



## The Impact of Institutional Ownership on Dividend Policy in Pakistan

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### ABSTRACT

The purpose of the paper is to study the effect of institutional ownership on dividend policy. In order to study the affect of institutional ownerships on dividend policy the institutional owners are segregated as joint stock companies, foreign companies, insurance companies, banks, modarabas and mutual funds. Total 104 firms listed at Karachi Stock Exchange for a period of eight years were taken as sample for analysis. Fixed effect model of panel data regression is used for finding the relationship between institutional ownership and dividend policy. The results show that joint stock companies' ownership, foreign companies' ownership and insurance companies' ownership have positive and significant effect on dividend payment due to their high percentage of shares in Pakistani firms and having strong influence on decision making power of the firms' managers. Banks, modarabas and mutual funds ownerships show no significant relation with dividend payment. The results suggest that firms can attract big institutional owners through growth in their dividend payment which will be helpful for them to get shareholder confidence along with improvement in firm's performance and high market capitalization.

**KEY WORDS:** Institutional ownership, Dividend policy, Pakistan

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### 1. INTRODUCTION

Dividend decision is one of the most important financial decisions and have prominent place in corporate finance. A lot of empirical work has been done in this regard but still it is thought a most controversial topic in financial literature. In financial management dividend policy is one of the top ten puzzles. In emerging market, this policy gets more importance as how much of the profit is paid to investors as dividend and how much should be retained by the business in order to boost investment.

Investors are the key finance provider of a corporation. The environment where direct control by investor is not possible, they can use the dividend policy as a tool to discipline the managers so that they work for the owners' best interest. The agency theory of dividend got significant importance in finance literature during past three decades. Agency theory suggests that profit, if not paid as dividend, may be used by the insiders/ managers for their personal use or may be invested in non- profitable projects, which may result in agency cost for the firm. Dividend payment reduces this agency cost. This reveals the importance of ownership in dividend policy. Institutional owners are more prominent in reducing agency cost than individual owners because of having more market information and strong decision making power.

The study focuses on the impact of institutional ownership on dividend policy in Pakistan. Pakistani firms have pyramid structure of ownership where one owner controls the activities of whole firm. The institutional owners invest huge amount of their resources, so they are eager to gain information about the company policies so the influence the company decision regarding investment

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and dividend payment. In Pakistan previous researchers, such as [1] and [2] studied the affect of institutional ownership on dividend policy. But different institutions have different nature of business may have different motives to invest. To settle their claims, cash requirement is greater in pension fund and insurance companies so these companies prefer high dividend. On the other hand mutual funds focus on capital appreciation as against dividend and other earnings. Similarly, banks, at the cost of low dividend earning, may prefer more securities as assets. Foreign institutional owners may like cash dividend because of more political and economic risks. This reveals that when the institutional ownership is taken as a whole and looks its relationship with dividend policy it gives us vague picture because of the different preferences of different kind of institutional owners. [1] categorized the institutional owners as insurance ownerships, modaraba ownership, national investment trust and miscellaneous ownership (banks, joint stock companies, foreign companies etc) and analyzed their impacts on dividend policy in Pakistan. But miscellaneous ownership (banks, joint stock companies, foreign companies etc) make the large proportion of institutional ownership in Pakistani firm, if taken as one category, may mislead the results. So the present study aims at fullfilling this knowledge gap by taking seven major institutional owners that is joint stock companies, modabahs, insurance companies, banks, investment companies, mutual funds and foreign companies as major determinants of dividend policy.

The objectives of this research study are:

1. To study the affect of each institutional owner (joint stock companies, modabahs, insurance companies, banks, investment companies, mutual funds and foreign companies) on dividend policy in Pakistan
2. To find the effect of institutional ownership as whole on dividend policy in Pakistan

This research study will be helpful to managers in designing their dividend policies and also to researchers and scholars in their researches. This is an important addition to literature related to corporate finance in general and literature related to dividend policy in particular.

## 2. LITERATURE REVIEW

The past literatures related to institutional ownership and its relationship to dividend policy were reviewed critically for developing of conceptual framework and interpretation of results. [3] studied the relationship between the ratio of institutional ownership and dividend payout ratio in non- financial listed companies of Chinese A-share market. The results of this study revealed that that institutional ownership ratio in these listed companies has positively related to dividend payout ratio.

Agency cost incurs as the managers have more knowledge and information regarding business environment ant share holders cannot directly ensure where the managers are always acting in shareholders best interest. So in order to reduce agency cost, the dividend payment can be used as a signal that managers are acting in the best interest of the shareholders. According to [4] dividends enables the companies to reduce the problems of overinvestment and also enables the enterprises to control the agency cost. They argued in corporate world whenever dividends are not paid to shareholders, managers then try to use these resources for their personal benefits. Dividend policy enables the enterprises to control the agency cost.

[5] thoroughly studied the dividends payout policy of Malaysian companies where ownership structure is closely held, he stated that as in the centralized ownership structure shareholders get higher dividends and they can greatly influence the dividend policy, therefore companies try to generate higher dividend payout. [5] observed in their study that decisions of corporations could be greatly influence by controlling shareholders. Policies can be implemented by them & they can be benefited from these policies at the expense of minority shareholders benefits.

Ownership structure can affect the dividend payout policy. [7] also observed the relationship between these two variables in their literature. Although from the results of various previous studies it has found that a relationship exists between the dividend policy and management ownership [7], [8], but still institutional ownership has space to be considered. [9] and [10] recommended that there is remarkable relationship between the dividend policy and institutional ownership.

In the context of developing economy of US, [11] analyzed the relationship between institutional ownership and dividend payout of US public enterprises. By applying the Thomson financial data base, they studied financial data of 79,010 public companies from the year 1980 to 1986. They examined the impact of dividend paying enterprises on institutional investors. According to their observations investors prefer to invest money in the firms paying fewer dividends instead of those that do not pay dividends. Institutional investors also give preference to those companies which frequently repurchases the shares. However, higher institutional shareholdings and concentration of shareholdings do not increase dividend payouts.

[12] analyzed the relationship between corporate governance & dividend payouts in the context of growing economy of India. In his study by using the panel data of Indian companies from 1994 to 2000, he found that most important factors of dividend payouts policy are the firm's financial structure, investment opportunities, dividend history, earning trends, and the ownership structure. He reported a positive alliance between earnings trends and debt-equity and negative alliance between investment opportunities and debt-equity ratio. Institutional ownership is negatively associated with dividend payout in Indian companies.

[13] study concerned to examine the determinants of dividend policy in the context of Pakistani economy. They used the data of 320 companies listed at KES for the period of 5 years ranging from (2001 to 2006). Initially by employing the Panel Regression they examined the [14] and [9] proposed models, which were the extension of partial adjustment models. They found in their study that Pakistani firms greatly depend on previous dividend payout and current resources to fix their dividend payments. Then, they analyzed the determining factors of corporate payouts and stated that companies tend to pay higher dividends if they have stable and high revenue. Results showed dividend payout ratio is positively related to both ownership concentration and market liquidity. It is found that payout cannot be influenced by growth opportunities. Contrary to the existing literature they stated there is a negative relationship between the size of the company and dividend policy. On the basis of these findings they concluded that large Pakistani firms often prefer to invest and try to increase their own assets instead of paying dividend to their shareholders.

[15] analyzed the dividend policy of 535 Pakistani's enterprises for the period of 20 years ranging from 1985 to 2005. By using the probit regression model they empirically found that the most important factors which greatly influenced dividend behavior of these companies are profitability, liquidity and firm leverage. All the firms which have high stock often avoid to pay dividend while on the other hand big corporations likely to pay large dividends to shareholders. Results showed all the firms with greater growth opportunities give less attention to increase their dividend payouts but on the other hand government ownership in companies increases the dividend payouts but companies with surplus growth opportunities do not necessarily increase their dividend payouts. According to them financial reforms have positive impacts on the dividend decision, and on the basis of these findings they stated that secondary market development can effectively influence the dividend decisions.

By taking Sample of 120 Listed Companies of Karachi Stock Exchange (KSE), Pakistan, for the period of 5 years ranging from (2002 to 2007) [1] investigated the impact of institutional ownership and growth opportunities on dividend policy. Based on OLS and Tobit regression models, findings of their study showed that growth opportunities, profitability and shares held by insurance firms have positive

effects, on the other hand dividends are negatively affected by leverage. However, no significant impact of ownership by Modaraba, NIT and miscellaneous institutions on dividend payout is observed. Big firms tend to pay lower dividends however no significant relationship has observed between size of the company and dividend payout.

A lot of other factors affect dividend policy and they are taken as control variables in many studies while analyzing the impact of institutional ownership on dividend policy. Profit is the main indicator of dividend policy [1],[16], [13]. Earnings per share, as a proxy of profit, indicate that dividend is paid from net profit divided by number of shares. Some research studies e.g. [17],[18]and [13] showed that lagged dividend i.e. past year dividend has significantly positive impact on dividend payout ratio and so it is an important indicator of dividend policy. According to [19] and [13], slake is an important determinant of dividend policy. Dividend is paid out of profit after availing the entire projects with high net present value. The under investment problem can be solved by slake when no external financing is available.

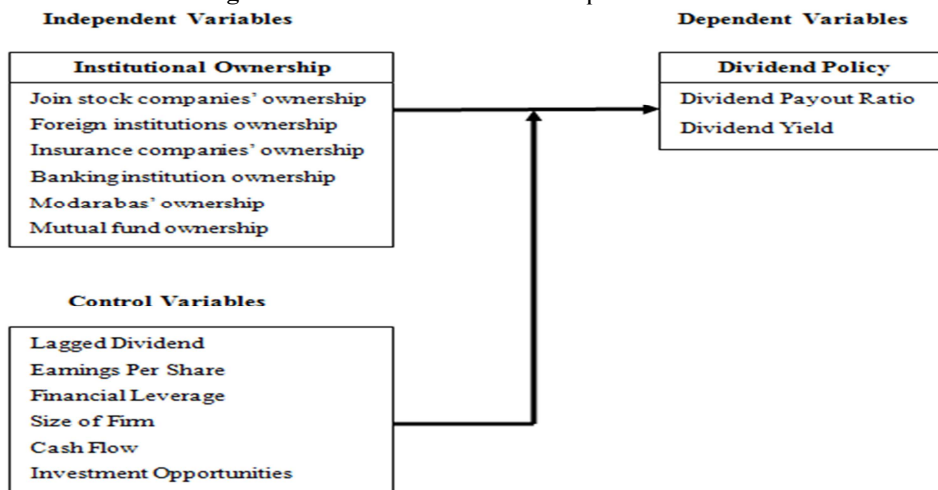
Free cash flow of the firm can be used in less profitable project by managers and thus dividend help in dipping this free cash flow. On other hand, if their shortage of cash management will be unable to pay any dividend [20],[21]. The debt covenant hypothesis suggested after issuing debts the firm will pay low or even no dividend. [22] showed that firms with high debt burden ad low paid dividend ratio. Large firms have more excess to external financing and thus the usually pay high dividend. Several studies showed positive relation between firm size and dividend policy [22], [23].

The review of above literature reveals that a lot of work has been done on the relationship institutional ownership and dividend policy but a little evidence is available how each individual institution affects the dividend policy because of their different nature of business. [1] categorized the institutional owners as insurance ownerships, modaraba ownership, national investment trust and miscellaneous ownership and analyzed its impact on dividend policy in Pakistan. In this study we further segregated the institutional owners as joint stock companies, modabahs, insurance companies, banks, mutual funds and foreign companies and look at their imapcts on dividend policy.

### 2.1 Conceptual Framework

Based on above literatures the following conceptual model has been developed.

**Figure 1:** Schematic model of conceptual framework



**2.2 Variables of the study**

**Dependent variables.** Two dependent variables were used in this study. Almost all the researchers used Dividend Payout Ratio as dependent variable [1], [13], [24]. For strengthening of outcome another measure of dividend is also taken i.e. Dividend Yield which shows the relation of between dividend and stock price [16], [13].

**Independent variables.** The present study categorized the institutional ownership and each category is taken as independent variable. The categories that are considered in this study are investment companies' ownership [1], insurance companies' ownership [1], modaraba' ownership [1], joint stock companies' ownership, foreign companies' ownership, banks' ownership, mutual fund ownership.

**Control variables.** This study also considered some control variables. These are lagged dividend [13],[17], [18], earning per share [1], [13], firm size [22], [25], financial leverage [1], [8], [21], [25], cash flow [20], [21] and investment opportunities [13], [19].

The definitions of variables and expected relationship of independent and control variables with dependent variables are summarized in table 1 and 2.

**Table 1:** Detail of dependent and independent variables

Variables	Abbreviation	Definition / Calculation	Expected Relation
<b>Dependent Variables</b>			
Dividend payout ratio	DPO	Dividend per share / Earning per share [1], [13], [24]	
Dividend yield	DY	Dividend per share / Price per share [13], [19]	
<b>Independent Variable</b>			
Joint stock companies ownership	JSC	% of Shares	+
Foreign companies ownership	Frgn	% of Shares	+
Investment companies ownership	InvCo	% of Shares [1]	+
Insurance companies ownership	Insrnc	% of Shares [1]	+
Banking ownership	Banks	% of Shares	+
Modarabas' ownership	Mod	% of Shares [1]	+
Mutual fund ownership	MF	% of Shares	+

**Table 2:** Detail of control variables

Variables	Abbreviation	Definition / Calculation	Expected Relation
<b>Control Variables</b>			
Lagged dividend	$D_{t-1}$	Past year dividend [13], [17], [18]	+
Earnings per share	EPS	Net Profit / number of share holder [1], [13], [16]	+
Firm size	Size	Log of total Assets [22], [25], [26]	+
Financial leverage	FL	Total liabilities/Shareholders' equity [1], [9], [21]	-
Cash flow	CF	Log of cash flow from operating activities [20], [21]	+
Investment opportunities	Inv	Accumulated retained earnings/ Total assets [13], [19]	-

**2.3 Study hypothesis**

Followings are the hypotheses of this study

- H1: Joint stock companies' ownership has significant impact on dividend policy.  
 H2: Foreign institutional ownership has significant impact on dividend policy. .  
 H3: Banks' ownership has significant impact on dividend policy.  
 H4: Insurance companies' ownership has significant impact on dividend policy.  
 H5: Modaraba companies' ownership has significant impact on dividend policy.  
 H6: Mutual Funds' ownership has significant impact on dividend policy.

### 3. METHODOLOGY

The main aim of the research study is to see the impact of institutional ownership on dividend policy. This is time- series cross- sectional study which looks at different subjects and how they vary over time [27]. Firms, constituting our sample, were taken from the company registered at Karachi Stock Exchange (KSE) because of the rationale that firms listed at stock market make their shares attractive by presenting their earnings [28], [29]. Firms which do not have banking ownership, modaraba companies' ownership; joint stock companies' ownership, insurance companies' ownership, mutual fund ownership and foreign companies' ownership were excluded from our sample. Finally, firms must be nonfinancial firms and have complete data related to our variables for the period covered by this study constituted our sample. Data related to our variables was taken from the published annual reports of the respective firms, official website of State Bank Of Pakistan and Karachi stock exchange. At the end, 864 firms- years observations for 104companies for 8 years period from 2005 to 2012 were concluded.

For the purpose of analysis, first descriptive statistics was applied in order to describe the data [30]. The correlation analysis was done in order to determine the degree of relationship among the variables [31]. Fixed effect model for penal data was applied to see the intercept difference for each company and each period having separate dummy variables for each firm and period. The fixed effect model takes into consideration that explanatory variables are associated with the company particular effect. In this research, dummy variable  $\eta_i$  (eta) is used to measure the particular effect of the firm and

$\lambda_t$  (lambda) is time dummy variable which remain same across the firms but change over time [27], [32]. For the purpose of analysis, SPSS (20.0) was used.

The following regression models have been used in this study.

$$(DPO/DY)= \beta_0+\beta_1JSC_{it}+\beta_2D_{(t-1)it}+\beta_3EPS_{it}+\beta_4Size_{it}+\beta_5FL_{it}+\beta_6CF_{it} +\beta_7Inv_{it}+\eta_i+\lambda_t+\varepsilon_{it} \quad (1)$$

$$(DPO/DY)= \beta_0+\beta_1Frgn_{it}+\beta_2D_{(t-1)it}+\beta_3EPS_{it}+\beta_4Size_{it}+\beta_5FL_{it}+\beta_6CF_{it} +\beta_7Inv_{it}+\eta_i+\lambda_t+\varepsilon_{it} \quad (2)$$

$$(DPO/DY)= \beta_0+\beta_1Banks_{it}+\beta_2D_{(t-1)it}+\beta_3EPS_{it}+\beta_4Size_{it}+\beta_5FL_{it}+\beta_6CF_{it} +\beta_7Inv_{it}+\eta_i+\lambda_t+\varepsilon_{it} \quad (3)$$

$$(DPO/DY)= \beta_0+\beta_1Insrnc_{it}+\beta_2D_{(t-1)it}+\beta_3EPS_{it}+\beta_4Size_{it}+\beta_5FL_{it}+\beta_6CF_{it} +\beta_7Inv_{it}+\eta_i+\lambda_t+\varepsilon_{it} \quad (4)$$

$$(DPO/DY)= \beta_0+\beta_1Mod_{it}+\beta_2D_{(t-1)it}+\beta_3EPS_{it}+\beta_4Size_{it}+\beta_5FL_{it}+\beta_6CF_{it} +\beta_7Inv_{it}+\eta_i+\lambda_t+\varepsilon_{it} \quad (5)$$

$$(DPO/DY)= \beta_0+\beta_1MF_{it}+\beta_2D_{(t-1)it}+\beta_3EPS_{it}+\beta_4Size_{it}+\beta_5FL_{it}+\beta_6CF_{it}$$

$$+\beta_7\text{Inv}_{it}+\eta_i+\lambda_i+\varepsilon_{it} \quad (6)$$

#### 4. ANALYSIS AND RESULTS

##### 4.1 Descriptive statistics

Descriptive statistics for different variables of this study with range mean and standard deviation are given in table 3. The mean value of dividend payout is 34.3% with standard deviation of 46.3% and having a range of 3.134. The mean value of dividend yield is 3.6% with standard deviation of 4.6%. The mean value of shares holding by joint stock companies = 23.6%, by foreign institution = 7.1%, by insurance companies = 5.9%, by banks = 3.45, by modaraba = 1.65 and by mutual funds = 1.2% in the firms taken as sample. The mean value of lagged dividend is Rs. 75 in our sample that of earning per share is Rs.35.312. The size of the firm is measured by log of total assets. The means value of the firm size is 0.216. The financial leverage, measured by total liability/ total assets, has a mean value of 50.2% with standard deviation of 22.9%. Log of cash from operating activities is taken as proxy for cash flow has a mean value of 0.187 and accumulated retained earnings / to total assets is used as proxy for investment opportunity has a mean value of 2.7% with standard deviation of 34.3%.

##### 4.2 Correlation Analysis

Correlation analysis is used to find the degree of association amongst different variables of this research study and is shown in table 4.

The results show that joint stock companies' ownership is positively correlated with dividend payout as indicated by positive coefficient of 0.267 ( $p \leq 0.01$ ) and the correlation coefficient between joint stock companies' ownership and dividend yield is 0.293 ( $p \leq 0.05$ ). This shows that joint stock companies' ownership is positively related with dividend policy. Foreign companies ownership has  $r = 0.160$  ( $p \leq 0.05$ ) with dividend payout and  $r = 0.143$  ( $p \leq 0.05$ ) with dividend yield showing that foreign institutional investors prefer dividend. The correlation between insurance companies and dividend yield is 0.009 ( $p \leq 0.05$ ) revealing that insurance companies in Pakistan prefer cash dividend to settle their customers' claim. The correlation of banks ownership, modaraba and mutual fund is insignificant with both dividend payout ratio and dividend yield. This shows that these companies ownership do not affect dividend policy. Lagged dividend is positively correlated with dividend policy as indicated by correlation results. Similarly earning per share and free cash flow of the firm is positively and significantly correlated with dividend policy. Investment opportunity has correlation coefficient of 0.012 ( $p \leq 0.05$ ) with dividend payout ratio showing negative relationship. This shows if the firm has a profitable investment opportunity, it does not pay dividend.

##### 4.3 Regression analysis

Tables 5 and 6 shows the results of fixed effect model of panel data regression.

The first modal shows the relationship between joint stock company ownership and dividend policy. The result shows that joint stock companies' ownership is positively and significantly related with dividend payout ratio and dividend yield at 1% confidence level. This means that joint stock companies have significant influence on dividend policy because of their high percentage of share as institutional ownership in Pakistani firms. The possible explanation for positive relationship between joint stock companies reveals that joint stock companies use dividend payment as a mean of monitoring the managers by compelling the firms to distribute the extra cash flow among the shareholders and thus reducing agency cost [33], [34]. Furthermore, in Pakistan, as many of the firms are small, attract the big investors by paying high dividend.

In the second model the joint stock companies' ownership is replaced by foreign ownership and found its relationship with dividend policy. The beta coefficient of foreign institutional ownership with dividend payout is 0.147 significant at 5% confidence level and with dividend yield is 0.217 also significant at 5% confidence level. This shows that foreign institutional ownership has positive and significant impact on dividend policy. This result is in line with agency theory, that managers of the firm can use the free cash flow in unprofitable projects, as the foreign institutional investors have no direct control over the firm's decisions so they control the behavior of the firm's manager by dividend payment [13],[17], [18]. Also, due to political instability and high terrorism threats in Pakistan the foreign investors prefer cash dividend on their investments instead of increasing their percentage of shares.

In the third modal insurance companies ownership is taken as independent variable along with control variables. The result reveals that insurance companies' ownership has also positive and significant impact on dividend policy having beta coefficient of .008 at 5% significant level with dividend payout and 0.037 at 1% significance level with dividend yield. This result positive relation of insurance companies with dividend policy is consistent with [1]. In Pakistan, as insurance companies use cash for settlement of their customer claims prefer cash dividend [1].

The fourth model shows the relationship between banks and dividend policy. The results show that relationship of banks' ownership having beta coefficient of 0.006 with dividend payout and 0.021 with dividend yield but both results are insignificant. This reveals that banks' ownership in Pakistan has no effect on dividend policy so banks, at the cost of low dividend earnings, may prefer more securities as assets [16].

In the fifth model the banks' ownership is replaced by modaraba ownership. The result shows that beta coefficient of modaraba with dividend payout is 0.011 and with dividend yield is 0.002 but results are insignificant. These results are in line with [1]. The insignificant relationship of modaraba ownership with dividend policy is due to the low ownership proportion of modaraba ownership in Pakistani firms because modaraba business is not strongly established in Pakistan [1].

In the sixth model mutual fund ownership is taken as independent variable. The beta coefficient for mutual fund ownership is .004 with dividend payout and 0.015 with dividend yield but both are statistically insignificant. This reveals that mutual fund ownership have no significant impact on dividend policy in Pakistan. First reason for this insignificant result might be the low proportion of ownership of mutual fund in Pakistani firms. Secondly, mutual funds focus on capital appreciation as against dividend and other earnings [16].

The study considered some control variables. The first control variable is lagged dividend. The lagged dividend show positive and significant relationship with dividend policy in all models. This shows that past year dividend plays an important role in current year dividend. This positive relation of lagged dividend and dividend policy is consistent with previous studies such as [13], [17] and [18]. The second control variable earning per share shows positive and significant relationship with dividend payout and dividend yield. This shows that with increase in profitability the firms pay more dividend [1], [13], [17]. The next control variable firm's size shows insignificant relationship with dividend policy. [1] also found insignificant relationship between size of the firm and dividend policy in Pakistan. This result contradicts with [13] and [18] who reported negative and [16] found positive relationship between size of the firm and dividend policy.

The other control variable financial leverage, as expected, has significantly negative relationship with dividend policy as revealed by the analysis of all models.[22] showed that firms with high debt burden have low paid dividend ratio. This shows that Pakistani firms must have cash in order to retire debts with interest and thus these firms pay low or dividend [1]. Free cash flow has positive and statistically significant relationship with dividend policy in all models. If a firm has free cash flow it



will be in better position to pay high dividend. On other hand, if their shortage of cash management will be unable to pay any dividend [21], [22]. The last control variable the investment opportunity is significantly negative relationship with dividend policy in all models. Some previous studies like [13] and [19] also reported negative between investment opportunity and dividend policy. This shows that if a Pakistani firm has an investment opportunity with positive NPV it will retain dividend in order to avail that profitable investment opportunity.

**Table 3:** Descriptive statistics

	Range	Mean	Std. Deviation
DPO	3.134	0.343	0.463
DY	0.106	0.036	0.046
JSC	0.635	0.236	0.173
Frgn	0.113	0.071	0.268
InvCo	0.131	0.050	0.158
Insrnc	0.103	0.059	0.224
Banks	0.078	0.034	0.243
Mod	0.040	0.016	0.039
MF	0.043	0.012	0.029
D <sub>t-1</sub>	1250.000	75.002	30.372
EPS	87.221	35.312	9.342
Size	1.75	0.216	0.378
FL	1.09	0.502	0.229
CF	0.625	0.187	0.113
Inv	0.798	0.027	0.343

**Table 4:** Correlation

	DPO	DY	JSC	Frgn	Insrnc	Banks	Mod	MF	D <sub>t-1</sub>	EPS	Size	FL	CF	Inv
<b>DPO</b>	1.000													
<b>DY</b>	0.744**	1.000												
<b>JSC</b>	0.267**	0.293*	1.000											
<b>Frgn</b>	0.160*	0.143*	0.128	1.000										
<b>Insrnc</b>	0.043	0.009*	-0.123**	0.054**	1.000									
<b>Banks</b>	-0.031	-0.007*	0.095*	-0.032	0.253	1.000								
<b>Mod</b>	-0.009	-0.003*	0.004**	-0.014*	0.022*	0.029*	1.000							
<b>MF</b>	0.001	-0.012	0.010	0.213*	0.092**	0.018*	0.056**	1.000						
<b>D<sub>t-1</sub></b>	0.441*	0.341*	0.143	0.162	-0.163*	0.015*	0.051**	0.253*	1.000					
<b>EPS</b>	0.311*	0.211	0.125**	-0.085	0.082	0.155	0.018	-0.012	0.004	1.000				
<b>Size</b>	0.011	0.130	-0.111	-0.044	0.137	0.146	0.023**	0.191	0.213	-0.085	1.000			
<b>FL</b>	-0.121*	-0.191**	-0.002**	0.010**	0.059	0.264**	0.200	-0.088*	0.007	-0.222	0.051	1.000		
<b>CF</b>	0.132	0.194*	0.004**	0.081*	-0.093	0.014	0.124	0.011*	0.081*	0.065*	0.011**	-0.014	1.000	
<b>Inv</b>	-0.012*	-0.016	0.011	-0.210	-0.098	0.081*	0.111	0.001	0.004*	0.094	0.132	-0.122	0.145**	1.000

**Table 5: Estimates of Fixed Effect**

Variables	Model 1		Model 2		Model 3		Model 4	
	DPO	DY	DPO	DY	DPO	DY	DPO	DY
Intercept	0.473 (0.556)	0.031 (0.596)	0.402** (0.006)	0.030 (0.760)	0.061 (0.698)	0.130 (0.321)	1.839* (0.013)	0.017 (0.713)
JSC	0.277** (0.007)	0.236** (0.004)						
Frgn			0.147* (0.012)	0.217* (0.017)				
InvCo					0.163* (0.022)	0.371** (0.000)		
Insrnc							0.008* (0.012)	0.037** (0.009)
D <sub>t-1</sub>	0.337* (0.019)	0.446* (0.017)	0.236** (0.000)	0.245* (0.011)	0.389* (0.013)	0.211* (0.015)	0.265* (0.017)	0.245* (0.023)
EPS	0.372** (0.000)	0.299** (0.001)	0.219** (0.002)	0.206* (0.022)	0.243* (0.002)	0.233* (0.010)	0.396* (0.019)	0.243* (0.018)
Size	0.009 (0.711)	0.015 (0.312)	0.003 (0.132)	0.013 (0.310)	0.019 (0.989)	-0.013 (0.732)	0.013 (0.931)	0.021 (0.872)
FL	-0.436** (0.000)	-0.332** (0.000)	-0.446** (0.000)	-0.267** (-0.007)	-0.317** (0.000)	-0.291** (-0.003)	-0.331* (-0.021)	-0.299** (0.000)
CF	0.067* (0.011)	0.057* (0.026)	0.097** (0.001)	0.086* (0.031)	0.053** (0.000)	0.063* (0.017)	0.049** (0.003)	0.057* (0.015)
Inv	-0.013* (-0.023)	-0.011** (-0.004)	-0.017** (0.000)	-0.025** (0.002)	-0.017* (-0.037)	-0.011* (-0.019)	-0.024* (0.017)	-0.016** (-0.009)
R <sup>2</sup>	0.121	0.536	0.169	0.533	0.173	0.632	0.123	0.591
F-Test	10.321 (0.000)	20.012 (0.000)	9.736 (0.000)	20.041 (0.000)	9.172 (0.000)	19.372 (0.000)	10.312 (0.000)	24.001 (0.000)

**Table 6: Estimates of Fixed Effect**

Variables	Model 5		Model 6		Model 7	
	DPO	DY	DPO	DY	DPO	DY
Intercept	1.113** (0.001)	1.072* (0.031)	0.115 (0.773)	0.219 (0.341)	0.053* (0.017)	0.443 (0.417)
Banks	0.006 (0.421)	0.021 (0.344)				
Mod			0.011 (0.267)	0.002 (0.731)		
MF					0.004 (0.787)	0.015 (0.663)
D <sub>t-1</sub>	0.277** (0.001)	0.259** (0.000)	0.222* (0.011)	0.219** (0.007)	0.310** (0.003)	0.217** (0.007)
EPS	0.276* (0.012)	0.331** (0.008)	0.132** (0.003)	0.118** (0.003)	0.172* (0.012)	0.210* (0.018)
Size	0.013 (0.331)	0.071 (0.439)	0.010 (0.411)	0.003 (0.532)	0.011 (0.311)	0.009 (0.473)
FL	-0.024** (0.000)	-0.022* (-0.021)	-0.027** (-0.003)	-0.023** (0.000)	-0.019** (0.000)	-0.022** (0.000)
CF	0.031* (0.021)	0.029* (0.010)	0.014* (0.017)	0.021* (0.019)	0.021** (0.000)	0.018** (0.003)
Inv	-0.018* (-0.013)	-0.011** (0.009)	-0.022* (0.017)	-0.013** (-0.006)	-0.017** (0.001)	-0.014* (-0.011)
R <sup>2</sup>	0.212	0.719	0.172	0.631	0.241	0.663
F-Test	14.045 (0.000)	25.135 (0.000)	12.450 (0.000)	22.130 (0.000)	10.111 (0.000)	21.372 (0.000)

## 5. Conclusion

The aim of this research study was to analyze the effect of different institutional owners such as joint stock companies, foreign companies, insurance companies, banks, mutual funds and modarabas on dividend policy in Pakistan. This study covered a period of eight years from 2005 to 2012 with a sample of 104 non- financial firms listed at Karachi Stock Exchange for analysis. The relationship between

institutional ownership and dividend policy was examined by fixed affect model of panel data regression. Dividend payout ratio and dividend yield, as proxy of dividend policy, were taken as dependent variables. Joint stock companies, foreign companies, insurance companies, banks, mutual funds and modarabas ownership were taken as independent variables along with lagged dividend, earning per share, financial leverage, and size of firm, cash flow and investment opportunities as control variables in this study.

The result of this study reveals that Joint stock companies, foreign companies and insurance companies have positive and significant effect on dividend policy in Pakistan while banks, mutual funds and modarabas ownership showed no relation with dividend policy. Joint stock companies having high proportion of shares as institutional owners in Pakistani firms significantly affect the dividend policy and use dividend payment as a tool to control the behavior of the managers of the firms in which they invest. Foreign institutional investors prefer cash dividend instead of increasing their percentage of shares in Pakistani firms due instable political and economic conditions. Insurance companies prefer cash dividend as they have to settle their customer claims [13], [33]. Banks, modarabas and mutual funds due to low proportion of share in Pakistani firms do not have any significant impact on dividend policy. It is also concluded that lagged dividend, earning per share and free cash flow showed positive, financial leverage and investment opportunities showed negative while size of the firm showed no significant relationship with dividend policy.

Based on the empirical results of this study it is recommended that firms can attract big institutional owners through growth in their dividend payments which will be helpful for them to get shareholder confidence along with improvement in firm's performance and high market capitalization. The scope of this study is only limited to non- financial firms which can be extended to financial firms in further research studies. Furthermore, Pakistani firms have other types of institutional owners such as charitable organization and investment companies which may also be considered in future researches.

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