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Studying the Dividend Policy and Share Price Volatility: Iran Evidence

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Abstract

Explaining dividend policy has been one of the most difficult challenges facing financial economists. Despite decades of study, we have yet to completely understand the factors that influence dividend policy and the manner in which these factors interact. The aim of this paper is to examine the relation between dividend policy and share price volatility in Tehran Stock Exchange (TSE). The analyses are performed using data derived from the financial statements of 100 firms listed on the Tehran Stock Exchange during a six-year period from 2006 to 2011. Multiple regression analyses are used to discover the association between share price changes and both dividend yield and dividend payout ratio. The empirical findings suggest that there is a significant negative relationship between the dividend policy of a firm and the volatility of its stock price. In addition, it is shown that a firm's growth rate, debt, size and earnings explain stock price changes. The study found that dividend policy is relevant in determining share price changes for a sample of firms listed in Tehran Stock Exchange.

Keywords: Dividends, Share prices, Tehran Stock Exchange.

1. Introduction

One of the more puzzling issues in corporate finance involves dividends. Dividends have long been an enigma in corporate finance. Miller and Modigliani (M and M) (1961) argue that under certain restrictive assumptions, the dividend decision does not affect the value of a firm and is, therefore, irrelevant. Although their simple model provides some powerful results, it serves only as the beginning of the theory of dividends. The intention of the model is not to duplicate the world we observe. Conventional wisdom suggests that a properly managed dividend policy is important to shareholders because it can affect share prices and shareholder wealth. Much empirical evidence on dividends is inconsistent with the irrelevance of dividend policy to a firm's value. According to Lease, John, Kalay, Loewenstein and Sarig (2000), if dividend policy counts, some of M and M's simplifying assumptions, especially those involving perfect markets, require modification. The more important market imperfections include asymmetric information, agency costs, and taxes but other imperfections such as transaction costs, flotation expenses, and behavioral factors also exist (Baker et al, 2006).

The first empirical study of dividend policy was provided by Lintner (1956), who surveyed corporate managers to understand how they arrived at the dividend policy. Lintner found that an existing dividend rate forms a bench mark for the management. Companies' management usually displayed a strong reluctance to reduce dividends. Lintner opined that managers usually have reasonably definitive target payout ratios. Over the years, dividends are increased slowly at a particular speed of adjustment, so that the actual payout ratio moves closer to the target payout ratio.

Bond and Mougoue (1991) reexamine the partial adjustment model of dividend payment suggested by Lintner. They find that when earnings follow a linear autoregressive process, then there are many combinations of target payout rate and the speed of adjustment that would fit the same earnings stream and dividend stream. They conclude that, for firms with autocorrelated earnings, Lintner's partial adjustment model gives results that are not unique; thus, for such firms the partial adjustment model is not a succinct description of dividend policy.

The volatility of share price is the systemic risk faced by investors who possess ordinary shares investment. Investors are by nature risk averse, and the volatility of their investments is important to them because it is a measure of the level of risk they are exposed to.

The debate has been whether corporate dividend policy has any relationship with stock price movement. In this connection, this paper is aimed at establishing a relationship between dividend policy and share price volatility, with particular focus on the Tehran Stock Exchange.

The research is based on the theoretical framework created by Baskin (1989), Allen and Rachim (1996) and Hussainey et al (2011). We apply correlation and multiple least square regressions in order

to establish the extent to which dividend policies of firms in the TSE affect their share price changes. We regress share price changes on two dividend variables to establish this relationship. The independent variables are dividend yield and payout ratios. However, this research is different from that of Baskin and Allen and Rachim in some ways:

- It analyses firms in the Iran.
- It excludes firms in the finance sector because of their specialised regulatory nature.
- It discusses the determinants of dividend policy as well as the theories of dividend policy.

2. Literature Review

Since the M and M study, researchers have attempted to model dividend behavior mathematically and relate dividend policy to share-price levels. In their study on the evolution of dividend policy, Frankfurter and Wood (1997, p. 31) conclude, "Accordingly, it (dividend policy) cannot be modeled mathematically and uniformly for all firms at all times." This is because different firms may adopt different dividend policies depending on firm-specific factors including the economic and behavioral characteristics of their stockholders. Thus, despite voluminous research on dividends, corporate managers and financial economists still face what Black (1976) once described as a dividend "puzzle" with "pieces that just don't seem to fit." Recent works by Baker, Powell, and Veit (2002), Bierman (2001), Lease et al. (2000), and Frankfurter and Wood

(2003) attempt to pick up the pieces and to put them together so that different dividend policies make sense in different situations.

Dividend policy seemed characterized by "inertia and conservatism"; managers seemed to think that investors reward stability and avoided making unsustainable changes in payout ratios. Based on these findings, Lintner (1956) suggested a model of partial adjustment to a given payout rate.

In a recent study, Brav et al. (2004) find that "maintaining the dividend level is a priority on par with investment decisions". Furthermore, less than half of the executives they interviewed agree that "the availability of good investment opportunities is an important or very important factor affecting dividend decisions". Although to a somewhat lesser degree, Lintner's findings seem valid almost half a century later.

The volatility of ordinary stock is a measure used to define risk and represents the rate of change in the price of a security over a given time: the greater the volatility, the greater the chance of a gain or loss in the short run. Volatility has to do with the variance of a security's price. Thus, if a stock is labeled as volatile, its price would greatly vary over time, and it is more difficult to say with certainty what its future price will be. Investors prefer less risk. The lesser the amount of risk, the better the investment is (Kinder, 2002). In other words, the lesser the volatility of a given stock, the greater its desirability is.

2.1. Theories of dividend policy

Over the past five decades, researchers have devoted considerable study to the question of why companies pay dividends and have proposed many dividend theories about dividend payout decisions. Although numerous theories, models, and explanations exist, we focus on six broad categories, which are not necessarily mutually exclusive. An in-depth discussion of each theory and the related empirical evidence is available in Baker (2009).

- *Bird-in-the-hand theory*: The bird-in-the-hand theory states that dividends are relevant especially if investors face expropriation. For example, dividend payout can be value enhancing for poorly governed firms by distributing free cash flow that insiders might otherwise squander. This theory recognizes that investment, earnings, and dividend streams are uncertain and that distributions of possible future cash flows replace certain amounts. Advocates of this theory argue that investors value dividends more than capital gains when making decisions related to stocks. This theory takes its name from the old saying ''a bird in the hand is worth two in the bush.'' In this theory ''the bird in the hand'' refers to dividends and ''the bush'' refers to capital gains. By contrast, Miller and Modigliani (1961), who contend that investors are indifferent between dividends and capital gains, refer to the bird-

in-the-hand theory as a ''fallacy.'' (Baker et al, 2012).

- '*Signaling explanations*: According to dividend-signaling theory, firms can use dividend changes to convey information about the firm's future growth opportunities. Given information asymmetry between the firm and the market, investors should consider the announcement of dividend increases as good news and dividend cuts and reductions as bad news. The firm's stock price should respond according to the signal that the dividend announcement conveys. That is, the stock price should move in the same direction as the dividend. Based on his synthesis of the literature on asymmetric information and signaling theory, Filbeck (2009, p. 174) concludes: ''Overall, most empirical evidence tends to support theoretical models regarding the ability of dividend changes to affect share prices. Unexpected dividend increases (decreases) are associated with significant share-price increases (decreases).'' (Baker et al, 2012).

- *Taxes and clientele effects*: Taxes may be an important consideration for investors if dividends and capital gains are taxed at different rates. According to tax preference theory, investors should prefer the return taxed at the lower rate. Based on their review of the theoretical and empirical literature on taxes and

clientele effects, Saadi and Dutta (2009, p. 128) note that ''despite extensive research, researchers still dispute the effect of dividend taxation on dividend policies largely because of the lack of compelling tax variations and fully convincing research designs.''

- *Agency theory*: According to agency theory, conflicts of interest may occur between management and shareholders. For example, Easterbrook (1984) suggests that dividends may help reduce the agency costs associated with separation of ownership and control. Because managers cannot be perfectly monitored, Easterbrook argues that paying dividends forces managers to raise funds in the financial markets and therefore subjects them to scrutiny by outside professionals. (Baker et al, 2012).Thus, dividends help prevent managers from taking self-serving actions that are costly to the firm's shareholders. Jensen (1986) also realizes that self-interested managers have incentives to invest excess cash in unnecessary perks and investments. He suggests that one way to solve the over investment problem is to extract surplus cash from management control by paying dividends, which reduces the agency cost of free cash flow. Megginson (1996, p. 377) suggests that ''the agency cost model is currently the leading mainstream economic model for explaining observed dividend payouts.'' Mukherjee (2009) provides a synthesis of the research on the agency theory of dividends.

- *Firm life cycle theory of dividends*: Mueller (1972) proposes a formal theory that states that a firm follows a relatively well-defined life cycle and then traces the implications of this theory to dividend policy. The optimal dividend policy of a firm relates to the position of a firm in its life cycle. For example, the theory predicts that a firm begins paying dividends when it transitions from a high-growth phase to a mature phase of its life cycle. Thus, a change in dividend policy signals a life cycle change within the firm. Bulan and Subramanian (2009, p. 211) conclude: ''Overall, the empirical evidence favors the firm life cycle theory of dividends in terms of dividend payment propensity and life cycle characteristics.''

- *Catering theory of dividends*: Baker and Wurgler (2004a) develop a catering theory of dividends in which investor demand drives the decision to pay dividends. Managers cater to investors by paying dividends when investors put a stock price premium on payers, and not paying when investors prefer nonpayers. The theory mainly addresses whether firms pay dividends, and not how much they pay. In their review of the catering theory of dividends, De Rooij and Renneboog (2009, p. 235) conclude

the empirical results are ''far from conclusive or unanimous as to whether the catering theory of dividends can explain the dividend payout'' (Baker et al, 2012).

Different researchers have different views about the relationship among dividend policy and stock prices. The earlier work on dividend-yield and stock price-volatility was conducted by Harkavy (1953); Friend and Puckett, (1964); Litzenberger and Ramaswamy (1982); Fama and French (1988); Baskin (1989) and Ohlson (1995) in the context of United States. Rozeff (1982) found a high correlation between value line CAPM and betas and dividend payout for 1000 US firms. Fama (1991) and Fama and French (1992) focus on dividends and other cash flow variables such as accounting earnings, investment, industrial production etc to explain stock returns. Allen and Rachim (1996) in Australia found no significant relationship between dividend policy and stock prices. Gordon (1963) argues that stock prices influenced by dividend payouts. He reported that firm with large dividends faces less risk in terms of stock price volatility. Some of hypothetical mechanisms suggest there is a universal relationship of dividend yield and dividend payout ratio with stock price volatility. Jensen and Meckling developed an agency cost argument in (1976), which suggests that dividend payouts reduce the cost of funds and increase the cash flows of the firm. The company after paying cash dividends to stock holders would have less idle funds in the hands of managers to invest in less or negative NPV projects.

Contrarily Allen and Rachim (1996) found a significant positive correlation among stock price volatility and earning volatility and leverage, and a significant negative relationship between price volatility and payout ratio. Conroy et al. (2000) found that current dividend announcements are unable to explain the market reaction towards announcements. Nishat and Irfan (2001) argued that both dividend payout ratio and dividend yield have significant affect on stock price volatility. Rashid and Rehman (2008) found a positive but non-significant relationship among stock price volatility and dividend yield in the stock market of Dhaka. Some other studies on stock price volatility in Pakistan include Nishat and Bilgrami (1994) and Nishat (1999).

Chen, Huang & Cheng (2009) analyzed the effect of Cash Dividend on Share Price for the period 2000-2004 in China. They found that Cash Dividend has significantly positive effect on the Stock Prices. When Cash Dividend increases Stock Prices also increase and when the Cash Dividend decreases, Share Prices decrease.

Akbar & Baig (2010) studied the effect of dividend announcement on stock prices. Results of their study showed that announcement of dividends either Cash Dividend or Stock Dividend or both have positive effect on Stock Prices.

Suleman et al. (2011) studied the association of dividend policy with share price volatility in Pakistan. They extracted data from Karachi Stock Exchange regarding five important sectors for the period of 2005 to 2009. They used multiple regressions model for their analysis.

Contrary to (Baskin, 1989)'s results, their findings showed that share price volatility has significant positive relationship with dividend yield. They also reported that share price volatility has significant negative relationship with growth.

Hussainey, et al (2011) examined the relationship between share price volatility and dividend policy in UK. They selected 123 English companies and the period of their study was from 1998 to 2007. Their work was based on (Baskin, 1989). Results of their study showed a positive relation between Dividend Yield and Stock Price Changes and negative relation between Dividend Payout Ratio and Stock Price Changes. Their results further indicated that the Firms' Earnings, Growth Rate, Level of Debt and Size also cause the change in Stock Prices of UK.

Hashemijoo et al. (2012), examine the relationship between dividend policy and share price volatility with a focus on consumer product companies listed in Malaysian stock market. For this purpose, a sample of 84 companies from 142 consumer product companies listed in main market of Bursa Malaysia were selected and the relationship between share price volatility with two main measurements of dividend policy, dividend yield and payout ,were examined by applying multiple regression for a period of six years from 2005 to 2010. The empirical results of this study showed significant negative relationship between share price volatility with two main measurements of dividend policy which are dividend yield and dividend payout. Moreover, a significant negative

relationship between share price volatility and size is found.

This study also seeks to examine the effect of dividend policy considering dividend yield and payout as independent variables, on the stock price volatility in emerging markets by taking Iran as a case and by taking the data of firms listed in Tehran Stock Exchange (TSE) for examination. The remainder of the paper is organized as follows: section 3 discusses the Methodology and variables followed by results and discussions in section 4 and conclusion in section 5.

3. Research Methodology

The sample of this study is cross-sectional and consists of 100 Iranian companies selected from the Tehran Stock Exchange (TSE). The financial accounting data were collected for six years (from 2006 to 2011).

The relationship between ordinary stock price volatility and dividend policy has been analyzed utilizing multiple least square regressions. The regression model developed basically relates price volatility with the two main measures of dividend policy – dividend yield and dividend payout ratio. In line with the recommendations by Baskin (1989) and Hussainey et al (2011), a number of control variables were included to account for certain factors that affect both dividend policy and stock price volatility – asset growth, leverage, earnings volatility and firm size.

The model was evaluated annually over the sex-year period to measure the periodic

effect of dividend policy on stock price volatility. Multiple regression analysis was used to describe these relationships and a correlation analysis was done amongst the variables.

First, the dependent variable price – volatility – was regressed against the two main independent variables, dividend yield and payout ratio. This provides a crude test of the relationship between share price volatility and dividend policy with the regression equation:

$$PV = \alpha_1 + \alpha_2 \, DY_j + \alpha_3 \, PR_j + e_j$$

Baskin's (1989) analysis showed a significant negative relationship between dividend yield and dividend payout and share price volatility. Allen and Rachim (1996) and Hussainey (2011), reported a positive relationship between share price volatility and dividend yield, but a negative relationship between share price volatility and dividend payout. The close relationship between dividend yield and dividend payout ratio may pose a small problem as there are a number of factors that influence both dividend policy and price volatility. To limit these problems, the control variables mentioned earlier were included in the analysis. The dependent variable was regressed against the two independent variables and the control variables with the following regression equation:

$$PV = \alpha_1 + \alpha_2 \, DY_j + \alpha_3 \, PR_j + \alpha_4 \, SZ_j + \alpha_5 \, EV_j + \alpha_6 \, Debt_j + \alpha_7 \, AG_j + e_j$$

3.1. Variable Definition

In this study Price Volatility is taken as dependent variable. Dividend yield, Payout Ratio, Earning volatility, Long-term debt, Growth in assets and Size are used as independent variables. It is expected that all these variables have significant affect on stock prices.

3.1.1. Price Volatility (PV)

Price Volatility is taken as dependent variable, which is calculated by using Parkinson (1980) method of extreme values. It is calculated by dividing the annual range of prices with the average of high and low stock prices. Then variance for the year 2006-2011 is averaged and is transformed into standard deviation. This method is considered better than the traditional methods in, which researchers use either opening price or closing price or average of opening and closing prices. Parkinson (1980), Allen & Rachim (1996), Nishat & Irfan (2003), Pani (2008), Rashid & Rahman (2009), Nazir, Nawaz, Anwar, & Ahmed (2010) and Asghar, Shah, Hamid, & Suleman (2011) also used price volatility as a dependent variable in their studies.

3.1.2. Dividend yield (DY)

The variable was calculated by summing all the annual cash dividends paid to common stock holders and then dividing this sum by the average market value of the stock in the year. The average for all available years was utilized. Travlos, Trigeorgis & Vafeas (2001) and Akbar & Baig (2010) used stock dividends as to see its effect on stock prices and

found positive relation between stock dividend and market prices of shares. Their results further indicated that Stock Dividend is an important variable that significantly explains the variations in Stock Prices.

3.1.3. Payout Ratio (PR)

Payout ratio is calculated by dividing the total dividend to total earning of every stock. We have calculated cumulative earning and dividends of each company individually for every year in order to control the problem of extreme values in individual year that lead the results to low or negative net income.

3.1.4. Earning Volatility (EV)

In order to develop this variable, the first step is to obtain an average of available years of the ratio of operating earnings (before taxes and interest) to total assets. The next step is to calculate an average of the squared deviation from the overall average. A square root transformation is then applied to the mean squared deviation to obtain estimates of standard deviation.

3.1.5. Long-term Debt (Debt)

Figures for long-term debt and total assets were obtained directly from Datastream. These figures represent all interest-bearing financial obligations, excluding amounts due within one year, e.g. debentures, mortgages and loans with maturity greater than one year. It is shown net of premiums or discount. The ratio of long-term debt to total assets was calculated and the average over all

available years was utilized (Hussainey (2011).

3.1.6. Growth in Assets (GA)

Figures for growth in assets were obtained directly from Data stream. These figures were obtained by taking the ratio of the change in total assets at the end of the year to the level of total assets at the beginning of the year. These figures were averaged over all available years.

3.1.7. Size (SZ)

This variable has been calculated by constructing the average value of common stock. The size of the company explains the real magnitude of the company.

3.2. Expected results and Hypothesis

The expectation was that dividend yield, payout and size would be inversely related to price volatility; that is, given an increase in the dividend yield, the dividend payout ratio and the size of a firm, there would be a decrease in the volatility of the stock price of a firm. Also, earnings volatility and the level of debt would be positively related to share price volatility, i.e. the more volatile a firm's earnings and the higher their leverage, the more volatile the stock price.

Based on this literature, two null hypotheses can be advanced:

H_1: There is a Negative Relationship between Dividend Yield and Price Volatility.

H_2: There is a Negative Relationship between Dividend Payout and Price Volatility.

4. Empirical results

Table 1 summarizes the descriptive details for six variables affecting price volatility of stocks traded in Tehran Stock Exchange. It shows the statistical mean, standard deviation and standard error. According Allen and Rachim (1996), Hussainey et al, (2011), assuming that stock prices follow a normal distribution pattern and ignoring the effect of a firm's going ex-dividend, the standard deviation of stock market returns is equivalent to the measured volatility of this study. This can be done using the formula derived by Parkinson (1980), in line with Baskin (1989). Here, the mean price volatility, 0.4953, is multiplied by the constant, 0.6008, giving a result of 29.75 per cent. This is in line with Allen and Rachim's (1996) result regarding Australian firms, which was 29.42 percent, and Baskin's (1989) result regarding US firms, which was 36.9 per cent and Hussainey et al (2011) result regarding UK firms which was 29.40 percent.

Table 1. Descriptive Analysis

Variables	Mean	SE	SD	Variance	Range	Sum	Observations
Price Volatility	0.4953	0.0185	0.2746	0.0763	1.8264	97.45	600
Dividend Yield	0.1852	0.0146	0.1253	0.0176	0.8565	43.19	600
Earnings	0.3158	0.0546	0.7633	0.4023	5.1846	101.851	600
Volatility	0.5961	0.0352	0.5501	0.2541	3.4521	121.520	600
Payout Ratio	0.1203	0.0135	0.0412	0.0065	0.3516	73.621	600
Debt	0.1851	0.0142	0.1214	0.0381	1.3242	53.011	600
Assets Growth Firm Size	13.41	0.0852	1.1530	1.4251	5.5941	63.25	600

Notes: Price volatility = the annual range of stock prices divided by the average of the high and low prices obtained in the year, raised to the second power; dividend yield = dividend per share divided by price per share; dividend payout = dividend per share divided by earnings per share; size = number of ordinary shares multiplied by price per share; earnings volatility = SD of earnings from the overall average; debt = ratio of long-term debt to total assets; growth = ratio of change in total assets at the end of the year to the level of total assets at the start of the year

Table 2 shows the correlation matrix of variables utilized for the study. From the table, it can be seen that the correlation between price volatility and dividend yield is negative (-0.501). As expected, this is in line with that of Baskin (1989), which was -0.643, but it is in contrast with that of Allen and Rachim (1996), which was positive (0.006). Also, the correlation between price volatility and dividend payout is negative (-0.381), as expected and in line with the correlation in both Baskin (1989), which was (-0.542), and Allen and Rachim (1996), which was (-0.210). The correlation table also shows a high correlation between dividend yield and payout, with value 0.657. This raises questions as there is the possibility of multicollinearity, which could be a potential problem. There is therefore the need to include the control variables in the regression equation to see if there would

be changes. The correlations for other variables are in line with their predicted sign with share price volatility. Price volatility has positive significant correlation with earnings volatility. The correlations for other variables are in line with their predicted sign with share price volatility

This is in line with expectation, as firms with volatile earnings are perceived to be more risky and management tends to pay lower dividends to have enough retained earnings for years when earnings are bad; this in turn affects dividend yield.

Table 2.Correlation analysis

Variables	PV	DIY	PRO	EV	LEV	AG	SZ
PV	1						
Sig. (2 tailed)							
DIY	-0.501	1					
Sig. (2 tailed)	(0.000)						
PRO	-0.381	0.657	1				
Sig. (2 tailed)	(.000)	(0.000)					
EV	0.247	0.185	-0.084	1			
Sig. (2 tailed)	(0.008)	(0.064)	(0.362)				
Debt	0.327	0.183	0.124	0.081	1		
Sig. (2 tailed)	(0.000)	(0.017)	(0.117)	(0.241)			
AG	-0.186	-0.051	0.103	0.051	-0.055	1	
Sig. (2 tailed)	(0.021)	(0.412)	(0.311)	(0.678)	(0.454)		
SIZ	-0.315	0.224	0.441	-0.251	0. 178	-0.286	1
Sig. (2 tailed)	(0.000)	(0.004)	(0.000)	(0.014)	(0.031)	(0.005)	

Table 3. The link between share price volatility, dividend yield and dividend payout ratio

Variables	Coefficient	Std. Error	t-student	Prob.
Constant	1.214	0.179	15.622	0.000
Dividend Yield	-1.356	0.241	-4.715	0.000
Payout Ratio	0.074	0.034	0.651	0.637
R-squared	0.355			
Adjusted R-squared	0.340			
Durbin-Watson stat	1.852			
F-Value	20.452			
Prob(p-value)	0.000			

Table 3 shows the results obtained from equation (1). The regression results of share price volatility with dividend yield and dividend payout show a positive relationship between dividend payout and share price volatility, and a negative

relationship between dividend yield and share price volatility. But that of dividend payout is contrary to expectation. This could be an explanation of the earlier mentioned high correlation between the dividend yield and dividend payout ratio,

which is a possible problem of multicollinearity.

Next, the control variables were added to see if there would be any change in the coefficient of dividend payout. This is given by the regression equation (2). As shown in Table 4, it was observed that the coefficient of dividend payout became negative, and all other variables were exactly as expected. This explains the fact that dividend policy on its own is not the determining factor of price volatility, but a close examination of the t-statistic and p-value of the dividend payout, (-1.224) and (0.283), respectively, showed that this was insignificant. To check the cause of this, dividend payout and dividend yield were simultaneously dropped from the equation. The results are shown in Tables 5 and 6.

The results in Table 5, which was the regression without payout, showed that there was not much difference in the values of the variables, just a slight increase or (decrease) in the coefficients. The relationship between price volatility and debt is positive and significant which implies that with higher levels of debt firms have higher volatility. Also, the relationship between price volatility and size is negative and significant that shows larger firms have more of price volatility as compared to smaller ones.

Table 6, on the other hand, shows that the previous insignificant result of payout is now significant, as well as other variables remaining as predicted. Tables 5 and 6 shows that three factors size, debt and asset growth are significant and increased the explaining power of the model. Two main variables dividend yield and payout ratio has remained significant and explained the larger portion of variation.

Table 4. The link between share price volatility, dividend yield, dividend payout, size, earnings volatility and debt

Variables	Coefficient	Std. Error	t-student	Prob.
Constant	-0.845	0.141	-1.825	0.003
Dividend Yield	-1.105	0.204	-4.21	0.001
Payout Ratio	-0.075	0.073	-1.224	0.283
Earnings Volatility	0.0365	0.084	2.615	0.008
Debt	0.462	0.120	2.320	0.000
Assets Growth	-0.352	0.114	-2.126	0.004
Firm Size	-0.253	0.123	-2.561	0.000
R-squared	0.315			
Adjusted R-squared	0.294			
Durbin-Watson stat	1.893			
F-Value	14.435			
Prob(p-value)	0.000			

Table 5. The link between share price volatility and dividend yield, size, earnings volatility and debt

Variables	Coefficient	Std. Error	t-student	Prob.
Constant	-0.659	0.155	-1.451	0.001
Dividend Yield	-1.688	0.148	-7.693	0.000
Earnings Volatility	0.176	0.086	2.926	0.000
Debt	0.654	0.224	2.560	0.000
Assets Growth	-0.233	0.080	-2.638	0.009
Firm Size	-0.152	0.086	1.845	0.004
R-squared	0.312			
Adjusted R-squared	0.294			
Durbin-Watson stat	1.887			
F-Value	16.853			
Prob(p-value)	0.000			

Table 6. The link between share price volatility and dividend payout, size, earnings volatility and debt

Variables	Coefficient	Std. Error	t-student	Prob.
Constant	-.1.045	0.254	-2.755	0.000
Dividend payout	-0.545	0.101	-6.412	0.000
Earnings Volatility	0.174	0.084	2.840	0.006
Debt	0.378	0.214	2.516	0.017
Assets Growth	-0.207	0.103	-2.462	0.009
Firm Size	-0.257	0.089	3.870	0.000
R-squared	0.349			
Adjusted R-squared	0.331			
Durbin-Watson stat	2.215			
F-Value	16.875			
Prob(p-value)	0.000			

The positive relation of price volatility with debt and negative relation of price volatility with size are according to the expectations. These results are similar to one reported by Baskin (1989). He reported that dividend yield had strong negative association with price volatility, which was twice the magnitude of the influence of any other variable. While these results are different from Allen and Rachim (1996) which showed that share price volatility and dividend yield is not associated.

5. Conclusion

Dividend policy, in today's corporations, has gone beyond this scope to include such issues as whether to distribute cash via share repurchase, or through specially designated rather than regular dividends. Other issues considered are how to balance the preferences of highly taxed and relatively "untaxed"

investors, how to maintain and improve the value of its shares and stocks in the market, etc.

The objective of this study was to examine the relationship between dividend policy (dividend yield and dividend payout) and the volatility of stock price. This was done for a period of 6 years of 2006-2011. The primarily regression model was expanded by adding control variables including size, earning volatility, leverage, debt and growth. It was based on a sample of Iranian companies in Tehran Stock Exchange. It also examined the relationship between stock price volatility and other variables, such as size, growth, earnings volatility and debt. The empirical findings suggest that there is a significant negative relationship between the payout ratio of a firm and the volatility of its stock price, and a negative relationship between dividend yield and the volatility of stock price. This result provides strong supporting evidence for (Baskin, 1989)' and Hussainey et al, (2011) study in which share price volatility and dividend yield, as well as dividend payout, are having significant association. However, the results of this study were contrary to (Allen & Rachim, 1996) results which showed that share price volatility and dividend yield are not associated. The significant negative linkage between share price volatility and dividend yield provides empirical supporting evidence for the duration effect, the rate of return effect, the pricing arbitrage effect and the information effect. In addition, significant negative impact of pay out on share price volatility

supports the rate of return and the information effect.

Based on the duration effect, it is expected that share price of companies with high dividend yield be less responsive to fluctuation in discount rate because high dividend yield implied near-term cash flow. Therefore, an inverse association between dividend yield and share price volatility is expected which is in line with this study's results. Based on results of this study, it can be concluded that managers of companies may be able to change their volatility of their share prices by altering their dividend policy. Indeed, it may be possible for them to use dividend policy as a device for controlling their share price volatility. They may be able to reduce their share price volatility by increasing their dividend payout. The overall findings suggest that the higher the payout ratio, the less volatile a stock price will be. They also suggest that payout ratio is the main determinant of the volatility of stock price.

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