

## Determinants of Dividend Payout: Evidence from Financial Sector of Pakistan

Lamia Fahim

MS Business Administration National University of Modern Languages (NUML) Islamabad, Faisalabad Campus

Muhammad Kashif Khurshid

Lecturer Department of Management Sciences National University of Modern Languages (NUML) Faisalabad Campus

Hina Tahir

MBA Business Administration National University of Modern Languages (NUML) Islamabad, Faisalabad Campus

### Abstract

This study seeks to ascertain the determinants of dividend payout of financial sector in Pakistan. The dividend is an important indicator and serves as a measure of a firm's financial performance and growth. Dividend is important decision for any firm and plays vital role in the growth and future progress of the firm. Study used quantitative approach to explore the effective determinants of DPO for the financial sector of Pakistan. The dependent variable of this research is dividend payout while the financial leverage, investments, liquidity, returns on equity and size are independent variables also functioning as determinants of DPO. The data were collected over a period of seven years from 2007 to 2013. However sample of this research is restricted to the selected listed financial firms of Pakistan. A sample of 53 financial firms is selected out of 181. For the analysis of data various statistical tools i.e. descriptive statistics, correlation matrix and panel data analysis are applied. Random effects model is selected to measure the determinants of DPO and their impact on it. The results conclude that financial leverage has a statistically significant and negative effect on dividend payout, while the advances to deposit ratio, return on equity, investment and size have a positive and statistically significant influence on dividend payout for the selected financial firms of Pakistan.

**Keywords:** Dividend Payout Ratio, State Bank of Pakistan, Karachi Stock Exchange

### INTRODUCTION

Finance being an integral part of any financial institution, plays an important role in analysis and making of monetary policy of any business. It works as a key tool in making business decision. The main objective of the firm is maximizing the shareholder's wealth and making a profit (Pandey, 2005). The whole process can be categorized into long-term and short-term decisions. Short-term decisions are made to balance current assets and liabilities. While long-term decisions relate to the capital investments which are based on debt or equity financing. In this way, a decision can be made whether to pay or not to pay dividend and where to make the investment. The decisions that mainly influence the shareholder's wealth are capital structure, investment in short-term & long-term assets, and improvement in profit margin and growth in sales (Azhagaiah & Priya, 2008). Dividend policy can affect the value of the firm and in turn, the wealth of shareholders (Baker et al., 2001).

Dividend is actually the part of the profit which is distributed among the shareholders and plays as an important factor for the success and value maximization of any business. On the other hand, the company having higher payout will be investing less in the growth of the firm. The dividend can be paid in the form of cash or in stock and it may be issued on annual, semiannual or quarterly basis. The more stable earnings of the company can lead to distribute more dividends. Dividend policy plays a significant role in the financing decisions of the company. The most important financial decision that encountered by any corporate managers is dividend policy (Baker & Powell, 1999).

There are three different schools of thought regarding the dividend payout (i) Dividend does not matter and it does not affect the firm value, if there is no tax advantage (ii) Dividend are bad and increasing dividend will reduce value, if there are tax advantages (iii) Dividend is good and increasing dividend will increase the firm value, if dividend is to be used for growth and future prospects. In financial economics, this issue is one of the tenth most unsolved problems, (Brealey & Myers 2005). The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that do not fit together (Black, 1976).

### Research Objectives

- Primary objective of this research is to identify the effective determinants of dividend payout ratio of the KSE listed financial firms in Pakistan.
- Secondary objective of the study is to check the track of the relationship between dividend payout ratio and its

determinants for the KSE listed financial firms in Pakistan.

- To determine the areas of improvement for the dividend payout policies of the financial firms in Pakistan.

### Research Questions

- What are the major factors that influencing the dividend payout ratio including the profitability, liquidity, investment, size, and capital structure of the KSE listed financial firms in Pakistan?
- What are the areas of dividend policies to be improved for the KSE listed financial firms of Pakistan?

### LITERATURE REVIEW

Dividend can be given to the shareholder in three forms: **cash dividend**; which is paid in the form of cash, **liquidating dividend**; which is paid at the time of liquidation of the firm, **stock dividend**; extra shares issued to the shareholders. The dividend is actually paid to the shareholders or owners of the firms from the profit. The shareholders viewed the equity finance as a reward from the corporation. Most of the researchers have done research on the dividend and attempted to solve the “dividend puzzle” given by Black (1976) but these studies can’t identify its true picture (Brealey & Myers; 2005).

### Theoretical and Empirical Background

There are different theories of dividend which are critical to understand. **Birds in hand** theory was presented by Gordon (1959). According to this theory, it is stated that uncertainty related to defer dividend payment can be minimized by dividend. Bird in hand theory is also given by Walter and Gordon (1963), in which they found investors that invested in the future promise of capital gain they prefer cash in hand to lowering risk or minimizing risk. The debate in relation to the importance of dividends to firm value initiated with the seminal work of the “Merton Miller and Franco Modigliani” entitled “Dividend Policy, Growth, and the Valuation of Shares” was published in “The Journal of Business” (1961). In this article, the authors took ahead the “theory of irrelevance”. According to MM, The dividend paid by a firm was irrelevant for shareholders with certain assumptions. Theory states that in a “perfect capital market” there is equal and easy access of information for traders along with no fees or taxes.

Another theory **signaling theory** was first given by Ross (1977). He created a signaling theoretical model for dividend. This theory states that when there is a change in the dividend policy, it gives the information about the change in future cash flow (Bhattacharya, 1979; Miller et al., 1985). It conveys that dividend policy and information asymmetry have a positive relation.

Jensen and Meckling (1976) defined **agency theory** that it is a contract between the two parties i.e. agent and principal. In which one party engages the other party to do or perform some services on their behalf which includes some authority related to the decision to the agent. The intensity of payments in the form of dividend is partially determined by the preference of shareholders as in consequence of their respective representative in management. However, due to the variety of stakeholders, the impact of dividend payment decisions is borne by a diversity of claimholders, including managers, debt holders and suppliers. The relationship of agency exists between the shareholders and debt holders; shareholders and management. The shareholder’s interest associated towards higher dividend payments and sole receivers of dividends, all else being constant, conversely debt holders prefer to limit dividend payments in order to maximize the resources of the firm to make them available to repay their loans.

According to the **Pecking Order Theory**, firms give first preference to the retained earnings on other sources of finance like debt issue or stock issue for their investment opportunities. This theory was given by Myers and Majluf (1984) and argues that to raise capital; equity is less preferred mean because when the new equity is issued the investor thinks about the manager that they think that the firm is overvalued. So due to this misunderstanding the manager take advantages of that over-valuation. This will give a lower value to the investor in issuance of equity. This theory was first given by Donaldson (1961) and then modified by Mayers & Majluf (1984).

The first study on dividend policy was conducted by Lintner (1956). The primary goal of his study was to search a model that explains the dividend. After studying many reviews of different literature of academic, he surveyed on the US managers by developing a model. He used fifteen variables for the survey. He concluded a significant effect of these variables on dividend payout.

Fama and French (2001) investigated a research on the dividend’s determinants from 1946-1964 on the individual firms. They found that as separate variables in the model, as compared to cash flows and depreciation, net income provide a better measure of the dividend.

Baker et al., (2007) conducted a survey of the 318 firms listed on the New York Stock Exchange. They found that the main determinants of payment of dividend are pattern of past dividends and anticipated level of future earnings. Bhat et al., (1994) conducted survey on the dividend decision as manager’s perspective. They concluded that the management of the firm believes that the dividend change follows the sustainable increase in

the level of the earnings.

### **Descriptive studies on dividend**

Rozeff (1982) investigated a research on growth, beta, agency cost as determinant of dividend payout ratio. He used different independent variables i.e. realized growth rate of the firm revenue, no. of common stockholders and beta. The correlation coefficient and regression analysis were used to study the determinants of dividend policy. The result showed that all variables had a significant effect on the dividend payout ratio.

D. Souza (1999) conducted a research on the dividend payout. He founded that there is a statistically negative and significant relationship between the dividend payout and beta. He also found that the growth has a positive and insignificant while the market to book value has a negative but insignificant relationship with the dividend.

Ghosh and Sirmans (2006) conducted a research to check the impact of managerial motives on the dividend decision in REITs (Real Estate Investment Trust). They concluded dividend yield and dividend payout are the functions of corporate performance while board structure, CEO ownership and CEO tenure.

Amidu and Abor (2006) inspected determinants of dividend payout ratios in Ghana. Their main purpose was to identify the factors those effects the dividend policy decision. They concluded that the dividend payout ratio had a positive relationship with profitability, cash flow, and taxes while a negative relationship between risk, institutional holdings, sales growth and market-to-book value.

Edward et al., (2011) conducted a research on determinants of dividend policy of banks in Ghana. They concluded that profitability, debt, changes in dividend and collateral capacity have the significant and positive effect on dividend payouts, while growth and age has the negative impact on dividend payouts.

Kanwal et al., (2008) investigated the determinants of the dividend payout ratio on the Indian information technology sector. They found that return on equity is highly influencing factor of the dividend payout ratio of the IT sector of India. He, et al., (2009) conducted a research on the firms listed in China's stock market. They collected the data from 2003 to 2007. Their main purpose was to find out the factors of dividend policy that affects the dividend decisions of the companies listed on the Chinese's stock market. Their results showed that the factors that influence the dividend policy are the characteristics of organizational structure. They also found that the profits, low leverage, strong shareholder protection affect the cash dividend.

Folorunso et al., (2012) conducted a research on the dividend payout on the Nigerian banking sector. They concluded factors that negatively influence the dividend payout includes; debt to equity ratio, revenue growth, retained earnings, loan to deposit and loan-loss provision.

Kanwer (2002) examined the factors that affect the dividend of firms listed in KSE. He used the data from 1992 to 1998. He found the firm size has a positive and insignificant relationship with the dividend. He concluded that it is not important that the firms having high net profit having a high dividend payment. Ahmed and Javid (2008) conducted the research on the determinants of dividend policy in Pakistan, as a case of non-financial firms listed on KSE from the period of 2001 to 2006. They concluded that dividend yield has positive and significant relation with the net earnings and also positively and significantly linked to shareholder. That indicates the ownership concentration is positively affecting dividend payout in non-financial firms listed on KSE. Hussain et al., (2012) conducted research on the fifty-five firms listed on the KSE to check the effect of stock prices on dividends. They found stock prices have a negative relationship with retention ratio, while the positive relationship with profit after tax, earnings per share, dividend yield and return on equity.

Imran (2011) did a research on the Pakistan's engineering sector. His results concluded that earnings per share, profitability, cash flows, sales growth, and size of the firms have the significant impact on dividend policy decision. He found a negative association between cash and dividend payout while positive associations between profitability, sales growth, size, earnings per share and size of the firm.

Fakhra et al., (2013) conducted a research on the factors influencing the dividend payout ratio. They conducted research under the financial and non-financial firms in Pakistan listed in KSE 100- index for the period of 2007-2009. They concluded that by paying dividends, the factors that increase the probability of the firm are earning per share, profitability and size of the firm while the growth opportunities decrease the probability of the firms.

Arif et al., (2013) conducted a research on the determinants of dividend payout in case of non-financial sectors by using sectorial analysis in Pakistan. They used the data from 2005 to 2010 of KSE listed non-financial firms. They first checked out the effects of variables on the overall sector and found no significant effect on that. Then after that they used to check the relationship on sectorial basis. They found profitability, tax, investment opportunities and size have a significant effect on dividend payout, while the stability of dividend policy was found lacking in the stock market of the Pakistan.

### **RESEARCH METHODOLOGY**

This research is related to the determinants of the dividend payout of the financial sector of Pakistan. The

population is restricted to KSE listed financial firms of Pakistan. The reason for omitting the non-financial firms is that the structure of these firms is entirely different from the financial firms. The data of the selected financial firms of Pakistan from 2007- 2013 is used in this study.

**Sources of data and sample**

This research is related to the determinants of the dividend in the case of selected listed financial firms of Pakistan. So, the data relates to the financial sector of Pakistan. The data are quantitative in nature and collected from secondary sources. The sources for the data are SBP, KSE, financial statements of the companies and SECP. The population of this research are banks, insurance, mutual fund and modaraba companies. The total financial firms in Pakistan are 181 and total numbers of sectors are ten. But due to unavailability of data of some variables and some companies, the sample is limited to 53 financial firms. This research relates only to the dividend-paying firms as performed by Deshmukh (2003) and Al-Najjar et al., (2009). The sample comprises of thirteen banks, seventeen insurance companies, eighteen modarabas, four leasing firms and one investment firm.

**Research Model**

$$DPOR = \beta_0 + \beta_1 FLR + \beta_2 INV + \beta_3 ADR + \beta_4 ROER + \beta_5 LOTA + \epsilon$$

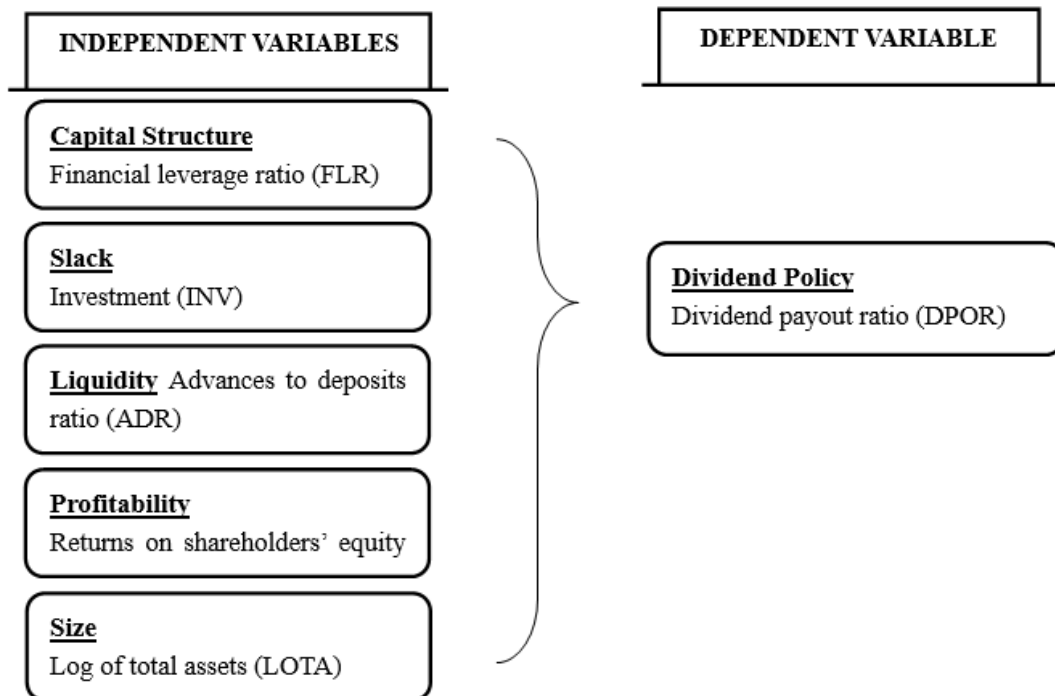
**Dependent variable**

**Dividend payout ratio**

It indicates how much of the profit is distributed among the shareholders of the firm. Dividend is actually part of the firm's net profit. The higher the ratio of dividend payout the more the shareholders will be attractive for the shares of the company. Dividend payout can be calculated by dividend divided by operating profit. Here dividend payout is calculated as dividend per share divided by earnings per share. Some researchers used the same proxy for calculation of dividend payout (Flint et al., 2010).

$$Dividend\ Payout\ Ratio = \frac{Dividend\ per\ share}{Earnings\ per\ share}$$

**CONCEPTUAL FRAMEWORK**



**Diagram 1: Determinants of Dividend Payout**

**Independent variables**

**(1) Capital structure**

The dividend is important for investors of the company and it also has an effect on the capital structure of the firm. The capital structure is composed of long-term debts and shareholder's equity. To get affordable financial leverage, there should be an equal balance of capital structure.

$$Capital\ structure = \frac{Total\ debts}{Total\ assets\ of\ the\ firm}$$

### **Hypothesis 1**

**H<sub>0</sub>: Financial leverage does not affect the dividend payout ratio.**

**H<sub>1</sub>: Financial leverage affects the dividend payout ratio.**

### **(2) Investment**

Ahmed and Javid (2008) calculated investment by accumulated retained earnings divided by total assets of the firm.

$$\text{Investment} = \frac{\text{Accumulated retained earnings}}{\text{Total assets of the firm}}$$

### **Hypothesis 2**

**H<sub>0</sub>: Investment does not affect the dividend payout ratio.**

**H<sub>2</sub>: Investment affects the dividend payout ratio.**

### **(3) Liquidity**

It is an important consideration for the firm that shows ability to pay dividends. The company having low liquidity position shows less chance to pay dividend due to unavailability of cash. Brittan (1996) stated that as compared to net earnings, cash flow is important to find out the ability to pay dividend to the shareholders of the firm. It is considered as calculating the disposable income of the company. Different studies have done on the liquidity, which show a positive relation between dividend and liquidity (Folorunso, 2012; Amidu & Abor 2006). Folorunso (2012) showed a significant effect of the advances to deposit ratio on dividend payout in case of Nigerian banking industry. The higher the ratio of ADR, there is a negative effect on the dividend. Here to calculate the liquidity, advances to deposit ratio is used. It is an important factor that influences the dividend policy of the firm.

$$\text{Liquidity} = \frac{\text{Loans and advances}}{\text{Total deposits}}$$

### **Hypothesis 3**

**H<sub>0</sub>=Liquidity does not affect the dividend payout ratio.**

**H<sub>3</sub>= Liquidity affects the dividend payout ratio.**

### **(4) Profitability**

The primary indicator to pay dividend of the firm is the earning (Lintner, 1956). The dividend is given from the profit. It is actually the part of profit, which the shareholders are given by the company. The more profitable the firm, they pay more dividend. Profit is an important explanatory variable of the dividend (Fakhra et al., 2013; Fama & French, 2001; Han et al., 1999). Reddy (2006) stated that firms that paying dividend are more profitable. Ahmad and Javid (2009) used EPS as a determinant of dividend payout ratio. Here to calculate the profitability, ROE is used as a determinant of dividend payout. Many previous researchers used return on equity to calculate the profitability of the firm (Aivazian et al., 2003) but in the previous study about the financial firms, the researchers used ROA to calculate the dividend (Fakhra et al., 2013).

$$\text{Profitability} = \frac{\text{Net Profit}}{\text{Shareholder's equity}}$$

### **Hypothesis 4**

**H<sub>0</sub>: Profitability does not affect the dividend payout ratio.**

**H<sub>4</sub>: Profitability affects the dividend payout ratio.**

### **(5) Size**

Dividend policy can be expected to explain by the size of the firms. Smith (1992) stated that with the firm's size, the dividend policy of the firm increases positively. Eriotis (2005) conducted studies on the size of the firm and role of distributed earnings. He found the size and earnings of the firms are important dividend policy determinants. For the external financing, Holder et al., (1998) and Mollah (2002) also used firm size in their studies to find out the impact on dividend payout. Renneboog and Trojanowski (2005) found an inverse relationship with the size of the firm and dependence on external financing of it. Here to calculate the size of the firm, log of the total assets is used.

Size = Log of total assets.

### **Hypothesis 5**

**H<sub>0</sub>= Size of firms does not affect the dividend payout ratio.**

**H<sub>5</sub>= Size of firms affects the dividend payout ratio.**

**Table 3.1 Definitions of variables with their ratios**

VARIABLES	RATIOS	DEFINITIONS
<b>Dividend Policy</b>	Dividend Payout	<b>Dividend per share / Earnings per share</b>
<b>Capital structure</b>	Financial leverage	Long-term debts / Total assets of the firm
<b>Slack</b>	Investment	Accumulated retained earnings / Total assets
<b>Liquidity</b>	Advances to deposit ratio	Loans and advances / Deposits
<b>Profitability</b>	Return on shareholder's equity	<b>Net profit / shareholder's equity</b>
<b>Firm size</b>	Log of the total assets	Log of total assets.

### DATA ANALYSIS AND RESULTS DISCUSSION

In order to find the impact of the selected set of independent variables on the dividend payout ratio of various financial firms, different analysis are used.

#### Descriptive statistics

Descriptive statistics gives minimum values, maximum values, the range between minimum and maximum values, mean values and standard deviation from the mean values about the data including each dependent and independent variable.

**Table 1  
Descriptive Statistics**

	No. of Obs.	Min	Max	Range	Mean	Median	Mode	S.D
DPOR	371	-17.84	64.69	82.53	42.55	44.57	41.49	6.42
FLR	371	0.27	0.91	0.64	0.65	0.66	0.76	0.13
INV	371	2.03	56.33	54.30	13.69	11.42	8.66	9.62
ADR	371	1.28	29.71	28.43	11.55	9.14	7.29	4.57
ROER	371	0.36	2.62	2.26	1.11	1.03	1.01	0.37
LOTA	371	12.51	18.57	6.06	14.87	14.81	14.81	1.05

From the above table, it is concluded that mean, median and mode value for log of total assets LOTA is maximized with a highest value of 14.87, 14.81 and 14.81. The value of standard deviation of the investment is also maximum with a value of 9.62 as compared to other selected variables. The Maximum and Range value for investment are also very much different as compared to other variables in the study.

#### Correlation Matrix

Correlation analysis is used to examine the relationship between dependent and independent variables. It measures the linear association between two variables. Its values lies between -1 and +1. +1 indicates that there is a positive linear sense between two variables and are perfectly related while -1 indicates a negative linear sense between two variables. Zero indicates no linear relationship.

Correlation matrix actually shows the relation between independent and dependent variables. This tells the degree of correlation between the independent and dependent variables, whether there is moderate or low degree of correlation. This degree shows the absence or presence of multicollinearity. Bryman and Cramer (1997) argued that "Multicollinearity is usually regarded as problematic because it means those regression coefficients may be unstable". According to Bryman and Cramer (1997), the Pearson's r should not exceed from 0.80 between each pair of independent variable, if it exceeds from 0.80 then they are suspected of multicollinearity. It is difficult to detect the multicollinearity when there are more than one dependent variables.

**Table 2  
Correlation Matrix**

	DPR	FLR	INV	ADR	ROER	LOTA
DPOR	1					
FLR	-0.5711*	1				
INV	0.3047*	-0.2811	1			
ADR	0.2158*	-0.1965*	0.1628	1		
ROER	0.5587*	-0.6435*	0.1176	-0.0052	1	
LOTA	0.1927*	-0.0228	0.0922	0.0979	0.0883	1

\*. Correlation is significant at 0.01 (1%) levels

\*\* Correlation is significant at 0.05 (5%) levels

Table 2 describes the correlation matrix by using the Pearson's product correlation movement to check the correlation between the dependent and independent variables.

From the above matrix of correlation, it is concluded that all independent variables i.e. Advances to deposit ratio,

investment, return on equity ratio, financial leverage ratio and log of total assets are correlated with dividend payout ratio i.e. dependent variable. The only financial leverage ratio is negatively correlated with a dividend payout ratio, while other independent variables are positively correlated. Advances to deposit ratio and return on equity ratio are also negatively correlated with DPOR.

### Panel data analysis

Panel data analysis are used to measure the change in dependent variable due to change in the independent variables. The data collected for this research is cross-sectional and time-series in nature. So, the OLS regression technique was not suitable for this data which is the combination of cross-sectional and time-series (Leamer, 1978). In this study, panel data analysis is used. Panel data analysis is a combination of time series from the year 2007 to 2013 over various individual units (firms).

### Results of Panel data analysis

Table 3A, 3B and 3C shows the result of regression models.

#### Redundant Fixed Effects Test

Table 3A

#### Redundant Fixed Effects – Likelihood Ratio

Redundant Fixed Effects Tests

Equation: Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	3.678646	(73,439)	0.0000
Cross-section Chi-square	247.239514	73	0.0000

Table 3 B

#### Correlated Random Effects – Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	24.039315	5	0.8002

Table 3A the value of P is 0.000 which shows the significant effect. The significant value of cross section chi-square suggests opting fixed effect model rather than a common effects model.

Table 3B shows the results of Hausman Test. The Hausman test actually used to select the model i.e. which model is appropriate for selected data. It is used to select the model from the fixed effect model (FEM) and random effect model (REM). The P value of Hausman test is 0.8002 which is insignificant. P-value suggests choosing a random effect model rather than the fixed effect model.

### R-squared

R-squared actually represents the correlation between the observed value and the predicted value of the dependent variable. It is also said to be a determination of coefficient. It is explained variation for an individual variable.

### Durbin-Watson

Durbin-Watson is used to test the serial correlation of the model. According to the rule, if the value of Durbin-Watson ranges from 1.50 to 2.5 then no problem of autocorrelation exist, less or more creates the problem of autocorrelation.

**Table 3 C**  
 Dependent Variable: DPOR  
 Method: Panel EGLS (Cross-section random effects)  
 Sample: 2007 – 2013  
 Periods included: 7  
 Cross-sections included: 53  
 Total panel (balanced) observations: 371

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.133062	0.056700	-2.346771	0.0193
ROER	0.064508	0.009783	6.593679	0.0000
FLR	-0.214918	0.031704	-6.778931	0.0000
INV	0.001471	0.000326	4.506195	0.0000
ADR	0.002284	0.000694	3.292818	0.0011
LOTA	0.015108	0.003378	4.472891	0.0000
R-squared	0.407070		F-statistic	70.30160
Adjusted R-squared	0.401279		Prob. (F-statistic)	0.000000
Durbin-Watson stat	1.290823			

#### Cross-section Random Effects

Table 3C shows the model of the cross section random effect (CSRE). Here the coefficient value of return on equity ratio (ROER) is 0.064508 which shows that there is positive relationship between the dividend payout ratio and return on equity ratio. The P-value of ROER is 0.000 which show the significant effect. This shows with increase in return on equity ratio, the dividend payout ratio will also increase. This shows that when the return on equity increases in financial firms of Pakistan, then dividend paid to shareholders is also increases.

The coefficient value of financial leverage is -0.214981 which shows a negative effect on the dividend payout ratio. The P value of financial leverage ratio is 0.000 which shows a significant effect on the dividend payout ratio. So, there is a significant negative relationship between the dividend payout and financial leverage ratio. It means if there is an increase in financial leverage ratio, then the dividend payout ratio will decrease. There is an inverse relationship between dividend payout ratio and financial leverage ratio.

Investment is another independent variable for dividend payout ratio. The coefficient value of investment is 0.001471 which shows a positive relationship between the dividend payout and investment. The P-value of investment is 0.000 which shows a significant effect on the dependent variable. Hence there is positive relationship between dividend payout ratio and investment opportunities. Means when there is an increase in investment, the ratio of dividend payout will also increase. The coefficient value of advances to deposit ratio is 0.002284. This shows a positive relationship between the dividend payout ratios and advances to deposit ratio. The P-value of advances to deposit ratio is 0.0011 which shows a significant effect on dependent variable. There is positive significant relationship between dividend payout ratio and advances to deposits ratio. Means, due to increase in advances to deposit ratio the dividend payout ratio will also increase.

According to the given table, the coefficient value of log of total assets is 0.015, which shows a positive relationship between the dividend payout ratio and log of total assets which shows the size of the firm. The P-value of size is 0.000. This value shows a significant effect on dividend payout. It means when there is an increase in size of firm; the dividend payout will also increase.

R-squared shows the adequacy of the model. In econometric model it explains the percentage of dependent variables explained by the independent variables. It is also called the goodness of fit. Here the value of R<sup>2</sup> is 0.4070. This shows that this model predicts 40% change in dependent variable due to change in independent variables.

Adjusted R-squared shows the coefficient for whole independent variables. Here the value of adjusted R-squared is 0.40. This shows that there is 40% effect on dependent variables from the independent variables.

Here the value of Durbin-Watson is 1.290823, which is between 1.5 and 2.5 so there is no issue of autocorrelation.

F-statistics show a fitness of the model. If it is more than probability of F-statistics this shows the fitness of the model. Here the value of F-statistics is 70.3010 and its probability is 0.000. So, it is concluded that this model is fits.

So under the stated assumption of “every firm has its specific, unique characteristics as compared to other individual units” is acceptable. So it has accepted the stated assumption that there is a significant difference among the individual firms.

#### Results and Discussions

From the given result, it is concluded that all variables show significant effect on the dividend payout.



## **Leverage**

There is negative and significant association between dividend payout and leverage of the financial firms. It also accepted the alternative hypothesis.

### **H1: Leverage affects the dividend payout ratio.**

It shows the companies paying fewer dividends are highly leveraged firms. At the same time, to maintain the good liquidity by paying regular interest and principal amount, the firm having high levels of outsider's equity. Our results are similar to Darling (1957), Rozeff (1982), Baker et al., (2001) and Ahmad and Javid (2010). Agrawal and Narayanan, 1994; Aivazian et al., 2003) stated that firm which is highly levered paying less dividends.

## **Investment**

There is a significant and positive relationship between dividend payout and investment opportunities. This result also accepts the alternative hypothesis and rejects the null hypothesis.

### **H2: Investment affects the dividend payout ratio.**

Much previous research contradicts with positive relationship (Abor and Bokpin, 2010; Patra et al, 2012; Kangarlouei et al, 2012). According to them investment reduces the payout policy of the firm. Kim and Jang (2010) concluded that the positive relationship between dividend and investment. He concluded that the companies having high investment opportunities pay more dividend to their shareholders in order to attract new investors and avoid a negative response from shareholders in order to maintain the firm's goodwill.

According to signaling theory, to attract investors, firm used dividend to signal their current future performance.

## **Liquidity**

Above result also shows a positive and significant relationship between the dividend payout and liquidity. This also rejects the null hypothesis.

### **H3: Liquidity affects the dividend payout ratio.**

Here the liquidity is calculated by advances to deposit ratio. Previous studies about dividend policy shows liquidity by current ratio and quick ratio. The company having good liquid position doesn't show paying high dividend. AL-Ajmi (2010) who concluded that liquidity is not significant in determining the payment of dividend. Goergen et al., (2005), Amidu and Abor (2006) found a significant and positive impact in paying dividends.

## **Profitability**

There is a significant association between dividend payout and profitability. Null hypothesis is rejected and accepted alternative hypothesis.

### **H4: Profitability affects the dividend payout ratio.**

The performance of the firm can be measured by the profitability. Financial theory argues that dividend payment and profitability have a positive relationship. Many previous scholars have found that same result and posted profitability as an important determinant (Baker et al., 2001; Kim and Jang, 2010). When there is an increase in the earning of the profitable firm, they transfer it easily to the shareholders.

## **Size**

Size has also a significant and positive relationship with a dividend payout. It also accepts the alternative hypothesis.

### **H5: Firm size affects the dividend payout ratio.**

Size is also considered to be important determinants of dividend payout. The firm having larger size has less financial constraints and sufficient funds that is why they have a high propensity of paying dividend. The findings that supports are by (Thanatawee, 2011; Fatemi and Bildik, 2012). According to them the firm with large size can easily access to the external market and such types of firm also have high profitability and less chance of opportunities for growth.

Larger firms have the ability to solve agency problem by using high dividend. These findings are against the result, those find a negative association between it (Afza, and Mirza, 2010; Ahamd and Javed, (2009). According to them the larger size firms keep their funds for their difficult period.

## **CONCLUSION**

This research is about the determinants of dividend payout in case of the financial sector of Pakistan. The dividend is an important part of the company's net profit. This part is given to the shareholders of the companies. The impact of dividend on the company is that if it would be paid to the shareholders of the firm at an appropriate time, it gives a good impact to the shareholders. The dividend impacts the three parties associated with the companies i.e. managers, lenders and the investors of the firms.

It is concluded that all variables have a significant effect on the dividend payout ratio. The financial leverage ratio has a negative, but significant effect on the dividend payout ratio. This negative association might

be due to the reason that there are immense levels of uncertainty in the financial sector and other financial institutions currently working in Pakistan. Over the last decades the process of capital shifting has been taken place in the economy of Pakistan, which in return put an adverse effect on the earnings capabilities. While others, i.e. liquidity, size, return on equity ratio and investment has a positive effect on the dividend payout ratio. The positive relationship between profitability and dividend payout showed that an increase in the profitability of the company, dividend is also increasing. The good liquidity position helps financial firms to give more dividends. There is also a significant and positive relation between investment and size with a dividend payout ratio. Therefore, due to increase in the size and investment opportunities, the dividend is also increasing.

Hence the liquidity, profitability, size and investment are important for the companies to pay dividend.

### Future Research

This research is related to the determinants of dividend payout in the case of selected financial institutions of Pakistan. Present variables explain 40% of financial firms' dividend behavior. The future research can be done on discovering independent variables that can explore the remaining 60% behavior of dividend. Future research can be done by other factors. There are many factors of banking and industrial sectors which affect the dividend payout ratio. But this research has used only financial statement related items. The other thing is that this research is related to only financial sector of Pakistan. In order to evaluate the other factors, other sectors of the Pakistan can also be used for further research. The future research can also be conducted by applying different statistical tools in order to evaluate the limitations that are present in this research. Future research can be done by making a comparison of the financial firms with non-financial firms. Further research can also be done for a comparison of firms within financial sector; like banking with insurance sector, modarabas with banking sector etc.

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