

STUDYING OF FACTORS INFLUENCING CORPORATE DIVIDEND POLICY OF FINANCIAL AND NON-FINANCIAL FIRMS ON COMPANIES LISTED IN TEHRAN STOCK EXCHANGE

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ABSTRACT

This study investigates factors influencing corporate dividend policy of financial and non-financial firms on companies listed in Tehran stock exchange. For this purpose, dividends payable as variable dividend policy alternatives were considered. Empirically the research data is collected from 70 firms in the Tehran Security Exchange (TSE) during 2009-2013 using the RA software and the site of the Tehran Stock Exchange were collected. Multiple regressions technique is used for examining the stated hypotheses. The results indicate that the variable size and liquidity of the company has a significant positive impact on the dividend is payable. Therefore, it can be argued that increasing the size and liquidity of the company paying the dividends by companies to increase.

Keywords: *Dividend Policy, Dividends Payable, Liquidity, Firm Size, Financial Leverage*

INTRODUCTION

Since Miller and Modigliani (MM) presented debt irrelevance theory (DIT, dividend policy has become one of the most researched topic in financial economics. This theory discloses that firm value and shareholders' wealth are not related to the decision of whether or not the firm pays dividend. But on the other side Bird-in-the Hand theory strongly suggest paying dividend (see for instance Linter, 1956; Gordon, 1956; Fisher, 1961; Gordon and Brigham, 1968). There are several researches on dividend policy till date, which deal with different aspects of the policy. Stability of dividend is an important decision to be made by any firm just like other decisions made. Brealey and Myers (2005) listed top ten problems that are unresolved in advance corporate finance and one of them is dividend policy. In empirical literature one of the important issues that are investigated intensively is to find the factors affecting firm's dividend policy. Among the factors industry specific and anticipated level of future earnings is found to be the major determinant of dividend policy Baker and Powel (1999). It is noteworthy that dividend policy is not only influenced by internal factors but external factors also play significant role (Jensen and Johnson, 1995; Jensen & Smith, 1984; Lintner, 1956).

Internal factors include investment opportunity, profitability and liquidity, whereas among external factors, macroeconomic problems like growth, stability, change in technology, and change in consumer taste are most important Roberto (2002). Despite the importance of the issue limited number of research studies is available for a developing country like Pakistan. Most of the studies are conducted in developed markets and countries. This research aims at investigating the issue of dividend policy in Pakistan-an emerging market economy. Pakistan was acknowledged as one of the twenty potential rising market acknowledged by IFC (Institute of Financial Consultant) in 1991. After going through different lapses in 1990's it has re-gained momentum after 2002 Previous studies related to Pakistan show that dividend announcement affects the share price and market efficiency Akbar & Baig (2010). Ahmed & Attiya (2009) find that dividend policy is affected by earning per share (EPS) and by previous dividend per share. The study is limited to non-financial firms only.

Gul *et al.*, (2012) on determinants of dividend policy we have only taken the banking industry of Pakistan and the sample size was only 18 banks. Here we have extended the work to non-financial firms also and include firms from other financial sectors and used a large sample size. So the objective is to examine whether or not there exists any relationship among different financial characteristics and decision regarding dividend payments. More specifically we investigate the effect of financial variables and ratios

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like profitability ratio, liquidity ratio, efficiency ratio, investment, companies risk and companies size on firm's dividend policy.

Literature Review

Controversies exist among many studies and research is conducted on several topics on cash dividend policy. Given in a perfect capital markets, worth of a firm is not influenced by dividend decision and is considered irrelevant (Miller *et al.*, 1961). Miller & Merton established their proposition, but below a set of limitations assuming that Zero flotation, Zero taxes and transaction costs. Their independence will be observed between systematic information, dividend policy and equity costs. Most of the financial researcher and academics acknowledged this theory with a surprise because previous researches focused and suggested that share price and shareholder equity is affected if dividend policy is properly managed, similarly structure of a capital is affected by cash dividend Gordon (1959). Different researches have explained that the disputed dividends are outcomes of bird-in-hand theory. The bird-in-hand means cash dividends, in comparison it considers birds-on-the-bush (capital gains). This theory states that investors prefer cash dividends over capital gains. This leads firms to lay high dividends which will result the increase in value of shares. All these theories prescribe the financial managers with a diverse approach. There is no single perfect dividend payout policy. The firms should adjust higher dividend payout ratios so that the stock prices can be raised. Many empirical studies afterwards proved that the results gained from the researches were not consistent.

Several hypotheses were developed afterward to prove the relationship among dividend policy and capital structure of organization, dividend announcement and share price relationship is not apparent (Litzenberger & Ramaswamy, 1982; Black, 1976; Miller, 1986; Dempsey *et al.*, 1993; Bernstein, 1996; Holder *et al.*, 1998; Van-Horne, 2001; Brealey and Myers, 2002; Brigham & Gapnskil, 2002). According to Fama & French (2002) three characteristics affecting dividend decisions are: the investment opportunity, the yield and the company's size. Manao and Nur (2001) investigated the relation between financial ratios and stock returns during the time period of economic crisis in Indonesia. They have found that EPS have significant influence on dividend payout in all models.

In a report by (Baker *et al.*, 2007) it was stated that many Canadian firms paying dividends are remarkably larger in size with higher profits. They are having huge positive cash flows, greater ownership structure and also available with some growth opportunities. In Australia and Japan a study was held on dividend policy by Ho (2002). This study instituted that dividend policy is positively affected by size in Australia and by liquidity in Japan. It has negatively affected by risk in Japan only. Moreover the industry effect is found to be significant in both the countries. In Greek firms the effect of size of firms and dispersed earnings to its dividend policies was determined by Eriotis (2005). It was concluded that the dividend policies are determined not only by dispersed earnings but also by the variation in dividend. Similarly numerous studies revealed that large companies have better opportunity to raise funds comparatively at lower cost as they have greater right of entry to capital markets. That's why they don't depend much on internal funding and more likely pay their shareholders higher dividend (Fama and French, 2001; Holder *et al.*, 1998; Redding, 1997; Eddy and Seifert, 1988). From previous studies positive bond is anticipated among dividend pay-out ratio and Size because larger firms face higher agency costs and inferior issuing costs (DeAngelo *et al.*, 2004) focused on why the firms pay dividends? This study was based on dividend policy, agency cost and earned equity. It concluded that there is a significant relationship between the choices to pay or not to dividends and the profitability, cash balance, firm size, leverage, growth and dividends paid in past. Study by Amidu and Abor (2006), examined determinants of dividend policy in Ghana. After study outcome they concluded that the profitable firms tend to disburse more dividends. They found a positive association between the dividend payout ratio, cash flows, profitability and corporate tax. They also showed that highly liquid firms pay more dividends; on the other hand negative relationship was found between growth, market to book value risk and payout ratio. The signaling theory and trade off theory hypothesis were used to clarify the observed performance of the companies listed on Bombay Stock Exchange (BSE) by (Reddy, 2006). The determinants of dividend policy of Indian corporate companies were examined in this study. Theory of Tax preference

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doesn't show to be right for Indian firms, because of the increased costs of external financing the growing companies utilize funds which are internally generated to finance their investments projects; it leads them to pay low dividends. In comparison companies with fewer investment opportunities and slow growth have a greater ability to pay higher dividends. This negative relationship has been supported by a large number of studies (Holder *et al.*, 1998; Moh'd *et al.*, 1995; Alli *et al.*, 1993; Dempsey & Laber, 1992; Jensen *et al.*, 1992; Rozeff, 1982). This negative association among company dividend payouts and growth opportunities is steady with Myers and Majluf (1984) the pecking order theory. Investigation by Al-Malkawi (2007) examined the dividend policy determinants by utilizing the panel data of publically operated companies listed during 1989 and 2000 on Amman Stock Exchange. Tobit model specification results suggested that percentage of stock held by state ownership and insiders considerably affect dividend payout ratio. While size, age and profitability were found to be the determining aspects of Jordan dividend policy.

Ayub (2005) studied the impact of firm specific factors on corporate dividend payments. Out of 180 companies listed at KSE during 1981 to 2002 only 23% of companies transform their incremented profit into dividend. After attaining certain level of growth from additional investment from profits companies start paying dividend. He also determined liquidity as negatively whereas profitability, insiders' ownership and retained earnings as positively related with payment of dividend. A recent study conducted in Pakistan by Ahmad and Attiya (2009). The results showed a trend that Pakistani companies fix their dividend payments through past dividends and current earnings. Second analysis of determining factors of dividend payout showed that more dividends are paid by stable companies. Ownership concentration and market liquidity are positively related with dividend payout ratio but Growth opportunities had no impact on dividend payment and size of the firms found to be negatively correlated. Similar research was conducted by Afza & Mirza (2010) on ownership structure and cash flows as determinates of dividend policy. They have found positive relation of operating cash flow and profitability to dividend policy whereas negative relationship was determined for ownership, cash flow sensitivity, size and leverage. Regarding ownership structure, Ayub (2005) argued that increased ownership by managers increases the corporate dividend payouts because in Pakistan majority of companies have concentrated family ownership structures that's why management practices are not strongly monitored. Shah *et al.*, (2010) conducted their study in the context of Pakistan and China to express the impact of earnings management on dividend policy. The results of research indicated that there is no such impact exists. Study conducted by Ayub (2005) focused on the role of corporate governance relation with factors in designing dividend policy, whereas, Ahmed and Attiya (2009) investigated the impact of general corporate characters on dividend payouts. But there is no comprehensive study on the aspect that what is the probability for dividend paying firms in Pakistani economy. In 2002, the Code of Corporate Governance was introduced by SECP.

It leads to an improved significance in investigating the dividend behavior of the firms.

Priestley *et al.*, (2009), smoothing it into dividends and it were investigated predictability. The results showed that, if the stock splits are in a smoothing company there is predictability in a sample of the limits. Also it is possible to predict, dividend growth stocks in companies that profit sharing is a smooth coat in them to get rid of that less dividend smoothing.

Booth *et al.*, (2009), examined how the imperative of market power on dividend policy affects the market measured by means of three criteria: 1. Fayndl and Hrchymn the index 2. The basic firms of imported jackets. 3. Learner indices were used. Results showed that the market positively on the ability to pay dividends and dividend decisions also affect the amount of dividends. They found the impact on market structure decisions, where dividend stocks, is a commercial risk.

Basel *et al.*, (2010), examined the relationship between time deposits and corporate dividend policy in a broad sample of 400 companies for the period 1991 -2008. Their investigation shows that deposit, the dividend, leverage, growth; size, risk, and profit potential are influenced. It also showed that when both variables are divided into bonds and dividends they are simultaneously monitored by the impact of any criteria.

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(Mazna, 2010) examined the impact of policies on distribution of profits and ownership structure, in companies in Malaysia in a time period 2002 - 2006. His research shows that companies that benefit more from the shareholders have split the shares of large and has increased; and the importance of the dividend to shareholders will be higher in the company of great importance in the distribution of profits.

Dimitar *et al.*, (2011), examined the impact of the company's characterizes on dividend decisions. The results showed that dividend policy depends on the life cycle of a conflict of interest between minority and majority shareholders.

Research Hypotheses

The hypothesis of this study is the identification of factors that influence the dividend policy the research hypotheses are classified as follow:

The financial leverage has a significant influence on dividend policy.

The Profitability has a significant influence on dividend policy.

The Company Size has a significant influence on dividend policy.

The Growth has a significant influence on dividend policy.

The Liquidity has a significant influence on dividend policy.

Variables Definitions

Independent Variables

The Ratio of Interest Payments

As the ratio of interest payments to investigation to decide on the amount of payment (payable amount) is defined. And a dummy variable that is when the company has paid dividends is equal to one and otherwise is zero.

Dependent Variable

Profitability

It is an important explanatory variable of dividend policy (Fama and French, 2001; Han *et al.*, 1999). Return on assets, selected as profitability of the firm is defined as Net Income divided by Total Assets. According to (Belanes *et al.*, 2007) the relation between return on asset and the dividend payout is found to be positive, in case of the

Tunisian companies: Jakob and Johannes (2008) in their study on dividend policy in Denmark found that the dividend payers in Denmark are affected by positive earnings, high ROE, large size and high retained payment in last year but no relationship is found between market to book ratio, leverage ownership structures and dividend decision in Denmark. And the net income divided by total assets is calculated.

Liquidity

Liquidity is one of the important considerations in dividend decisions, because dividend represent cash outflow. The greater the liquidity of a company by having stable cash flow greater its ability to pay a dividend. Company going through development and growth may not be liquid because its funds may go into permanent working capital and fixed assets. Companies desire to maintain liquidity up to certain level in order to provide cushion to provide financial flexibility and protection against uncertainty. So in order to avoid uncertainty they may be reluctant to jeopardize this position by paying dividend. In current study Current Ratio (CR) and Quick test Ratio (QR) are used

to measure liquidity. CR is most commonly used variable where as QR is more conservative measure of liquidity. According to the literature bulk of results explains that there is positive relationship present between liquidity and dividend payout behavior (Jakob & Johannes, 2008; Amidu & Abor 2006; DeAngelo *et al.*, 2004; Ho, 2002; La Porta *et al.*, 2000).

Leverage

Debt always involves high risk as it must be paid off. However, it allows companies to manage return on equity for shareholders. High financial leverage is associated with risk, so highly leveraged companies pay lower dividends to protect creditors and maintain internal cash flow to fulfill their responsibility. That is, highly leveraged firms pay lower dividends to reduce their transaction costs (Gugler & Yurtoglu, 2003; Agrawal & Jayaraman, 1994; Crutchley & Hansen, 1989; Jensen, 1986; and Rozeff, 1982). This suggests that non-dividend paying firms have high leverage in comparison to dividend paying firms. To determine

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the extent to which liabilities or debt can affect the pattern of dividend paying; this variable is included as one of the independent variables and is defined as total debt to total equity.

Growth

Signaling theory showed that it is smoother for higher growth firms to payout dividends to the shareholders. This signals shareholders that the firms having high growth opportunities. Chen & Dhensiri (2009) found that in Newzeland firms that practice recent development in revenues has a tendency to disburse lower dividends. We have used percent age change in sales annually as proxy for the growth.

Company Size

Scott & Martin (1975) stated that the firm size is one of the significant factors which affect the firms’ debt and dividend policies. Bradley *et al.*, (1998) conducted a study on a sample of 75 Firms. The data from year 1985-1992 was tested. The results proved that the firms with high expected cash flow risk have lower payout ratio. The firm size has also been accounted for as firms’ total sales.

Research Method and Regression Model

Since this study sought to examine the relationship between portfolio return volatility and stock return volatility based on wavelet analysis is, Methods for the study of correlation and regression analysis was used to examine the relationship between these variables. 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. We consider the empirical model described as follows:

$$D_{i,t} = \alpha_0 + \alpha_1 Lev_{i,t} + \alpha_2 Profitability_{i,t} + \alpha_3 Siz_{i,t} + \alpha_4 Groi_{i,t} + \alpha_5 Liquidity_{i,t} + \epsilon_{i,t}$$

The study of listed companies in Tehran Stock Exchange for the pharmaceutical, food and automotive industries, was selected as the target population. Among these firms, firms that are eligible under the cluster sampling method in the period 2008-2013 were selected from the 58 participants who were selected as samples.

1. The beginning of 2008 has been a member of the Tehran Stock Exchange.
2. Courses leading to the end of March is financial.
3. During the research period, interrupted their stock trades have been more than 6 months.
4. The information you need to research available.
5. Component industry companies are not investing in financial intermediation.

Required data through observation and analysis of documents and information have been collected from company financial statements. In this study, the research literature to develop a library of methods has been used. To test the hypothesis of a company's financial statements and information contained in the Site and the Information Exchange Bank and mash the New Deal program, has been used. In this study, the statistical methods used are descriptive statistics and regression.

Data Analysis

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

H₀=normal

H₁= Data is abnormal

Table 2: One-sample Kolmogorov-Smirnov Test

		DIV
N		450
Normal parameters ^{a,b}	Mean	.946394
	Std. Deviation	1.0424150
	Absolute	.074
Most Extreme Differences	Positive	.074
	Negative	-.070
	Kolmogorov-Smirnov Z	1.212
Asymp. Sig. (2-tailed)		.106

a. Test distribution is normal.

b. Calculated from data.

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

Table 3: Variables Entered

Model	Variables Entered	Adjusted R Square	Durbin-Watson	Method
1	Profitability	0.484		Step wise
2	Liquidity	0.574		Step wise
3	Growth	0.628		Step wise
4	Leverage	0.758		Step wise
5	Company Size	0.835	1/927	Step wise

A total optimum model was used to Study Factors Influencing Corporate Dividend Policy of Financial and Non-Financial Firms . We entered variables into the model respectively. 5 models were defined and finally the last model (5) including 5 variables was defined as an optimum model for Study Factors Influencing Corporate Dividend Policy. As a result, the regression model came as the followings:

$$D_{i,t} = \alpha_0 + \alpha_1 Lev_{i,t} + \alpha_2 Profitability_{i,t} + \alpha_3 Siz_{i,t} + \alpha_4 Groi_{i,t} + \alpha_5 Liquidity_{i,t} + \epsilon_{i,t}$$

Presenting Total Optimum Model based on Model 5 (T-test)

Optimum model was model 5 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 of Factors Influencing Corporate Dividend Policy and in the hypothesis, the optimum model was 5.

Table 5: Coefficients of model 5

Model4	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Erro	Beta		
Constant	/177	/062		1/893	0.000
Leverage	/007	/065	/005	/104	0.000
Company Size	/025	/010	/113	2/358	0.000
Growth	-/037	/020	/087	-1/852	0.000
Liquidity	/083	/008	/483	10/261	0.000
Profitability	-/003	/008	/016	-/342	0.000

The optimal regression model was written as the following:

$$D_{i,t} = \alpha_0 + /007 Lev_{i,t} + /003 Profitability_{i,t} + /025 Siz_{i,t} + /037 Groi_{i,t} + /083 Liquidity_{i,t} + \epsilon_{i,t}$$

According to the statistical results of the hypothesis to test the research, Leverage, Company Size and Liquidity are positive have a significant impact on the dividend policy while Growth and Profitability impact is negative and significant.

So, it can be argued that increasing the Leverage, Company Size and Liquidity, the dividend payments will increase. Meanwhile, based on Table (3) the results of group tests, suggest that, five independent variables of the study have a significant relationship with the company's market value (F= @. /000), which together offer a 83% (AdjR 2 = (0.835) Explains the behavior of the dependent variable.

Conclusion

This study investigates the factors influencing corporate dividend policy of financial and non-financial firms on companies listed in Tehran stock exchange. For this purpose, dividends payable as variable dividend policy alternatives were considered.

According to the results of statistical models to test the research, Leverage, Company Size and Liquidity are positive have a significant impact on the dividend policy while Growth and Profitability impact is negative and significant. So, it can be claimed that increasing the Leverage, Company Size and Liquidity, the dividend payments will increase while the increase Growth and Profitability the dividend payments will decrease.

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