

Impact of Growth Opportunities on Dividend Policy: Evidence on the Role of CEO Duality in the Emerging Economy of Pakistan

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This paper aims to determine the effect of growth opportunities on dividend policy when there is CEO duality in an organization. On the basis of market capitalization, the data is collected from the top 100 registered companies on the Pakistan stock exchange during a period from 2012 to 2019. In this study total population sampling technique is used to collect the data which includes 218 firms. The data is collected on a yearly basis. Those firms who have lost statistics are excluded. The findings of this study show that there is a link between lower dividend pay-outs and growth opportunities however this relationship is inverse for CEOs with dual firm ownership. More over this relationship occurs only in private firms.

Key words: *Dividend, Policy, Dual Ownership, CEO Duality, Emerging Economy.*

Introduction

Numerous studies have been conducted related to dividend policy. These studies are vast but most of the questions posed in these studies remain unanswered (Aivazian *et al.*, 2003; Lintner, 1956). In this paper the focus is on CEO duality in organization. There are lots of firms in which there is CEO duality which duality means that a single person holds two positions at the same time such that a CEO is also the chairman of another firm. This CEO duality influences organizational policies related to dividends. (Farahmand, 2011).

There are different rules according to which the dividend is paid in various organizations (Al-Kuwari, 2009). Dividends are paid mostly according to the section 365 in companies Act 1965. Dividends should be paid according to the earnings but this does not mean that dividends are distributed according to the accumulated profit or current income (SALIH, 2010). Now the question is whether Jenson's hypothesis of free cash flow (FCF) can be applied in this setting or not. There are two boards: dual managed boards and non-dual managed boards. This paper is about the relationship of investment opportunities and dividend pay-outs and whether board duality affects this relationship or not. Lots of proxies have been used for measuring growth opportunities. The study was completed in developing countries, limited to China, Korea and Ghana (Adam, 2000).

To know and explain the differences in corporate policy decision agency theory and contracting theory provide a platform (Hutchinson and Gul, 2004). Different aspects like theoretical related to dividend policy, signalling models, contract theory, informational asymmetry, free cash flow and agency theory have been discussed in the literature. However, the evidence related to the investment opportunities and dividend policy is mixed. Most of the studies support contract interpretation which is based on Jenson's free cash flow hypothesis. These studies were conducted in developed markets. There is very less evidence in emerging markets where there is a different context for dividend payment.

This research considers a sample of Pakistani firms during the period 2012 to 2019 taking 218 firms-year. The duality in Pakistan mainly depends on how the businesses and the country are managed externally and internally. To meet the national economic policy of the country most of the shareholders are retained in different sectors like the National Unit Trust Scheme and the National Equity Corporation (Hassan Che Haat *et al.*, 2008). As an observation, it is noted that Jenson's free cash flow can be applied in this context. Moreover, it is noted that the negative relationship between dividend pay-out and growth opportunities which is determined by Jenson free cash flow hypothesis is weak for dual owned major boards where most of directors have dual characteristics.

This paper contributes to the previous literatures in three different ways. Firstly most of the studies related to dividend policy were conducted in developed countries (Smith Jr and Watts, 1992). This study provides evidence from an emerging market point of view. Secondly it tells us that every care should be taken while applying Jenson's free cash flow in a study related to dividend policy in emerging markets. Ownership has a main role in dividend pay-out which means that duality in ownership also effects corporate dividend decision making.

Background of the Study and Hypothesis Development

Growth, Dividend Policy and CEO'S Duality

Firms with higher investment opportunities or higher growth are likely to pay more debt or more dividend under a contract theory. Gaver and Gaver (1993) used a more rigorous firm level study method confirming Smith Jr and Watts' (1992) results. Gul (1999) conducted a study in China and found that investment opportunities are negatively connected with dividend payments and debt financing. However Kumar, (2004) is of the opinion that past investment have positive effect on dividends. Fama and French (2001) concluded that those firms which are newly listed avoid paying dividends.

H1. Companies with a lower level of growth opportunities pay higher dividends, *ceteris paribus*.

Duality and Dividend Policy

Duality can be explained as existing when an officer who works as the chairman of the board serves on another board also. According to Jais (2011) and Haniffa *et al.* (2006) duality in a country is mainly due to the fact of how businesses and are managed internally at a national level and through political intervention. Haniffa and Cooke (2005) are of the opinion that firm operations are affected by ownership. In the Pakistani scenario, managers are affected by education, dual ownership and type of organization (Javid and Iqbal, 2010).

H2. The relationship between high growth firms and dividend payout is weak for dual proprietary firms, *Ceteris Peribus*.

Methodology

This research sample consisted of the Pakistani top 218 public listed companies (in terms of market capitalisation) for a period of 8 years (i.e., from 2012 to 2019). A summary of the selection process presented in Table 1 below. The sample comprised 218 firm-year observations, after excluding firms with missing data. The firms were excluded and included on the basis of following criteria (Ali *et al.*, 2015).

- Those firms are included whose financial data is present.
- Those firms whose equity is positive are included.
- Firms of non-financial sectors are included.
- Only private firms are included

Those firms which are not listed are removed.

Table 1: Sample descriptions of Pakistani firms for the years 2012 to 2019

Original sample size	235
Less: observations with missing information including sample firms without dividend payout	17
The final sample size used for analysis	218

Regression Model

The following regression model is used in the study.

$$DPP = \beta_0 + \beta_1 MBE + \beta_2 DUAL + \beta_3 BSIZE + \beta_4 BCOM + \beta_5 LOGMKTC + \beta_6 LEV + \beta_7 ROA$$

Findings

Descriptive Statistics

The sample firms by industry type is shown in Table 2 below. The descriptive statistics for dual and non-dual firms of dependent and independent variables is shown in Table 3 below. The average dividend payout ratio for dual firms and non-dual firms are 10.961 and 11.407 respectively. This shows that non dual firms are paying more dividend then dual firms on average. The market to book equity for dual firms is 6.047 which is lower than 7.461 was recorded for non-dual firms. This means that growth opportunities are higher in non-dual firms. Moreover, the risk in dual firms is higher as the leverage is 0.342 higher than non-dual firms whose leverage is 0.304. If the size is considered, both dual and non-dual firms have 10 directors on their

board. The percentage of independent directors for dual firms is 38.1 percent compared to non-dual firms which is 39.1 percent of the total board members. The return on asset is 6.3 percent for dual firms while for non-dual firms it is 9.6 percent.

Table 2: Number of observations by the industry for the years 2012 to 2019

Industry	Dual-firms	Non-DUAL firms	Total
Consumer products	12	58	70
Industrial products	12	28	40
Textile	10	25	35
Food	8	22	30
Plantations & Mining	10	15	25
Trading	6	12	18
Total	58	160	218

Table 3: Descriptive statistics of DUAL and non-DUAL firms for the years 2012 to 2019

Variable	DUAL(N=58)			Non-Dual (N=160)			t-test
	Mean	Std Dev	Median	Mean	Std Dev	Median	
DPP	10.961	20.210	0.601	11.407	18.925	0.610	0.433
BCOM	0.381	0.160	0.375	0.391	0.156	0.364	1.379
BSIZE	9.97	2.186	10	9.72	2.116	10	2.682***
LOGMK	6.934	1.726	6.680	6.647	1.544	6.370	3.799***
TC							
LEV	0.342	0.603	0.233	0.304	0.476	0.185	1.430
ROA	0.063	0.325	0.063	0.096	0.097	0.080	2.686***
MBE	6.047	13.895	2.734	7.461	12.138	3.171	2.110**

Correlation

Table 4 below shows the biennial statistical relationship for both non-dual firms and dual firms. In both dual and non-dual firms, leverage is positively related to dividend pay-out showing that both types of firm have a narrow range of leverage linked with dividend pay-out. There is negative correlation between return and dividend pay-out in non-dual firms showing that non-dual growth firms produce higher return on assets. Negative correlation is shown by board size and CEO duality in both dual firms and non-dual firms. There is no sever multicollinearity.

Table 4: Correlations among dividend payout, MBE and control variables

Variable	DPP	BCOM	BSIZE	LEV	LOGMKT C	ROA	MBE
DUAL firms (N = 58)							
DPP	1.000						
BCOM	-0.028	1.000					
BSIZE	-0.041	-0.029	1.000				
LEV	0.301**	-0.004	0.002	1.000			
LOGMKT C	-0.024	0.124**	0.042	-0.02	1.000		
ROA	-0.018	0.001	0.037	-0.069*	0.111**	1.000	
MBE	0.211**	-0.035	0.039	0.092*	0.120**	0.052	1.000
Non-DUAL firms (N = 160)							
DPP	1.000						
BCOM	-0.023	1.000					
BSIZE	-0.057*	-0.022	1.000				
LEV	0.402**	0.018	-0.007	1.000			
LOGMKT C	-0.114**	0.058*	0.001	-0.044	1.000		
ROA	-0.112**	0.031	-0.013	-0.044	0.230**	1.000	
MBE	0.258**	0.009	0.017	0.168**	0.119**	0.296**	1.000

Regression

In Table 5 below, multiple regression for the first hypothesis is presented showing that the coefficient of market to book equity is negative and significant (-0.093, $p < 0.01$, 2 tailed) and that high growth firms pay lower dividend. This supports the first hypothesis (H1). It also supports contract theory which is based on Jensen free cash flow hypothesis that high growth firms pay lower dividend due to their investment and expectation for better return more quickly for shareholders. According to (Amidu and Abor, 2006) these studies are consistent with earlier studies conducted in emerging and developing markets. Several similar studies in developed countries found similar results (Jensen, 1986).

Table 5 below shows the relationship between ethnicity and dividend pay-out and also growth opportunities for both dual and non-dual firms. MBE was positive and significant (0.092, $p < 0.05$, 2 tailed). This supports the second hypothesis which poses that the negative relationship between high growth firms and dividend pay-out is weak for dual firms. There was also a negative association between return on assets, board size and dividend payments. It is noted that for consumer products a positive relationship was found with dividend pay-outs and this was also significant. These results indicate that lower return is paid by smaller boards and companies. If industry sector is we considered, the consumer product industry sector appear to have higher profit than other industry sector. The R^2 for the regression analysis ranged from

72.5 per cent to 72.6 per cent. The variance inflation factor (VIF) was used to test for multiplexing, and the VIF values were typically less than 5.

Table 5: OLS Regression analysis

	Column A		Column B	
	Coefficient	t-Values	Coefficient	t-Values
Intercept	39.623	14.428	39.945	14.502
<i>Control variables</i>				
LOGMKT	0.406	1.494	0.392	1.444
LEV	0.932	1.588	0.911	1.554
ROA	-10.359	-2.799***	-9.292	-2.482***
BSIZE	-0.349	-1.979**	-0.345	-1.950**
BCOM	-3.819	-1.554	-3.621	-1.470
<i>Sector effects</i>				
Consumer	3.481	2.394***	3.599	2.469***
Construction	-1.112	-0.708	-1.103	-0.701
Industrial	-1.109	-0.983	-1.139	-1.025
Plantation	1.682	1.290	1.619	1.239
Properties	-0.015	-0.013	-0.107	-0.095
<i>EXPERIMENTAL VARIABLES</i>				
MBE	-0.093	-3.537***	-0.137	-3.930***
DUALITY	-0.084	-0.091	-0.664	-0.681
MBE*DUALITY			0.092	1.913*
Adj.R ²		0.725		0.726

Results and Conclusion

The objectives of this paper were to examine the validity of Jensen's FCF theory. Furthermore, to explain the relationship between growth opportunities (investment opportunities) and dividend policy and to determine whether the firm's ownership duality has modified the relationship between markets. Book equity (used as a proxy for growth opportunities) and dividend policy in the Pakistani context. The study inspired by a gap in the existing literature suggesting that board duality has an impact on firm dividend policies, particularly in emerging economies.

Given the different institutional settings, the application of contract theory based on Jensen's FCF theory need to be considered in the perspective of the emerging economy. This study broadened the existing dividend policy literature by providing evidence from an emerging

economy with an institutional structure distinct from a developed economy. Importantly, this study has documented that the negative relationship between high growth firms and dividend payout is weak for DUAL firms. The rationale for this is twofold: First, DUAL firms are combined with the government's new economic policy (NEP), and therefore pay dividends regardless of their growth and performance. Second, DUAL firms are highly profitable and politically interrelated and pay dividends irrespective of their performance.

According to the limitations of this study, the study was based on the top 100 highest-capital Pakistani listed companies, meaning that the study's findings may only be valid and applicable to large companies. The research was situated in the positivist paradigm and relied primarily on quantitative research approaches. Future research may consider a follow-up study using an explanatory or critical perspective in issues such as investment opportunities and accurate measurement of dividend payouts.

Further analysis

Endogeneity

To rule out factors that may have biased the study's findings, two sets of complementary tests conducted, namely, an alternative measure for endogeneity and dividend payout. The primary concern was the potential symmetry problem between dividend payment and investment opportunity sets. Hence, the tactical effect can run from dividend payout to investment opportunity sets (i.e., undiscovered firm characteristics can jointly determine dividend payouts and investment opportunities).

We first tested whether a change in the firm investment opportunity set (IOS) taken from the previous year changes the dividend measure governing other firm characteristics. The overall results in Table 8, column A, confirm previous findings. For example, the coefficient of change IOS was -0.079 and statistically significant at the 5% level (t-value = -2.580). Secondly, we have also assumed that the dividends held in year one (1) included in the increase for the next year due to investment opportunities and so we used iOS lead-lag1 and got similar results. The results in Table 6, Column B, show that the coefficient of Lag IOS was -0.119 and statistically significant at any conventional level (t-value = -3.860).

Table 6. Diagnostic Test

	Column A		Column B		Column C		Column D		Column E	
	Coef	t-Values	Coef	t-Values	Coef	t-Values	Coef	t-Values	Coef	t-Values
Intercept	-0.251	-0.11	36.939	12.990***	37.502	13.510***	-1.119	-0.790	4.910	11.730***
<i>Control variables</i>										
RTA	-0.029	-0.400	0.088	1.100	0.096	1.180	-	-	0.007	1.570
CR	-0.236	-1.680*	0.386	2.260**	0.392	2.32***	0.357	9.600***	0.007	1.120
ROCE	0.015	0.630	-0.026	-0.950	-0.026	-0.970	0.253	46.73***	0.000	-0.330
LEV	-0.100	-0.110	-1.792	-2.400***	-1.953	-2.610***	-0.175	-0.580	0.035	0.730
BSIZE	0.038	0.260	-0.103	-0.520	-0.127	-0.670	0.047	0.500	0.041	1.270
BCOM	2.023	0.980	-1.523	-0.550	-1.529	-0.570	1.418	1.080	1.174	2.590***
<i>Sector effects</i>										
Consumer	-1.117	1.195	4.693	2.870***	4.551	2.920***	1.789	2.29***	0.702	2.660***
Construction	0.810	1.318	0.541	0.030	0.929	0.540	-0.348	-0.041	-0.198	-0.660
Trading	-0.150	0.918	1.324	1.090	1.436	1.240	0.613	1.090	0.244	1.260
Plantation	-1.022	1.107	2.795	1.840**	3.096	2.120**	2.021	2.770***	0.065	0.250
Properties	0.186	0.190	2.120	1.620	2.141	1.710*	-0.389	-0.630	0.152	0.700
<i>Experimental Variables</i>										
MBE	-0.079	-2.580***	-0.119	-3.860***	-0.095	-2.830***	0.023	2.310***	0.003	1.660*
R ²		0.626		0.310		0.709		0.701		7.000

Finally, an instrumental variable was used to test for the endogeneity problem. However, the firm's projects with positive net present values (NPVs) were held in dividends and invested alternatively, there would be a market reaction, and share prices reflect higher firm value. This argument supported by prior empirical evidence (Friend and Puckett, 1964) This is also in line with the dividend policy and firm growth hypothesis introduced by Miller and Modigliani (1961), which states that dividends may be reflected in capital gains if not paid. Table 8, column C, uses market capitalisation (MKTC lead lag-1) for the second year. Results show a coefficient -0.095 is significant at the level of 5% (t-value = -2.830). Further results suggest that leverage has a negative correlation with dividend payout. It is thus, in line with Jensen's FCF hypothesis, which states that companies pay dividends when they offer low growth opportunities. Likewise, they will require less external financing, which reduces their leverage.

Alternative Measures for Dividend Payments

Two additional measures of dividend payment were used: total assets (ROA), and market capitalisation (LOGMKTC). Miller and Rock (1985) argued that unlike investors, managers are aware of the deviation of current period earnings from the expected value. They stated that the declaration of net dividend fully reflects income because it assumed that the market is fully aware of the firm's production opportunities and thus fully predicts the investment. Therefore, ROA used as an alternative measure. Table 6, column D, shows, the coefficient for MBE 0.023



is significant at the 5% level (t-value = 2.310). Another measure used was LOGMKTIC, and we expected to see a positive relationship between stock market capitalisation (share prices) and growth opportunities. Results in Table 6, column E, show that the coefficient for MBE is significant at the 10% level (t-value = 1.660).

Significance of the study

From the practitioners' point of view, this study helps understand more about dividend policy in the context of Pakistan. A deep study on non-financial sector using Pakistan stock exchange is fruitful for practitioners to know the dividend policy of these sectors. On the other side of the picture, academia will also find it supportive in having awareness about the relationship of dividend policy and the Ceos duality. They will also get to know about the determinant and various theories of dividend policy like signaling theory, Clientele effects of Dividends theories, dividend irrelevance theory, bird-in-hand theory. This study is of great importance for academia as this study will contribute enough knowledge and studies about the present subject.

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