerned with the answer of this question that should the profits of firm be distributed to
the shareholders as dividend or it must be reinvested in new opportunities and if it must be distributed, what
proportion of profit must be paid to shareholder and what proportion must be returned to the business?
Business groups are collections of legally independent firms, which share a
Common identity and are linked through various channels such as cross-holdings of equity or inter-locking
directorships. Arguably, the groups have evolved to mitigate informational asymmetry and market imperfections
(see Manos et al., 2007). For example, where inefficient flow of information makes it very costly for firms to
raise external capital for investment, group affiliated firms tend to pursue diversification strategies and create
internal capital markets (see Gopalan et al., 2007).It is interesting to note that information problems and market
imperfections also provide an important cross-cutting element of the main theories of dividend policy. As shown
by La Porta, et al. (2000).It may well be the case that the business group monitors member firms and facilitates
information sharing within the group, thereby reducing asymmetric information. Also, the group may be able to
create internal capital markets, to save underwriting fees, or to secure the availability of external finance through
reputation or its access to bureaucrats, thereby circumventing capital market imperfections. Therefore, it would
appear that, compared to their independent counterparts, group-affiliated firms are relatively less dependent on
formal capital markets and may be able to pay a dividend always (i.e. no dividend omissions) or to sustain high
dividends. But equally, and perhaps contrarian, when the business group creates a virtual internal capital market,
member firms do not need to use dividend policy to signal high profitability in order to access external finance.
Hence, group-affiliated firms may decide to omit dividend payment; or if they do not, the payout ratio may be
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Literature Review

In general, the theoretical framework for explaining the dividend payment decision and the payout level decision
over the last two decades has been dominated by signaling theory, agency theory, the asymmetric information

implications of pecking order theory of capital structure, and more recently catering theory and lifecycle theory (see, among others, Denis & Osobov, 2008; Von Eije & egginson, 2008; Ferris et al., 2009). The signaling theory emphasizes the role of dividends in conveying private information to investors about the prospects of the firm Bhattacharya, 1979; Cheng et al., 2011; Dasilas & Leventis, 2010; Miller & Rock, 1985). The higher the level of information asymmetry faced by a firm, the higher is the firm's payout ratio, arguably because dividend policy can be used to reduce information asymmetry and signal profitability and quality. However, Denis and Osobov (2008) question the importance of signaling theory, in view of their finding that dividends tend to be paid by firms with high earnings, which hardly need to signal their profitability.

Agency theory is refined by Rozeff (1982) and Easterbrook (1984) to underpin the role of dividends in controlling agency relationships between shareholders and managers. It is argued that paying dividend forces the firm to raise additional funds from the capital market, thereby exposing the firm to the discipline of the market and reducing the scope for agency conflicts. Jensen (1986) extends the arguments to generate the free cash flow hypothesis, which predicts that shareholders have preference for dividends because in the absence of profitable investment opportunities managers may squander retained cash, especially if the firm faces a high level of information asymmetry. Indeed, La Porta, et al. (2000) find evidence to suggest that dividends are the result of pressure by minority shareholders on corporate insiders to disgorge cash.

Further, in the presence of information asymmetry, use of external finance sends negative signals to the market regarding the value of the firm, so if external finance is required, firms prefer debt, on which the returns are more certain, and only as a last resort is equity issued, according to the pecking order theory of the firm's capital structure by Myers and Majluf (1984). Hence, the pecking order theory of the firm's capital structure has at least two important implications for dividend policy (Deshmukh, 2005). The first is that the higher the level of information asymmetry a firm faces, the lower is its payout ratio, because the costs associated with using external finance rise with the level of information asymmetry. The second is that the higher the firm's dependency on external finance, the lower is its payout ratio, because holding constant the level of information asymmetry the firm faces, external finance is always more costly than internal finance.

A recent contribution to the dividend literature is the lifecycle theory which argues that firms adjust their dividend policy through time in response to changes in investment opportunities (De Angelo & De Angelo, 2006). In its early life, the firm tends to pay low dividends because investment opportunities are abundant while internally generated capital is low. Later in the firm's lifecycle, internally generated cash exceeds investment opportunity so higher dividends are paid to mitigate free cash flow problems. Evidence in support of the theory is found by DeAngelo et al. (2006) and Denis and Osobov (2008). However, Von Eije and Megginson (2008) find no correlation between retained earnings (to total equity) and the likelihood of paying dividends.

It is curious that information asymmetry, market imperfections and related factors, which underpin the theoretical framework for dividend policy, also explain why business groups exist. According to the market failure theory of business groups, this type of industrial organization exists because it is able to overcome market failure, by creating internal capital markets that substitute for missing external capital markets and weak institutions (Khanna & Palepu, 2000) and by reducing information asymmetry between the firm and the market, through group visibility (Dewenter et al., 2001). Also, business groups overcome market failure through Diversification across a number of industries, as highlighted in the literature on conglomerates. Although evidence suggests that the conglomerate creates an internal capital market through internal cross-subsidization, increases the access of its divisions to capital, reduces earnings volatility and supports higher levels of debt for member firms, it has been found also that conglomerate type diversification destroys rather than creates value (see Chen et al., 2010) and, in general, conglomerates tend to trade at a discount relative to similar independent firms (for example, Denis et al., 2002). Further, the diversification discount is attributed to higher information asymmetry in diversified firms, due to complex organizational structure and opaque financial information (Lin et al., 2007).

Furthermore, it may well be the case that business groups create inefficient capital markets. Khanna and Palepu (2000) note the potential for conflict of interests between the controlling shareholder and member firms in business groups; which is exacerbated when the controlling entity pursues objectives other than shareholder wealth maximization and tunnels assets and profits away from member firms (Johnson et al., 2000). Indeed, Baek et al. (2006) find that private offerings within Korean business groups are set to benefit the controlling shareholders, and prices of these issues are set at a discount when the controlling entity has lower holdings compared with its holdings in the acquiringmembers.Moreover, Almeida andWolfenzon (2006) argue that even if the internal capital market of the business group is efficient, this organizational structure may still be detrimental to capital allocation.

Research Hypotheses

Based on the dividend Policy and theory of market failure on business groups, the theoretical framework, The hypothesis that the two groups with regard to the role of business groups in decision-making dividend payments

((to pay or not to pay) and decide on the amount of dividends paid (how much is paid) is planned. So the hypotheses of this research are as follows:

Group I: The general theory of the relation between dividend policy and factors such as information asymmetry, dependence on external financing (sources outside the institution):

H1:There is a significant relationship between payment of dividends and amounts due to the dependence on capital and external finance.

H2: There is a significant relationship between payment of dividends and amounts due to the dependence on capital and information asymmetry.

Group II: hypotheses based on how well the quality of the relationships between the companies of independent related groups:

H1: The likelihood of paying dividends and the payout level decrease with dependency on external finance and with the level of information asymmetry.

Group III: hypotheses based on how the relationship between volatility and other related companies consolidated (group) based on the size and diversity:

H1: The likelihood of paying dividends and the payout level increase with the lifecycle of the firm.

Variables Definitions
Dependent variable
- **firm's payout ratio(PAYOUT)**: is defined as the firm's payout ratio for investigating the payout level decision (how much to pay); and as a dummy variable that equals 1 if the firm paid a dividend and zero otherwise, for investigating the dividend payment decision (to pay or not to pay).

Independent variables
- **previous year's payout (P_PAYOUT):** Calculates and evaluates the amount of dividends paid last year.
- **dependency on external finance (DEP):** A firm is dependent on external finance when it has insufficient internally generated funds to meet viable investment opportunities, so DEP is calculated as the percentage of growth in sales that cannot be financed from free cash flow (1 - after tax cash flow per unit of growth in sales).
- **level of information asymmetry(P_STD):** is measured as the standard deviation of the daily residual returns from the market model, calculated over a calendar year. Consistent with previous work, P_STD, a measure of uncertainty, is a good indication of the level of information asymmetry and of the direct and indirect costs of issuing external finance (see Blackwell, Marr, & Spivey, 1990; Lin et al., 2007).
- **AGE**: is a proxy for lifecycle theory (DeAngelo & DeAngelo, 2006), measured as the natural logarithm of age since incorporation.

METHODS OF DATA ANALYSIS
In this study, the multiple regressions are used for data analysis. Initial data was inserted in Excel spreadsheet and SPSS software was applied to analyze the data statistically. Also Rahavard Novin software, Tadbir Pardaz software, stock organization library and stock sites such as www.rdis.ir & www.irbourse.com were used.

Sample Selection
The sample was chosen from the firms listed on the Tehran stock exchange (TSE), from 2006 to 2013, using the following criteria:

1). Firms were listed in TSE during 2006-2013.

2). Data was available for all the years under the study.

3). The companies didn't have changed the fiscal year for the period studied.

4). Banks, Insurance and Investment firms were not considered in this study.

Regarding the conditions above and the limitations, 50 companies were chosen from among firms listed in Tehran Stock exchange.

Research Method and Regression Model
Considering that the aim of this study was to examine The effect of group affiliation on decisions to pay dividends Company of listed in Tehran Stock Exchange First of all variables in the model study in a multiple regression model tested general form it is as follows:

$$PAYOUT_{i,t}=\alpha 0+\alpha_1 P\_PAYOUT_{i,t}+\alpha_2 DEP_{i,t}+\alpha_3 P\_STD_{i,t}+\alpha_4 AGE_{i,t}+\acute{\varepsilon}_{i,t}$$

These Variables are summarized in the table (1).

(Table 1) : Description of the variables

Names of the Variables	Proxies
$PAYOUT_{i,t}$	firm's payout ratio
$P\_PAYOUT_{i,t}$	previous year's payout
$DEP_{i,t}$	dependency on external finance
$P\_STD_{i,t}$	level of information asymmetry
$AGE_{i,t}$	lifecycle Company

Data Analysis

Pearson Correlation Coefficient and Multivariate Regression were used to analyze data.

Ho= Data is normal

H1= Data is abnormal

Table (2): One-sample Kolmogorov-Smirnov Test

		DIV
N		**225**
Normal parameters[a,b]	**Mean**	**.8178**
	Std. Deviation	**.38689**
Most Extreme Differences	**Absolute**	**.074**
	Positive	**.074**
	Negative	**-.070**
Kolmogorov-Smirnov Z		**1.212**
Asymp. Sig. (2-tailed)		**.106**

a. Test distribution is normal.

b. Calculated from data.

Following the table (II), Sig = 0.106>0.05. Thus results show that data is normal.

Testing Results of hypothesis:

Table (3):Variables Entered

Model	Variables Entered	Adjusted R Square	Durbin-Watson	Method
1	$P\_PAYOUT_{i,t}$	0.584		Step wise
2	$DEP_{i,t}$	0.674		Step wise
3	$P\_STD_{i,t}$	0.804	1.643	Step wise

Under the Tables (3) are considered, the results are statistically Enter. This test can be improved by using the logistic regression model and the independent variables, the regression model can be determined. The results indicate that the four independent variables that were studied and their impact on corporate dividends payable, variable life company does not have a significant effect on corporate dividends payable. As the table indicates, the first model is the dividend payable last year.

And then dependency on external finance, information asymmetry are entered into the model. Thus, the new model is as follows:

$$PAYOUT= \beta_0 + \beta_1 PAYOUT\text{-}P + \beta_2 DEP + \beta_3 P\text{-}STD + \varepsilon_{i,3t}$$

Table 4: Excluded Variables

model	Variable	Beta ln	t	Sig	Partial Correlation	VIf
1	$AGE_{i,t}$	-5.834	-2.128	0.034	-0.121	1.002

As it is seen, $AGE_{i,t}$, significance level is equal to .034> 0.05, therefore, this variable was not entering the model**.**

Presenting total optimum model based on model 3 (T-test)

Optimum model was model 3, which had a more determination coefficient than the previous ones. In fact, when most variables were beside each other, they could present a more precise prediction in decisions on corporate dividends payable therefore, the optimum model was 3.

Table (5) : Coefficients of model 3

Model4	UnstandardizedCoefficients		StandardizedCoefficients	t	Sig	VIF
	B	Stl. Erro	Beta			
Constant	.702	.059		11.949	0.000	
$P\_PAYOUT_{i,t}$	2.02	0.000	.361	5.746	0.000	1/031
$DEP_{i,t}$	-2.76	0.000	-.125	-2.019	0.000	1/003
$P\_STD_{i,t}$	.002	.010	.012	.187	0.000	1/032

The optimal regression model was written as the following:

$$PAYOUT= 702+2/02P\text{-}PAYOUT -2/76DEP+/002P\text{-}STD + \varepsilon_{i,3t}$$

According to the statistical results of the hypothesis to test the research, level of information asymmetry and previous year's payout are positive and have a significant impact on the firm's payout ratio while the dependency on external finance impact is negative and significant. Meanwhile, based on Table (3) the results of tests, suggest that, Three independent variables of the study have a significant relationship with the firm's payout ratio (F= @. /000), which together offer a 80% (AdjR 2 = 0.804) Explains the behavior of the dependent variable.

Conclusion
This study investigates the effect of group affiliation on decisions to pay dividends in the Tehran Security Exchange. Therefore, the relationship between policy dividends and factors such as information asymmetry, dependence on external financing (sources outside the institution) is checked. According to the statistical results of the hypotheses to test the research,
The first group of hypotheses, the result first hypothesis shows that, between the payment of dividends and the amount of capital and thus the dependence on external financing there were positive and significant , As well the result first hypothesis shows that, between the payment of dividends and the amount of capital and thus the dependence on information asymmetry there were positive and significant.
The second group of hypotheses , the result hypothesis shows that, between the payment of dividends and the dividend rate paid last year there were positive significant positive relationship, Thus, as expected, compared with independent companies, affiliated companies have higher levels of dividend payments.
The third group of hypotheses , the result hypothesis shows that, between the payment of dividends and lifecycle Company there is no significant relationship.

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