Taxes and Dividend Policy (The Case of Pakistan)

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Abstract

The paper investigates different firm specific factors that influence the decision relating to corporate dividend policy. The second aim of the study is to investigate the association between taxes and dividend policy, and to study the association between dividends, profits and taxes. The study sample consists of 120 Karachi Stock Exchange listed companies. The duration of the study is from 2000 to 2011. The sources of data are Karachi Stock Exchange, Securities and Exchange Commission of Pakistan, State Bank of Pakistan and the Audited Annual Reports from companies' official websites. Using panal data technique the results indicate that variables liquidity, size and profitability have significant positive, whereas leverage has significant negative influence on dividend payments of companies. However the variable growth did not appear to have any significant influence on dividend payment behavior of companies. Using standard multiple regression for the accomplishment of second aim, we have found that the link between dependent variable profit and explanatory variable tax is positive but statistically insignificant. On the other hand dividend has direct positive correlation with profit.

Keywords: Dividend policy, Karachi Stock Exchange, Bird in the hand theory

1. 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; and 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 & 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) found that dividend policy is affected by earning per share (EPS) and by previous dividend per share. This study aims at finding specific financial factors affecting dividend in Pakistan. So the objective is to examine whether or not there exists any relationship among different financial characteristics and decision regarding dividend payments. Also the study tries to investigate the impact of taxes on dividend policy. We use data over the period 2000 – 11 for 120 companies listed at Karachi Stock Exchange. To extend our previous work on determinants of dividend policy of banks, here in this study we have used a large sample size and more years and also included some new variables.

A lot of controversies regarding taxes and dividend policy have attracted many academic interests. Financial theorists such as Brennan (1970) and Masulis & Trueman (1988) have stipulated that taxes affect organizational corporate dividend policy. If this speculation were true, changes in corporate dividend payout would be expected whenever the government changes its income tax policy Wu (1996). It is hard to deny that taxes are important to investors. Although, dividend affects the shareholders tax liability, it does not in general alter the taxes that must be paid regardless of whether the company distributes or retains its profit Brealey, Myers & Marcus (1999). Conscious of these assumptions, surrounding dividend policy and this study is directed at evaluating the effects of taxes on the dividend policy of companies in Pakistan.

2. Literature Review

According to Miller, Merton & Franco (1961) dividend policy does not affect firm value under a certain set of assumptions; which include perfect capital markets, no transaction costs, no flotation costs and no taxes. Their independence will be observed between systematic information, dividend policy and equity costs. Most of the financial researchers 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 Gul, S. et al., (2012), similarly structure of capital is affected by cash dividend Gordon (1959). Based on previous work done, Fisher Black's (1976) found that "dividends" is a puzzle. This conclusion of Fisher motivates researchers to study the dividends in more detail, especially those factors that play an important role in determining the dividend policy for emerging country like Pakistan. Different studies have been conducted on emerging countries including Pakistan by Aivazian et al., (2003). They stated that profitability and Investment opportunities play a significant role in determining dividends. Similarly Hu and Liu (2005) found a positive relationship between the current earnings of a company and the cash dividend they pay to their shareholders, and a significant negative relationship between the debt to total assets and dividends.

It was found in a study by Baker *et al.,* (2007) that profitable and larger Canadian firms pay higher dividends. A similar study was conducted by Ho (2002) in the context of Australia and Japan and found that size and dividend policy has positive correlation in Australia whereas liquidity and dividend policy are positively correlated in Japan. On the other hand risk has negative influence on dividend policy in Japan. Most of the prior literature suggests that large companies due to greater access to capital markets have better opportunity to raise funds comparatively at lower cost. Therefore they do not rely on their retained earnings and pay higher dividends to their shareholders Fama and French (2001); Holder *et al.,* (1998); Redding (1997); Eddy and Seifert (1988). According to Booth et al (2001) large firms are more mature and have easy access to capital markets and thus have little dependence on internal funds and allow high dividend paying ratios Gul, S. et al., (2012). Previous studies suggest positive association between dividend pay-out ratio and size because larger firms face higher agency costs and inferior issuing costs. A study based on agency cost, earned equity and dividend policy was conducted by DeAngelo *et al.,* (2004) who focused on why the firms pay dividends? They found that there is a significant relationship between the choices to pay or not to pay dividends and the leverage, profitability, cash balance, firm size, growth and past dividends. A similar study in the context of Ghana was conducted by Amidu and Abor (2006). The results indicate that there is positive association between profitability and dividend policy and liquidity and dividend policy. They found a positive association between the dividend payout ratio, cash flows, profitability and corporate tax.

Companies with slow growth rate and fewer investment opportunities have a greater ability to pay higher dividends. This inverse association has been supported by a large number of studies Holder *et al.,* (1998); Dempsey & Laber (1992); Jensen *et al.,* (1992); Rozeff (1982). Moreover this relationship is also consistent with the pecking order theory presented by Myers and Majluf (1984). The influence of firm specific factors on dividend payments was

studied by Ayub (2005). He found that only 23% of companies out of 180 companies pay dividends. The study period was from 1981 to 2002. Furthermore he also found that liquidity has negative whereas profitability, insiders' ownership and retained earnings have direct positive correlation with payment of dividend. In Pakistan a recent study was conducted by Ahmad and Attiya (2009) who investigate different factors determining dividend policy. The period of the study was from 2001 to 2006. 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 stable companies pay higher dividends. Growth variable did not appear to have any significance influence on dividend policy while size of the firms found to be negatively correlated. Shah, Yuan & Zafar (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.

2.1 Theoretical Models to Explain Dividend and Tax

According to Matthias A. Nnadi and Meg Akpomi (2008) the theory presented by M&M (1961) classified investors into dividend clientele, and is the basis for controversy. But after some time it was found that tax is the main culprit for marginal modification in portfolio composition, and not the differences predicted by Miller & Scholes (1978). According to Baker, Powell & Veit (2001) many academics and financial practioners at the time when the theory of M&M was suggested welcomed the conclusion that dividend policy is marginally influenced by tax. However models like after tax income of investors by Farrar & Sewlyn (1967), Model of shareholders wealth by Auerbach (1979) and Akerlof (1970) Signal Model, theoretical dividend behavioral models by Feldstein and Green (1983) and Shefrin & Statman (1984) theory of self control, free cash flow hypothesis presented by Jensen (1986) Model of cash payments of Masulis & Trueman (1988), tax adjusted model and information asymmetric theories, are all measure to expose firms dividend policy. Financial leverage according to Chang and Rhee (1990) is a crucial factor in firm's dividend policy. Companies will pay higher dividend to shareholders when they have higher amount of leverage. However it is because that tax on dividend is higher as compare to capital gain.

2.2 Research Questions

(1) Whether there is any association between dividend and taxes?
(2) How dividend policy is influenced by profit?

3. Data and Methodology

The study attempts to investigate the determinants of dividend policy and the link between taxes and dividend policy in a sample of 120 KSE listed companies. The duration of the study is from 2000 to 2011. The sources of data are Karachi Stock Exchange, Security and Exchange Commission of Pakistan, State Bank of Pakistan and the Audited Annual Reports from companies' official websites.

3.1 Measurement of Variables

3.1.1 Dependent Variable

Dependent variable of the study is dividend payout ratio which is measured as dividend per share divided by earning per share.

3.1.2   Independent Variables

3.1.2.1   Profitability

Profitability is measured by using the proxy Return on assets which is equal to net income divided by total assets. Following Belanes *et al.,(* 2007) we expect positive association between dividend policy and profitability.

3.1.2.2   Liquidity

Following Amidu & Abor (2006), DeAngelo *et al., (*2004), Ho (2002) and La Porta *et al., (*2000), we expect direct positive correlation between liquidity and dividend policy. The firm will have higher ability to pay dividends if it has higher liquidity and having stable cash flow. We have measured the explanatory variable liquidity by using current ratio which is current assets divided by current liabilities.

3.1.2.3   Leverage

Following Jensen (1986) and Rozeff (1982), we expect negative relationship between leverage and dividend policy. The reason is that debt is associated with high risk, risk increases with the amount of leverage a company uses thus high leveraged firms will pay lower dividends to reduce the risk of creditors and maintain internal cash flows to pay interest charges. We proxy leverage as total debt divided by total assets.

3.1.2.4   Growth

We have measured the variable growth oppurtunities by taking percentage increase in total assets. High growth firms have ample investment oppurtunities thus they required a very large amount of funds to finance their investment oppurtunities. Therefore they retain a higher amount of their earnings and maintain a low dividend payout.

3.1.2.5 Company Size

We have used the proxy natural log of total assets to measure size variable. Following Fama and French (2001) we expect positive influence of size on dividend policy because larger firms are more diversified have less chances of bankruptcy and more consistent cash flows thus they pay higher dividends.

3.2 Model

Following Fama and French (2001) we have used the following regression model:

$$D_{it} = \alpha_i + \sum \beta_j X_{ijt} + \varepsilon_{it}$$

Div it = β1 SZ it + β2 PROF it + β3 LEQ it + β4 LEV it + β5 GR it + e it

Where,

Div it= the amount of dividend paid by company i in period t,

SZ it= size of the firm i in period t,

PROF it= profitability of company i in period t,

LEQ it= liquidity of company i in period t,

GR it= growth of company i in period t,

e it= the disturbance term

t=1, 2, 3……T is the subscript for time and i= 1, 2, 3……N for cross sectional units;

This equation can be estimated by OLS as Fixed Effect Model.

4. Empirical Results

4.1 Descriptive Statistic

The descriptive statics which include the mean, median, standard deviation, skewness and kurtosis are presented in table 1. The dependent variable of the study is dividend policy where as liquidity, leverage, profitability, growth oppurtunities and firm size are explanatory variables.

4.2 Results of Regression

Table 2 presents the results of the OLS Regression with dividend paying behavior as the dependent variable and financial factors as independent variables. Total 69% variation in the dependent variable is explained by all five independent variables.

The variable liquidity was found to have significant positive correlation with dividend policy. We measured liquidity by using current assets divided by current liabilities. The result is consistent with the findings of Ho (2002) in the context of Australia and Japan who found that size and dividend policy has positive correlation in Australia whereas liquidity and dividend policy are positively correlated in Japan. Leverage variable have significant negative influence on dividend payments of companies. The result is similar to the findings of Ahmed and Attiya (2009) and Ayub (2005). They argued that the public debt market is not well established in Pakistan and majority of loan are sanctioned on socio-political basis and such loans are sanctioned only for a particular project and are not contributed in capital employed by the company. Therefore, debt cannot be considered as having a direct bearing on the corporate dividend policy in Pakistan. However Mayers and Frank (2004) found positive association between dividend payment behavior and leverage.

The next explanatory variable of the study is profitability which is measured as net income divided by total assets. We have found direct positive relationship between profitability and dividend payment behavior. A study based on agency cost, earned equity and dividend policy was conducted by DeAngelo et al., (2004) who focused on why the firms pay dividends? They found that there is a significant relationship between the choices to pay or not to pay dividends and profitability. A similar study in the context of Ghana was conducted by Amidu and Abor (2006). The results indicate that there is positive association between profitability and dividend policy. They found a positive association between the dividend payout ratio, cash flows, profitability and corporate tax.

Size is measured as natural log of total assets. The impact of firm size on dividend payments of companies is positive and statistically significant. Most of the prior literature suggests that large companies due to greater access to capital markets have better opportunity to raise funds comparatively at lower cost. Therefore they do not rely on their retained earnings and pay higher dividends to their shareholders Fama and French (2001); Holder *et al.,* (1998); Redding (1997); Eddy and Seifert (1988). Large firms are more mature and thus have easy access to capital markets and thus have little dependence on internal funds and allow high dividend paying ratios. Previous studies suggest positive association between dividend pay-out ratio and size because larger firms face higher agency costs and inferior issuing costs. However the variable growth did not appear to have any significant influence on dividend payment behavior of companies.

Table 3 presents the descriptive statistics for tax and dividend. Tax variable has a mean value of 49.47 with a standard deviation of 41.25 whereas dividend has a mean value of 79.10 with a standard deviation of 115.85.

We have calculated the Pearson correlation coefficient to investigate the association between tax and dividend. The result is shown in table 4, indicating a significant positive association between the two variables.

Table 4 presents the results obtained by standard multiple regressions in order to investigate the link between dividend, profit and taxes. It can be seen that the link between dependent variable profit and explanatory variable tax is positive but statistically insignificant. On the other hand dividend has direct positive correlation with profit as indicated by t-value of 4.993 and beta value of 0.835. Tax variable has a beta value of 0.154 against 0.835 for dividend variable indicating a strong association between dividend and profit. Matthias A. Nnadi and Meg Akpomi (2008) also found similar results in a study conducted in the context of Nigeria on a sample of 50 banks.

5. Conclusion

The paper investigates different firm specific factors that influence the decision relating to corporate dividend policy and also investigate the link between taxes and dividend policy, and to study the association between dividends, profits and taxes. The study sample consists of 120 Karachi Stock Exchange listed companies. The duration of the study is from 2000 to 2011. The sources of data are Karachi Stock Exchange, Security and Exchange Commission of Pakistan, State Bank of Pakistan and the Audited Annual Reports from companies' official websites. Using panal data technique the results indicate that variable liquidity, size and profitability have significant positive, whereas leverage has significant negative influence on dividend payments of companies. However the variable growth did not appear to have any significant influence on dividend payment behavior of companies. Using standard multiple regression we have found that the link between dependent variable profit and explanatory variable tax is positive but statistically insignificant. On the other hand dividend has direct positive correlation with profit.

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Table: 1 Descriptive Statistics

	DIV	LIQ	LEV	PROF	GR	SZ
Mean	79.10	155.42	165.54	9.24	68.01	8.00
Median	28.12	98.08	71.07	5.10	14.85	9.36
Std. Dev.	115.85	385.75	245.70	18.05	105.41	5.20
Skewness	4.09	11.20	6.25	-1.01	19.45	-1.23
Kurtosis	19.45	95.51	39.18	15.02	65.36	5.12

Table: 2 Regression Results of Model

Variable	Coefficient	Std. Error	t-Statistic
C	-25.52	23.124	-1.262
LIQ	0.652	0.124	3.45
LEV	-0.045	0.015	-1.98
PROF	0.205	0.245	2.23
GR	-0.012	0.005	-0.257
SZ	6.254	3.562	2.63
R-squared	0.692	Durbin-Watson stat	1.85
Adjusted R-squared	0.680	Prob(F-statistic)	0.0000

Table: 3 Descriptive Statistics for Tax and Dividend

Variables	Mean	Std. Deviation
Tax	49.47	41.25
Dividend	79.10	115.85

Table: 4 Correlation Matrix

	Tax	Dividend
Tax	1	
Dividend	0.856**	1

**Correlation is significant at the 0.01 level

Table: 5 Results of Standard Multiple Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.245	0.254		2.45	0.000
	Tax	0.124	0.071	0.154	1.435	0.154
	Dividend	0.113	0.079	0.835	4.993	0.000

Dependent variable is Profit