

## **Impact of Leverage, Dividend Payout and Family Ownership on Value of the Firm: Role of Growth Opportunity as a Moderator**

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### **Abstract**

*This study is about finding impact of leverage, dividend and family ownership concentration over value of firms under two conditions. Firstly, when there is growth opportunity what would be the influence of leverage, dividend and family ownerships concentration over value of a firm? Secondly, when there is no growth opportunity then what would be the possible outcomes? The study employs annual panel data of firms which are listed at Pakistan's stock exchange. Sector wise data over the period 2005 to 2016 has been used. The study has is carried out on non-financial firms. The first finding of this study reveals that, debt carries a positive influence over the value of a firm in both cases e.g. when there are growth opportunities and when there are no growth opportunities. The second finding about positive relationship between dividend and firm's value is uncertain when there are growth opportunities. While in case of no or few growth opportunities the relationship between paying dividend and firm's value is positive. The third finding of this study is about non-monotonous relationship between family ownership concentration and firm value.*

**Keywords:** leverage, dividend, ownership concentration, firms' value, growth opportunity

### **Introduction**

Leverage, dividend and family ownership has a great role in the value creation development of an organization. Leverage was defined by Horne (1970) as the use of fixed costs in an attempt to increase or lever up profitability. According to Brealey, Myers and Allen (2017), leverage can lead to better financial performance which causes an increase in the worth or value of an organization. The value of an organization is firmly linked with the value of shareholders (Lonkani, 2018). In the current study family firms are the main shareholders. The value of a firm is also affected through dividend which was defined by Rustagi (2001) that it is that fraction of profits (after tax) which is going to be distributed among the owners or shareholders of the firm.

There is a growing body of literature (Iturriaga and Crisóstomo, 2010) which has focused on the association between financial decision and firm's value which is conditional to growth opportunities of firm (Smith and Watts, 1992; McConnell and Servaes, 1995), but much less is known about impact of ownership concentration on firm's

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value (Ghalandari, 2013) in Asian organizations like Pakistan (Sualeh and Hussain, 2017) in the absence or presence of growth opportunity (Iturriaga and Crisóstomo, 2010). Therefore, this study aims at exploring the moderating role of growth opportunities on the relationship among family ownership, financial decisions (leverage and dividend) and firm's value as there are chances of expropriation of minority shareholders by family firms (Javid and Iqbal, 2008).

### **Literature Review**

The base of modern capital-structure theory has laid down by Modigliani and Miller in 1958. They proposed the capital structure irrelevance theory which enumerates that the value of an organization is unaffected by the capital structure of the firm. It means, weighted average cost of capital (WACC) has no role in firm's value creation process. However, M&M had assumed a perfect market where there is no transaction cost, symmetric information, risk free debts and no taxes. These all assumptions are in contradiction with real world. When a firm capital structure is more composed of debt it may cause financial distress, which was defined by Warner (1977) as a situation in which a firm is unable to pay its debt or a situation which leads to deteriorating financial decisions. Warner (1977) and Kim (1978) found that when a firm increases its debts then financial distress also increases due to which its chances of bankruptcy also increases (Cheng & Tzeng, 2011).

Stulz (1988) developed a model which was based on the work of Myers (1977) and Jensen (1986) in which it was shown that on one side leverage decrease overinvestment problems but on the other side it aggravates the underinvestment problems. This model shows the dual role of leverage e.g. positive and negative on value of firm and presumed that all firms have both effects (Margaritis & Psillaki, 2008). According to McConnell and Servaes (1995) leverage can have a positive influence at firm's performance when a firm has few growth opportunities and will have a negative impact on value of firm when a firm has high growth opportunities.

H<sub>01</sub>: There is no relationship between leverage and firm's value when there are growth opportunities.

H<sub>1</sub>: Leverage and firm's value are negatively co-related when there are growth opportunities.

H<sub>2</sub>: Leverage and firm's value are positively co-related when there are no growth opportunities.

*Dividend and growth opportunities*

The discussion on dividend policy is dated back to the work of Modigliani and Miller (1961) where it was challenged that firm's value is affected by dividend. They said that in a perfect market dividend does not affect the value of a firm. But MM's claim was challenged by Linter (1962) and Gordon (1963) by supporting "Bird in hand theory" while stating that high dividend leads to high firm value because of asymmetry and imperfection of information. According to Anil and Sujjata (2008) there is not only one factor through which dividend behavior can be explained. It means that there are many factors which explain dividend policy.

H<sub>02</sub>: There exists no relationship between dividend pay-out and firm's value conditioned to growth opportunities?

H<sub>2</sub>: The relationship between a firm's value and dividends is uncertain when there are growth opportunities. But paying dividend has a positive impact on firm's value when a firm has no growth opportunity.

*Family ownership and growth opportunities*

The discussion on the relationship between ownership structure and firm's value was first explored by Berle and Means (1932). According to Morck et al. (2005) family owned controlling shareholders may forego profitable mergers and expansions strategies due to excessive risk aversion. Therefore, an effective board in family firms is required which potentially includes both independent directors and family directors (Anderson, 2004). In the current study, we theorize a curvilinear relation (an inverted U shape) between family ownership and firm's value. At low levels of family concentration, we anticipate a positive effect on firm performance. As family concentration continues to increase, we expect to observe a negative effect on firm performance. According to Iturriaga and Crisóstomo (2010), the expropriation of minority shareholders by dominant shareholders is more. So, we can expect that chances of minority shareholders expropriation by family firms (Javid and Iqbal, 2008) would be more in case of few or no growth opportunities because of free cash flows.

H<sub>03</sub>: There exists no relationship between family ownership concentration and firm's value?

H<sub>3</sub>: There is a non-linear relationship between a firm's value and family ownership concentration. This relationship is positive initially and becomes negative when there is few or no growth opportunity.

**Data and Methodology***Data Procedures and Management*

The population size of the current study consists of all non-financial firms which are listed at Pakistan Stock Exchange. This study employs annual panel data of a sample of 93 firms which are listed at Pakistan stock exchange. The numbers of firms without growth opportunity are 65 while firms with growth opportunity are 28. Data sources include the official website of Pakistan stock exchange, annual reports from company's websites and financial statement analysis reports of State Bank of Pakistan.

*Empirical Model*

This study follows the model of Iturriaga and Crisóstomo (2010), which is as following.

$$SMBVR_{it} = \beta_0 + \beta_1(\text{leverage})_{it} + \beta_2(\text{dividend payout ratio})_{it} + \beta_3(\text{family ownership concentration})_{it} + \beta_4(\text{FOC})_{it}^2 + \beta_5(\text{control variables})_{it} + \eta_i + \varepsilon_{it}$$

Where,  $\beta_0$  = Intercept term,  $\beta$  = coefficient of independent variable,

$\eta_i$  = Firms fixed -effect

$\varepsilon$  = Error term,  $i$  is used for firm and

$t$  is used for time.

*Descriptive Statistics*

Variables	Observations	Mean	Std. Dev.	Min	Max
SMBA	930	-1.35	10	-28.1	175.1
LEVE	930	2.27	19.1	-292.3	331.4
DPR	930	0.05	0.1	-0.5	2.5
FOC	930	0.51	0.2	0.1	0.93
FOCS	930	0.31	0.2	0.01	0.86
ROA	930	7.4	16	-99.2	205.2
LCAP	930	7.3	2.1	0.3	13.8

The above table shows the descriptive statistics of dependent variable, independent and control variables. It is clear from the results that average firms under consideration show bad performance as the value of Sector adjusted market to book asset (SMBA) is negative (-1.35) which is a proxy for firm performance. Similarly, the mean value of leverage is 2.27 which mean that firms mostly depend on debt as compare to using its internal sources of finance for financing a project. The average value of Dividend is 0.05 which shows that the paying tendency of firms under consideration is very low. The average value of ownership is 0.51 which show that on average 51 percent of shares are held by family shareholders

due to which they have a controlling impact on the performance of the firm.

*Matrix of Correlation*

	1	2	3	4	5
1	1				
2	-0.015	1			
3	-0.032	0.096	1		
4	-0.022	0.407	0.118	1	
5	-0.06	0.354	0.24	0.42	1

The Pearson correlation matrix shows the correlation among explanatory variables. The co-relation among variables are slightly high in two case e.g. first between Return on asset and Dividend pay-out ratio (0.407) and second time between Market Capitalization and Return on assets (0.42). But in both cases the correlation among variables are not that much high which could cause a serious problem of multicollinearity. Besides the two aforementioned cases, the results of Pearson correlation matrix exhibit no high correlation among variables which shows that there is no problem of multicollinearity.

*Pooled OLS*

Variables	Full sample	Growth opportunities	No growth opportunities
	SMBA	SMBA	SMBA
LEVE	0.19** (0.09)	0.22* (0.12)	0.07*** (0.006)
DPR	1.003 (1.88)	2.70 (2.13)	-3.36 (2.55)
FOC	0.34 (7.64)	-25.78 (20.01)	14.51** (4.89)
FOCS	0.51 (8.89)	36.56 (23.37)	-18.19** (4.98)
ROA	-0.005 (0.02)	-0.26** (0.12)	0.042** (0.01)

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LCAP	0.84*** (0.20)	2.21*** (0.72)	0.09 (0.14)
Constant	-8.32*** (1.40)	-11.48** (3.80)	-6.15*** (1.67)
Observations	930	279	651
R-squared	0.16	0.30	0.08

*Regression results*

VARIABLES	Full	Full	Growth	Growth	No	No
	sample	sample	opportu nity	opportu ity	Growth opportun ity	Growth opportun ity
	Fixed	Random	Fixed	Random	Fixed	Random
	SMBA	SMBA	SMBA	SMBA	SMBA	SMBA
LEVE	0.20* (0.11)	0.19* (0.11)	0.29** (0.13)	0.28** (0.14)	0.036*** (0.002)	0.036*** (0.002)
DPR	2.04* (1.22)	1.49 (1.10)	1.74 (1.23)	1.22 (1.03)	3.41*** (1.14)	3.38*** (1.14)
FOC	7.05 (15.9)	2.96 (10.2)	74.4 (69.7)	21.6 (62.8)	-7.30* (4.16)	-6.04 (4.15)
FOCS	-2.62 (13.7)	-1.81 (10.4)	-54.0 (71.6)	5.32 (66.2)	6.47* (3.55)	4.83 (3.64)
ROA	-0.01 (0.01)	-0.01 (0.01)	-0.06* (0.03)	-0.07** (0.03)	-0.004 (0.003)	-0.004 (0.003)
LCAP	2.01** (0.83)	1.15*** (0.39)	4.03** (1.72)	3.40** (1.42)	0.46*** (0.07)	0.43*** (0.07)
Constant	- 19.31***	- 11.21***	- 52.58**	-36.50*	-5.13***	-4.42***

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	(6.25)	(3.27)	(24.0)	(18.78)	(1.20)	(1.26)
Observations	930	930	283	283	647	647
R-squared			0.598		0.28	
Hausman test			0.011		0.008	
Prob>chi 2						

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

From results it is clear that when there are growth opportunities then leverage has a significant and positive impact on firm's performance. It denies the rational of underinvestment problem mentioned by Myers in 1977. Results also indicate that debt has a significant and positive impact on the performance of a firm when there are no growth opportunities which support the overinvestment problem (Jensen, 1986).

The results also indicate that family ownership concentration has an insignificant impact on firm performance in full sample. But the impact of family ownership becomes significant when there are few or no growth opportunities. In the case of no growth opportunities, family ownership concentration affects the value of firm significantly and negatively, as the result reveals. When the family ownership structure is not very entrenched then it has a negative impact on the performance of a firm but when it becomes highly entrenched then reverse impact on firm performance gets started as the results indicate. The results of this study regarding the non-linearity of family ownership is in line with the studies conducted by Dyck and Zingales (2004) and Morck, Wolfenzon and Yeung (2005). The results also show that when family ownership is highly entrenched then expropriation of minority shareholders doesn't occur which supports the study conducted by Javid and Iqbal (2008).

### **Conclusion**

Keeping the importance and key role of leverage, dividend and family ownership structure, this study examines the impact of these variables on the value of firms in context of Pakistan. This study has taken into account 93 firms which are listed at Pakistan Stock Exchange for the

period ranging from 2005 to 2016. The first finding of this study reveals that debt has a significant and positive impact on performance of a firm. The findings of this study also partly support our third hypothesis which is about the impact of family ownership concentration on the value of a firm. When family ownership concentration is not at extreme then it causes a negative impact on the value of a firm. It may be because of conflict of interest due to diffused ownership structure because different members of the family.

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