

# Ownership Structure, Board Composition and Dividend Policy in Pakistan

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## ABSTRACT

**Purpose:** The purpose of this study is to examine the relationship between corporate governance practices and corporate dividend policy in Pakistan.

**Design/methodology/approach:** The impact of ownership structure and board composition on corporate dividend policy of 42 Karachi stock exchange (KSE) listed non financial firms in Pakistan is investigated from 2005 – 2009. OLS regression, Logit and Probit models are applied for the estimation purpose.

**Findings:** Results show that board size, individual ownership, firm size and investment opportunities are positively and significantly associated with the amount of dividend paid. On the other hand, insider ownership and firm profitability show significantly negative impact on dividend payment. Institutional ownership and leverage have a negative affect, while board independence relates positively with the payout ratio, but the results are insignificant. The results of Logit and Probit models show that individual ownership and insider ownership are negatively, while profitability is positively and significantly related with dividend decision. Investment opportunities are positively but insignificantly related with dividend decision.

**Originality/value:** This study gives an insight to the corporate authorities of Pakistan about the reasons of low dividend paying practice. More precisely, this research work explains an important role of board composition in the designing of dividend policy in Pakistan.

**Keywords:** Ownership Structure, Board Composition, Dividend Policy, Pakistan.

## 1. INTRODUCTION

Dividend Policy has been remained one of the most controversial matters in corporate finance literature. More than a half century, financial economists and experts have been engaged in examining corporate dividend policy. “The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that don’t fit together” (Black, 1976). This debate originates from the pioneering work of Miller and Modigliani (1961), which establishes that dividend, is irrelevant in determining share value in a perfect capital market and given investment policy. Lintner (1962) and Gordon (1963) have advanced “Bird-in-the-hand” theory which states that investors prefer to receive certain dividend rather than a future risky capital gain. On the other side, some theories have established the opinion that dividend policy is relevant due to the existence of differential taxes in the market (Litzenberger and Ramaswamy, 1979; Poterba and Summers, 1984; Ang et al., 1991; Barclay, 1987). Others argue that “Clientele Effects” matter in dividend policy decisions (Pettit, 1977; Scholz, 1992). It is because investors’ preferences divide them in groups (clienteles) that tend them to select a company where their investment goals and dividend policy are aligned. Signaling models focus on allaying the information asymmetries. The former, known as “Signaling” theory, assumes that dividend is one of the sources through which a company can convey information to the market (Bhattacharya, 1979; Miller and Rock, 1985; Bali, 2003). According to this theory, dividend can mitigate information asymmetries between managers and shareholders by conveying inside information of a firm’s future prospects. The latter, known as “Agency” theory, argues that dividend reduces the costs of shareholder-manager conflict and it performs a controlling function where monitoring of firm’s management by its shareholders is inactive (Rozeff, 1982; Easterbrook, 1984; Jensen, 1986). Jensen (1986) argues that by paying dividend the discretionary resources under managerial control can be decreased and in this way the overinvestment problem can be resolved. The relationship between payout policy and agency cost is the recent development in corporate finance literature.

Besides dividend, corporate governance is also considered a useful tool to control agency cost, as a result it affects the payout policy of a firm. Corporate governance is a collection of processes, policies and laws which direct or control an organization and its concerned

individuals, with an ultimately aim to improve firm's performance and minimize or eliminate agency cost. The involved regulatory bodies in corporate governance are board of directors, management, shareholders and auditors. These corporate governance practices are considered a way to protect shareholders' rights and thus have a significant impact on the decision of dividend policy (Kowalewski et al., 2007; Bebczuk, 2005). If managers are well controlled due to the good governance practices then it results in low free cash flow available to the managers to distribute among the shareholders, thus reducing the payout (John and Knyazeva, 2006). In this way, both theoretical and empirical studies suggest a relation between corporate governance characteristics and corporate payout policy.

A rich literature on dividend policy has been produced for developed capital markets, mainly like Germany, UK and USA (see for example, Jensen and Meckling, 1976; Rozeff, 1982; Easterbrook, 1984). The researchers, in Pakistan, have identified and tested different determinants of dividend policy (see for example, Afza and Mirza, 2010; Ahmed and Javid, 2010; Ahmed and Javid, 2009; Naeem and Nasr, 2007). Moreover, Mehar (2005) has linked corporate governance with the dividend payout policy in Pakistan. But, to the best of our knowledge, very few detailed work has specifically been carried to analyze the impact of corporate governance mechanisms on dividend policy. More precisely, the impact of one of the major corporate governance mechanisms - composition of board of directors - has not been tested on payout policy despite of the fact that the code of corporate governance of Pakistan has emphasized the importance of composition of board of directors. Board of directors plays an important role in the determination of dividend policy (see for example, Klein, 2002).

Keeping in view the complex corporate environment of Pakistan, diminishing dividend paying practice and availability of limited literature in this area, this paper aims to empirically address and investigate the impact of ownership structure and board composition on corporate dividend policy of Karachi stock exchange (KSE) listed non financial companies in Pakistan from 2005 – 2009. The rest of the paper is structured as follows: a brief overview of Pakistan's corporate scenario has been presented in section 2. Review of studies is briefly discussed in section 3. Section 4 comprises of methodology and data

sources. The applications of diagnostic tests, analysis and discussion of results have been included in section 5. Section 6 carries conclusion and policy suggestions, while references are placed in section 7.

## **2. PAKISTAN'S CORPORATE SCENARIO**

### **2.1 Capital Market**

In Pakistan's capital market, there has been a sequence of many structural reforms since 1991. Amendments in Security and Exchange Ordinance 1969, Modaraba Companies and Modaraba Ordinance 1980, Companies Ordinance 1984 and the Securities and Exchange Commission of Pakistan Act 1997, all are the significant developments in corporate environment. In order to make the regulatory mechanism powerful and for its proper enforcement, SECP has issued the code of corporate governance in March 2002. This code makes the application of corporate governance practices compulsory for all the listed firms of Pakistan. At present, three stock exchanges are working in Pakistan, Islamabad Stock Exchange (ISE), Lahore Stock Exchange (LSE) and Karachi Stock Exchange (KSE). KSE is one of the best performing stock exchanges of Asia. It stood sixth among the best performing stock exchanges of emerging markets in year 2007.

### **2.2 Ownership Pattern in Corporations**

The corporate ownership structure in Pakistan is highly concentrated. Most of the companies are owned by a single owner or one particular family that not only owns but manages a huge number of affiliated firms.<sup>1</sup> A unique feature of Pakistani corporations' ownership structure is the pyramid ownership structure and cross shareholding that enables shareholder of a company to perform controlling or ownership rights on businesses of different industries.<sup>2</sup> Interlock directorship practice is also common in Pakistan.<sup>3</sup> This practice allows the ultimate

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<sup>1</sup> Two or more companies interconnected with each other.

<sup>2</sup> Chernykh (2005) has defined pyramid ownership and cross-shareholding as following: "A pyramid is a group of companies with a vertical control chain that has an ultimate owner at its foundation. This arrangement allows the ultimate owner to effectively control all companies in a chain by owning just a fraction of their equity". "Cross-holdings or reciprocal holdings – occur when the company directly or indirectly controls its own stock. In other words, two or more companies may maintain interlock ownership positions in each other".

<sup>3</sup> Interlock directorship is when a firm's employees (having executive posts) sit in the board of another firm and the other firm's employees sit in the board of the first firm.

owner to enjoy control rights (voting rights) in a business while owning a small percentage of shares.

In Pakistan, the rights of small or minority shareholders are not well sheltered. According to Companies Ordinance of Pakistan 1984, if there occurs any misconduct in a business by other shareholders, then only the shareholder who is having at least 20% shareholding in a company may ask for help from the court. The shareholders representing 10% shareholding can lodge a complain to SECP. The Company Ordinance 1984, and the code of corporate governance do not deal with the protection of rights of shareholders that have shareholding less than 10% and in this way minority shareholders do not get any legal protection of their rights.<sup>4</sup>

### **2.3 Dividend Pattern and Tax System**

In Pakistan, payment of dividend is an irregular practice. Corporate dividend depends on the income which is left after tax payment and financing for the future investment projects of a company. In Pakistan, companies prefer to retain income for additional investment in the business and that is why only 23% of the after tax profits are converted into dividend (Mehar, 2005). In Pakistan, the board of directors or their family members hold a significant part of the company's shares and directors enjoy the facilities provided by the company. Thus, such expenditure may be a cause of lower profits which ultimately discourage the practice of dividend payment and the minority shareholders suffer (Mehar, 2005).

Tax scenario in Pakistan is also different from developed countries. Income generated from the sale of stocks is exempted from capital gain tax. On the other hand, 10% withholding tax is levied on the dividend incomes and these dividend incomes are taxed as an independent income block of individual shareholders. In this way, dividend income suffers from the problem of double taxation and this adverse tax system compels individual investors to prefer capital gains to dividend.<sup>5</sup>

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<sup>4</sup> Company Ordinance 1984, section 263 and 290.

<sup>5</sup> Double taxation refers to taxation of the same earnings at two levels. Dividend income suffers from this taxation problem because the income earned by a company is already taxed at corporate level, but dividend tax is again levied on the earnings of a person who receives dividend.

The number of dividend paying companies in each sector, listed on KSE, is decreasing every year. Table 2.1 shows the percentage of KSE listed companies of different sectors that have paid dividend (either regular or irregular) from 2005-2009. The table shows that around 35% of the total KSE listed companies are paying dividend by the end of year 2009.

Table 2.1: Dividend Paying Companies - Sector Wise (2005-2009)

Name of Sector	2005		2006		2007		2008		2009	
	No. of Co.	Div Paying Co.	No. of Co.	Div Paying Co.	No. of Co.	Div Paying Co.	No. of Co.	Div Paying Co.	No. of Co.	Div Paying Co.
Close end Mutual Funds	22	16	21	15	23	16	24	19	24	16
Modarabas	38	18	35	15	35	19	35	19	34	18
Leasing Companies	21	10	21	6	20	7	19	5	18	3
Inv. Banks/Inv. Cos./Securities Cos.	26	14	25	11	24	13	27	12	30	12
Commercial Banks	20	5	22	5	22	12	26	15	25	14
Insurance	37	1	38	3	38	23	38	21	38	15
Textile Spinning	112	16	112	19	110	28	108	22	107	13
Textile Weaving	20	0	20	3	20	4	18	1	18	1
Textile Composite	57	15	58	15	58	23	59	23	60	18
Woollen	5	0	5	-	5	-	5	1	5	-
Synthetic & Rayon	19	4	19	6	19	6	19	4	19	5
Jute	6	1	6	2	6	2	6	1	5	1
Sugar & Allied Industries	37	1	37	3	37	17	37	8	37	11
Cement	21	8	21	12	21	12	21	6	21	2
Tobacco	5	2	4	2	4	3	3	2	3	3
Refinery	4	3	4	4	4	4	4	3	4	3
Power Generation & Distribution	13	3	13	3	13	3	13	3	13	5
Oil & Gas Marketing Cos.	7	6	7	5	7	5	6	6	6	5
Oil & Gas Exploration Cos.	4	4	4	4	4	4	4	4	4	4
Engineering	13	4	13	6	13	9	14	9	13	6
Automobile Assembler	13	5	13	7	13	10	12	6	13	6
Automobile Parts & Accessories	12	6	12	6	12	6	12	4	12	5

Table 2.1: (Continued)

Cables & Electrical Goods	9	1	9	2	9	4	9	4	9	4
Transport	5	1	5	1	5	1	5	2	5	2
Technology & Comm.	12	4	12	3	9	4	9	3	9	2
Fertilizer	4	4	4	4	4	4	4	4	4	4
Pharmaceuticals	9	4	8	5	8	8	8	8	8	8
Chemical	23	6	23	8	23	10	24	12	26	12
Paper & Board	12	7	10	4	10	5	10	6	10	4
Vanaspati & Allied	14	0	12	1	12	1	12	2	10	1
Leather & Tanneries	5	0	5	1	5	3	5	2	5	2
Food & Personal Care	21	11	21	12	21	13	22	14	22	14
Glass & Ceramics	10	3	10	3	10	3	10	5	10	3
Miscellaneous	26	6	27	9	27	12	28	11	26	9
<b>Total</b>	<b>662</b>	<b>189</b>	<b>653</b>	<b>205</b>	<b>651</b>	<b>294</b>	<b>655</b>	<b>267</b>	<b>653</b>	<b>231</b>
		<b>28.55%</b>		<b>31.39%</b>		<b>45.16%</b>		<b>40.76%</b>		<b>35.38%</b>

Source: KSE Annual Report (various issues).

### 3. REVIEW OF STUDIES

Dividend is considered as an unresolved issue in the field of corporate finance. Many explanations have been presented in this regard. By using a sample of 1000 US firms, Rozeff (1982) argued that in the presence of inside equity holders, the need to pay high dividend is decreased. He considered average payout ratio for a period of seven years (1974-1980) as a dependent variable. The results showed a negative relationship between inside shareholders and dividend payout, while a positive relationship between dispersed shareholding and dividend payout. Jensen et al., (1992) examined interdependence between the determinants of the three policy choices, level of inside ownership, leverage and dividend levels, by applying three stage least squares (3SLS). A cross-sectional firm data was analyzed at two points in time, 565 firms for 1982 and 632 firms for 1987. The results proved insider ownership as an important determinant of a firm's dividend policy and debt. Investment and growth were related negatively to dividend, while profitability was found positively associated with dividend.

Bathala and Rao (1995) used OLS to examine the interrelation between board composition and debt, managerial ownership, and dividend payout for a sample of 261 firms. The findings showed a negative relationship between outside board directors and inside ownership, dividend and debt leverage. The results described that outside directors on the board provided important monitoring function to control agency conflicts.

Yermack (1996) empirically examined the performance effect of board size on a sample of 792 companies for the period of 1984 – 1991. The study found a significant inverse relationship between firm's market valuation and the sizes of board of directors. The model was then tested again using different measures of firm size. The findings described that for the board size, between 4 and 10 members, the market valuation of companies declined but beyond 10 no relationship was found. The findings explained clearly that reducing board sizes may improve corporate governance.

Belden et al., (2005) studied the relationship between outside directors and dividend policy by using pooled OLS regression on the data from 524 companies, listed on the Forbes 500 list of the largest American companies, for the years 1998 and 2000. The results found that companies with more outside directors pay higher dividend.

Khan (2006) studied the relationship between dividend policy and ownership structure for a panel of 330 large listed UK firms over the period of 1985–1997. Generalized Method of Moments (GMM) was applied. The results revealed that ownership concentration and individual ownership were negatively related with dividend. A positive relationship was observed for shareholding by insurance companies and dividend. Kumar (2006) analyzed a panel of Indian firms over the period of 1994-2000 to test the relationship between corporate governance, ownership structure and dividend payout. The results revealed that ownership by corporations and directors was positively related with dividend but the squared corporate ownership was negatively related. Earning trends and investment opportunities were positively associated with dividend. The relationship between debt to equity ratio and dividend was negative.



Naceur et al., (2006) tested the determinants and dynamics of dividend policy of 48 non financial firms listed on Tunisian stock exchange for the period of 1996-2004. By using static and dynamic panel regression, the study found that high profitable Tunisian firms with more stable earnings pay high dividend because of the availability of large cash flow. It was also found that high dividend is paid by the fast growing firms, while size and liquidity were negatively related with dividend. Al-Malkawi (2007) examined the determinants of corporate dividend policy in the emerging market of Jordan by using a firm level panel data of publicly traded 160 firms on the Amman stock exchange between 1989 and 2000. The results described significant negative relationship between insiders' ownership and dividend. Firm size, age, and profitability showed a positive and significant relationship with dividend policy. The analysis also found that a firm's financial leverage significantly and negatively related to its dividend policy. Market to book ratio did not show any relationship with dividend.

Li and Huang (2007) examined the relationship between institutional ownership and cash dividend for 364 manufacturing listed companies of China over the period of 2001-2003. The results showed a significant positive impact of institutional ownership on the payout of cash dividend. Earning per share and debt ratio also was positively associated with cash dividend.

By using pooled cross-sectional observations from the top 50 listed Egyptian firms between 2003 and 2005, Abdelsalam et al., (2008) examined the affect of board composition and ownership structure on dividend policies in an emerging capital market of Egypt. A positive relationship was found in institutional non- governmental ownership and dividend policy. The results confirmed that firms with a higher return on equity and a higher institutional ownership distributed higher levels of dividend. No significant association was found between board composition and dividend decisions or payout ratio.

Kouki and Guizani (2009) tested the impact of shareholder ownership on the level of dividend paid by using a panel data of a sample of 29 Tunisian firms over the period of 1995-2001. A significant negative correlation is found between institutional ownership and dividend policy. Moreover, it was found that large size and high leverage firms pay low

dividend, whereas firms with better investment opportunities pay high dividend. Sharif et al., (2010) tested the impact of shareholder ownership on payout ratio for a panel of 41 listed companies on Tehran stock exchange (TSE) for 2002-2008. The results found a significant positive relationship between ownership concentration, institutional shareholding and payout ratio. A negative association was found between the individual shareholders and payout ratio.

### **Pakistan's Scenario**

Mehar (2005) investigated the impact of some corporate governance factors on the long term return behavior of dividend changing firms over the period of 1981-2002. OLS technique was applied on the pooled data of annual audited accounts of 180 Karachi stock exchange listed companies. The results also showed that only 23% profits in Pakistan are transformed into dividend. A positive relationship was observed between concentrated inside ownership and dividend. The results supported that companies start paying dividend after a certain level of growth.

Naeem and Nasr (2007) studied the affect of different variables to analyze the dividend trends of 180 Karachi stock exchange listed firms for the period of 1999-2004 by using OLS and Generalized Least Square (GLS). The results described that mostly firms in Pakistan avoid dividend payment or their dividend per share ranges between 0 - 2.5 rupees per share. For the whole sample, profitability was related positively; whereas, investment opportunities, liquidity and leverage were negatively associated with the payout ratio. Ahmed and Javid (2009) analyzed determining factors and dynamics of dividend policy of a sample of 320 non financial firms listed on KSE for the period of 2001-2006. By using the panel regression, they found that the firms with stable net earnings generate high cash flow so pay larger dividend. Moreover, ownership concentration and market liquidity were found positively associated with dividend payout policy. Firm's leverage, market capitalization and size showed a negative impact on dividend payout ratio.

Ahmed and Javid (2010) examined the relationship between firm's ownership structure and dividend payouts of the sample of 50 KSE-100 index non financial firms over the period of 2001-2006. The findings described a positive and highly significant relationship between the

corporate investor ownership and dividend growth in Pakistan. An insignificant link was found between director ownership, financial institutions investor and dividend. Dividend was positively associated with sale growth and earning growth. Debt equity found negative and insignificant. Afza and Mirza (2010) applied OLS regression to investigate the impact of ownership structure and cash flow, on corporate dividend policy of 100 KSE listed companies for the period of 2005-2007. According to the findings, managerial and individual ownership, cash flow sensitivity, size and leverage were negatively, whereas operating cash-flow and profitability were positively related to cash dividend.

The above reviewed literature helps in identifying the gaps in the existing literature on dividend policy particularly in Pakistan. Due to the unavailability of empirically determined affect of board of directors' characteristics on Pakistan's payout policy, this study is first of its kind that tests the impact of both, board of director's composition and ownership structure, on dividend policy of the emerging capital market of Pakistan.

#### **4. METHODOLOGY AND DATA**

Corporate dividend policy is taken as a dependent variable and measured by two proxy variables. Dividend payout ratio is the first proxy variable which is used widely to measure dividend policy (see for example, Kumar, 2006; Al-Malkawi, 2007; Naeem and Nasr, 2007; Sharif et al., 2010). Following Abdelsalam et al., (2008) dividend policy is measured by a second proxy variable, which is dividend decision. This variable follows a qualitative response regression, therefore it is measured by a dummy variable which takes the value "1" if company decides to pay dividend and the value is "0" if company decides not to pay dividend.

This study considers size of board of directors and board independence as proxy variables to measure board composition. Board size is calculated as total number of directors sitting on the board (Li, 1994). Klein (2002) argues that a large board size plays an effective role in monitoring of management; subsequently fewer dividend is required for monitoring purpose. Another view describes large size boards as less effective monitoring tool (see for example, Yermack, 1996). Thus, we expect a mixed (either positive or negative) and significant

relationship between size of board and dividend policy. Board independence is measured as a ratio of independent non executive directors to total number of directors on the board (see for example, Abdelsalam et al., 2008). Some researchers argue that delegating control to the outside independent directors may result in loss, if insiders are having more information as compared to the outside directors or these directors might be incapable or unwilling to perform monitoring function. So in such situations independent directors would not be a good monitoring mechanism of corporate governance (Fosberg, 1989; Harris and Raviv, 2008). Farinha (2003) argues that for the companies where monitoring by independent outside directors is low, higher dividend payment is a way to enhance management monitoring by external capital markets. Hence, we expect a mixed (either positive or negative) and significant relationship between board independence and dividend policy.

The independent variable of ownership structure is measured by individual, insider and institutional ownership. Individual ownership is calculated as percentage shares held by individual shareholders to the total number of shares outstanding (Khan, 2006; Sharif et al., 2010). According to Afza and Mirza (2010), individual investors in Pakistan prefer capital gains rather than receiving dividend. As a result, we expect a negative relationship between individual ownership and dividend policy. Insider ownership is measured as percentage shares held by inside shareholders to the total number of shares outstanding (Rozeff, 1982; Al-Malkawi, 2007). It is argued that insider ownership plays a strong role in reducing agency cost by aligning the interests of management and shareholders, thus reducing the need to pay high dividend (see for example, Jensen and Meckling, 1976; Rozeff, 1982; Jensen et al., 1992). Therefore, we expect a negative relationship between insider ownership and dividend policy. Institutional ownership is measured as percentage shares held by institutional shareholders to the total number of shares outstanding (Kouki and Guizani, 2009). Khan (2006) argues that an important governance role is played by institutional ownership of financial institutes. In Pakistan, financial institutes are one of the major sources that provide large finances to businesses and hence they keep strong controls on the working of management to prevent the misuse of these funds. Consequently, we expect a negative relationship between institutional ownership and dividend policy.

Firm size is measured as log of total assets (Jensen et al., 1992; Gugler and Yurtoglu, 2003). Smith and Watts (1992), explains a positive relationship between dividend payout and the firms having more assets in place. Thus, we expect a positive relationship between firm size and dividend policy. Following Al-Malkawi (2007), a proxy of earning per share (EPS) is used to measure profitability of a firm. It is believed that more profitable firms have an ability to distribute high dividend amounts along-with the generation of retained earnings to finance future investments. Like Fama and French (2001), we also expect a positive relationship between profitability and dividend policy. Debt to equity ratio is used as a proxy to measure leverage of a firm, which is calculated as dividing total short term and long term debt by total shareholder's equity (Al-Malkawi, 2007). High levered firms face a risk of bankruptcy if they fail to fulfill the commitments of fixed financial charges of debt that is why they prefer to maintain cash flow rather than distributing it in the form of dividend. Following Gugler and Yurtoglu (2003) and Kumar (2006), we expect a negative relationship. Following Aivazian et al., (2003), market to book value ratio is used as a proxy to calculate investment opportunities of a firm. The pecking order hypothesis by Myers and Majluf (1984) suggests that firms prefer to finance their investment opportunities by internal finances. Therefore, we expect a negative relationship between investment opportunities and dividend policy.

#### **4.1 Model – I**

The proxy of dividend payout ratio (DPR) is used in Model-I to measure the amount of dividend. Model-I is applied only on regularly dividend paying sample companies. Model-I will be analyzed with the help of Ordinary Least Squares (OLS) method.

We develop the equation of Model-I as follows:

$$\begin{aligned} \text{DPR}_{it} = & \alpha_0 + \alpha_1 \text{SIZEB}_{it} + \alpha_2 \text{INDNEB}_{it} + \alpha_3 \text{INVLOS}_{it} + \alpha_4 \text{INDROS}_{it} + \alpha_5 \text{FINSOS}_{it} \\ & + \alpha_6 \text{FSIZE}_{it} + \alpha_7 \text{PRFT}_{it} + \alpha_8 \text{LEVR}_{it} + \alpha_9 \text{INVET}_{it} + \mu_{it} \end{aligned} \quad (1)$$

Where:

$i = i^{\text{th}}$  firm in the sample that regularly pays dividend,  $i = 1, 2, 3 \dots 28$

$t =$  time period (2005 -2009)

$\alpha_0 =$  intercept

$\alpha = [\alpha_1, \alpha_2, \alpha_3, \dots, \alpha_9]$ , slope coefficients

$\mu =$  error term.

The expected signs of the coefficients of individual ownership, insider ownership, institutional ownership, leverage and investment opportunities are negative ( $\alpha_3 < 0$ ,  $\alpha_4 < 0$ ,  $\alpha_5 < 0$ ,  $\alpha_8 < 0$  and  $\alpha_9 < 0$ ). The expected signs of the coefficients of firm size and profitability are positive ( $\alpha_6 > 0$  and  $\alpha_7 > 0$ ), whereas, the signs of the coefficients of board size and board independence can either be negative or positive ( $\alpha_1 < 0$  or  $\alpha_1 > 0$  and  $\alpha_2 < 0$  or  $\alpha_2 > 0$ ).

#### 4.2 Model – II

The second proxy of dividend decision (DECSN) is used to measure decision of the sample companies that whether to pay dividend or not. Model-II is applied on all 42 sample companies. Since the dummy variable is a qualitative response variable, hence Logit and Probit models are applied.

Model-II takes the following form:

$$\begin{aligned} \text{DECSN}_i = & \beta_0 + \beta_1 \text{SIZE}_i + \beta_2 \text{INDNEB}_i + \beta_3 \text{INVLOS}_i + \beta_4 \text{INDROS}_i + \beta_5 \text{FINSOS}_i \\ & + \beta_6 \text{FSIZE}_i + \beta_7 \text{PRFT}_i + \beta_8 \text{LEVR}_i + \beta_9 \text{INVET}_i + \varepsilon_i \end{aligned} \quad (2)$$

Where:

$i = i^{\text{th}}$  firm in the sample,  $i = 1, 2, 3 \dots 42$

$\beta_0 =$  intercept

$\beta = [\beta_1, \beta_2, \beta_3, \dots, \beta_9]$ , slope coefficients

$\varepsilon =$  error term.

It is expected that a firm decides not to pay dividend if there occurs increase in individual ownership, insider ownership, institutional ownership, leverage or investment opportunities.

It is expected that if firm size and profitability increase, a firm prefers to pay dividend. While the expectation about the impact of board size and board independence on dividend decision is mixed.

(All variables have been explained in Table 4.1)

Table 4.1: Variables' Explanation

VARIABLE	CODE	EXPLANATION
Dividend Payout Ratio	DPR	cash dividend per share / earning after tax per share.
Dividend Decision	DECSN	dummy variable equals "1" if dividend is paid and "0" otherwise.
Board Size	SIZEB	total number of directors sitting on the board of directors.
Board Independence	INDNEB	independent non executive directors / total number of directors sitting on the board.
Individual Ownership	INVLOS	no. of shares held by individuals / total no. of shares held.
Insider Ownership	INDROS	no. of shares held by insiders / total no. of shares held.
Institutional Ownership	FINSOS	no. of shares held by institutions / total no. of shares held.
Size of Firm	FSIZE	log of total assets.
Profitability	PRFT	earning after tax / total no. of shares held.
Leverage	LEVR	total debt / total equity.
Investment Opportunities	INVET	market capitalization / total equity

### 4.3 Data Sources

The KSE listed non financial firms are selected for this study and the data are collected from a sample of 42 companies for the period of 2005 – 2009. The present study includes both the dividend paying and non dividend paying firms. For the purpose of data collection, annual reports of the sample companies have been considered as a major source.

The following criteria have been applied for the selection of sample companies:

1. The firms that have been delisted from KSE during 2005 - 2009 are excluded.
2. The firms that have changed their fiscal year during the study window are excluded.

3. All the non financial firms that have been paying irregular dividend during 2005 – 2009 are excluded and only regularly dividend paying and regularly non dividend paying firms are included.
4. All those firms that are either earning a regular profit or facing loss not more than two years of the study period are included.

## **5. EMPIRICAL RESULTS AND DISCUSSION**

Table 5.1 represents results of OLS regression, Logit and Probit models. OLS results reveal that size of board of directors has a significant and positive relationship with dividend payout ratio. This means that in Pakistan large boards are not an effective tool of monitoring. To keep the management under control and to limit misuse of cash by management, high dividend payout is declared. Due to the lack of clearly defined roles of non executive directors in the code of corporate governance of Pakistan, Pakistani corporations' boards may include incapable non executive directors who fail to bring objectivity and correct strategy making to the board. That is why; board independence has shown a positive but insignificant relationship with payout ratio.

OLS results show a positive and significant relationship between individual ownership and payout ratio. Due to uncertain capital market, whenever a company declares to pay dividend, these minority individual investors prefer to obtain high amounts of dividend, supporting “Bird-in-the-hand theory” by Lintner (1962) and Gordon (1963). Results show a significant and negative relationship between insider ownership and dividend payout. This reveals that in Pakistan, insider shareholders use their discretionary power to increase funds under their control and hence reduce the amount of dividend paid. Similar results were found by Al-Malkawi (2007) and Afza and Mirza (2010). A negative but insignificant relationship has been observed between institutional ownership and dividend payout ratio. In our study, majority of the shares of the sample companies are not owned by financial institutes (the average shareholding by institutes is 12.75 percent), that is why this negative impact of institutional ownership on payout ratio is insignificant.



OLS results show that firm size has a significant and positive relationship with payout ratio. This positive relationship has also been observed by Al-Malkawi (2007). Opposite to our expectations, a negative and significant relationship between profitability and payout ratio has been observed. One of the reasons of this relationship is the time period of this study (2005-2009) which involves both; the economic boom of 2007 and the worst depression and economic downfall of 2008. Accordingly, during this period, organizations were earning short term profits and trying to build up their reserves to deal with any unexpected critical market situation. Therefore, even profitable companies preferred to decrease the amount of dividend. The results show a negative but insignificant relationship between leverage and payout ratio. As Mehar (2005) describes that in Pakistan there is no well established market for public debt. Socio political factors are given importance to sanction a loan. Moreover, loans are granted on political reasons. Thus, debt is not considered as having a significant impact on dividend payout ratio in Pakistan. From the OLS results, contrary to expectations, the coefficient of investment opportunities is found positive and significant. This finding is in line with Aivazian et al., (2003) and Kouki and Guizani (2009) for Jordanian and Tunisian firms respectively. This positive relationship exists because our regularly dividend paying sample companies have achieved a certain level of growth and now they pay high amounts of dividend in the time of expansion. Overall explanatory power of Model-I is 72 percent.

All the variables that are found insignificant in Model-I, have been dropped and only significant variables are included in Model-II. In Model-II, the results of logit and probit models show that the firms, having large number of directors in their boards, decide to pay regular dividends. As expected, individual ownership is negatively and significantly related with dividend decision for both Logit and Probit models. The category of individual investors, in Pakistan, consists of brokers, traders, jobbers and upper middle class income people. They expect to gain a higher return on their investments so they usually prefer capital gains because of the exemption of capital gain from tax. Insider ownership also shows negative and significant relationship with dividend decision for both logit and probit models.

Firm size has been found negatively associated with dividend decision for both the models because firms with large size have high liabilities and to avoid costly financing, they do not

pay dividend (see for example Afza and Mirza, 2010; Ahmed and Javid, 2010). Similar to the results of Abdelsalam et al., (2008), profitability is positively and significantly related with dividend decisions. Like Al-Malkawi (2007), the results of logit and probit models show a positive but insignificant relationship of investment opportunities with dividend decision. This relation is insignificant because our sample companies are a combination of those firms which either have achieved a certain growth level or they are still growing. Overall explanatory power of Model-II is 77 percent for both logit and probit models.

Table 5.1: Model-I and Model-II – logit and probit models

Variables	MODEL-I (paying companies)	MODEL-II (paying and non paying companies)	
	OLS	Logit Model	Probit Model
	DPR (Y <sub>1</sub> )	DECSN (Y <sub>2</sub> )	DECSN (Y <sub>2</sub> )
Constant	-104.4139* (-2.561983)	17.6116 (1.340416)	9.496137** (1.825423)
SIZEB (X <sub>1</sub> )	5.962719* (3.989878)	1.13857 (1.50748)	0.620391* (2.039687)
INDNEB (X <sub>2</sub> )	0.767733 (0.075403)	-	-
INVLOS (X <sub>3</sub> )	0.563055** (1.736098)	-0.2152* (-2.28714)	-0.123059* (-2.965823)
INDROS (X <sub>4</sub> )	-0.319684* (-3.023678)	-0.0918* (-3.20741)	-0.053295* (-3.724795)
FINSOS (X <sub>5</sub> )	-0.309793 (-1.028555)	-	-
FSIZE (X <sub>6</sub> )	10.57140* (2.290757)	-2.5077 (-1.24546)	-1.327557** (-1.828975)
PRFT (X <sub>7</sub> )	-0.177997** (-1.862708)	0.58772* (2.152984)	0.332708* (2.948107)
LEVR (X <sub>8</sub> )	-1.912176 (-0.526014)	-	-
INVET (X <sub>9</sub> )	2.143642* (2.332728)	0.68099 (0.792006)	0.343532 (0.956892)

R <sup>2</sup> / McFadden R <sup>2</sup>	0.721093	0.767668	0.770582
Adjusted R <sup>2</sup>	0.699304	-	-

Note: \* and \*\* indicate the significant coefficients at 5% and 10% respectively.

## 6. CONCLUSION AND POLICY IMPLICATIONS

The corporate governance practices have been introduced to the emerging capital market of Pakistan to establish and maintain a good quality corporate culture in the organisations and to motivate directors and managers to protect investors' rights. In Pakistan, there are very few companies that are regularly paying dividend. Table 2.1 shows that around 35% of the total KSE listed companies are paying dividend, either regular or irregular, by the end of year 2009. Therefore, this paper aims to empirically address and investigate the impact of ownership structure and board composition on dividend policy of KSE listed non financial companies in Pakistan from 2005 – 2009. The estimated results show that the companies having large boards not only decide to pay regular dividend but also pay a high amount of dividend. Board independence has not shown any significant impact on payout ratio. It is observed that the companies having high individual ownership decide not to pay dividend, but when their majority individual investors prefer certain dividend on uncertain capital gain, then companies pay high amount of dividend. Insider shareholders take advantage of the discretionary resources under their control and decide to pay irregular and small amount dividend. The negative relationship between institutional ownership and payout ratio has not revealed any significant results.

The large size companies mostly decide not to pay dividend, but because of high cash flows and easy accessibility to capital markets when they pay dividend, the magnitude is quite large. In Pakistan, highly profitable firms pay dividend regularly but the amount declared is small for our study time window. High leveraged firms show negative and insignificant association with the amount of dividend. Finally, it has been found that growing firms decide to pay dividend on regular basis and the dividend amount is high.

On the basis of findings, this paper suggests that large number of directors serving in a board can be one of the ways to improve dividend paying practice in the emerging capital market of

Pakistan. But at the same time the proportion of number of executive and non executive directors should be well balanced. SECP can play an important role in this regard by introducing some guidelines about the number, roles and responsibilities of both types of directors. The code of corporate governance of Pakistan makes it necessary to include at least one independent director in the board who represents minority shareholders. But during the data collection process, it has been observed that hardly 20 percent of the sample companies fulfil this requirement. Therefore, SECP should plan some penalties for those companies that are not following the practices of code of corporate governance. The corporate tax authorities should minimise tax rate on dividend income, so that individual investors prefer receiving dividend. The results show that profitable firms in Pakistan usually decide to pay dividend. Consequently, these profitable firms should be facilitated by the government regarding their local as well as global operations to safeguard their profits, so that high magnitude dividends should be regularly paid by these companies. Moreover, some incentives or rewards should be announced for the companies that regularly pay dividend. This practice will encourage all the other companies to pay regular dividend.

The data has been gathered for 5 years only i.e. 2005-2009 and only non financial listed companies that regularly pay and do not pay dividend have been included in the sample. Despite these limitations, the results of this study and above suggested policies will help the management of corporations and policy makers to design their future policies where dividend payment would be encouraged and the diverse range of shareholders would also be satisfied. In further, researchers may extend this work by comparing financial and non financial firms, public and private firms or by including the firms owned by state. The impact of third element of corporate governance, composition of audit committee, can also be tested on dividend policy.

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