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Financing Decision, Ownership Structure and Dividend Policy (An Empirical Analysis of the Banking Sector of Pakistan)

Ummara Fatima[1], Sundas Sohail[2], Uzma Bashir[3]

Abstract

Purpose

The payment of dividend is an exciting attraction for a company investor. Dividend is mostly paid out of the net earnings, and when the banks get levered, it may affect the disbursement of the dividend due to the deduction of interest from net income. Empirically, it is still to be explored that the inducement of leverage may affect the dividend payment, which may affect the ownership structure of the commercial banks of Pakistan.

Justification

The capital structure of an organization is the combination of equity and debt investment. The cost of the investments needs to be paid in the form of dividend and interest. Both dividend and interest payment are a source of attraction for the investor. However, in a developing country like Pakistan the commercial banks need to maintain optimal capital structure. Subsequently, in order to meet the excellence at both ends (interest payment at one side due to leverage, and payment of dividend due to investment in stock on the other side), nothing significant has been achieved to perfectly meet the gap between two ends which are, one provides tax benefit and other attracts firm investors.

Methodology/Design of Study

The data is collected from the annual reports of 21 commercial banks listed at Pakistan Stock Exchange (PSE) for the period of 2009-2015. This study empirically investigates the effect of leverage on the relationship of ownership structure and dividend policy in order to provide new means to motivate the investors and the creditors to build

[1] Assistant Professor & Research Assistant (School of Commerce & Accountancy), Minhaj University, Lahore ummarafatima@ymail.com

[2] Assistant Professor, School of Commerce & Accountancy, Minhaj University Lahore, PhD. Scholar Bradford University London, sundasnaeem15@yahoo.com

[3] Lecturer (School of Commerce & Accountancy), Minhaj University Lahore, uzmab05@gmail.com

professional relationship with the firm. This study employs panel data regression techniques.

Conclusion

The study builds confidence of commercial banks of Pakistan towards their investors and creditors and provides new means to motivate the investors and creditors to build sound relationship with the company.

Originality/Contribution

Previous literature has empirically explored the association between ownership structure and dividend policy and, the relationship of leverage with dividend payment separately. The study contributes to combine the above-mentioned concepts.

Keywords Ownership Structure, Foreign ownership, Institutional ownership, Financial Leverage, Dividend

1. Introduction

Every organization has an objective to expand the incentives for its investors. Corporate values that have opened up to the world can be reflected from the market price of the organization's stock. The objectives of an organization can be accomplished by implementing the functions of financial management which includes fund seeking and fund spending, and performing the three primary functions of the financial managers which includes, investment decision, financing decision and dividend decision (Iqbal et al., 2018)**.**

The firm's financial structure comprises of various investments i.e., bank loan, issuance of shares, bonds and debentures. It has to pay cost on maintaining these different sources of finance, but the most important thing is to determine the optimal level of financing (levered or unlevered) which, offers benefits for maximizing the value of the firm. First, M&M propositions (1958) gave the theory on capital financing but M&M I ignore the corporate tax issues that produce the optimistic role in describing the best capital structure. Afterwards, Modigliani and Miller (1963) reframed the previous assumption into M&M II and, postulates that "corporate taxes have significant characteristic in capital structure."

The firm worth is separate from the mix of debt and equity but it may create issues for the investors. The investor is most concerned with the earnings on its investment in the form of dividend. If the managers are not making policies for determining the dividend and earning per share it may generate the agency issues which, is a conflict of interest amongst the investors and managers (Ross, 1973;

Jensen, 1976). The division of proprietorship and control in big organizations generates irreconcilable situations among managers and investors, frequently alluded to as agency conflicts (Jensen, 1976; Fama & Jensen, 1983). Agency conflicts concern on the utilization of free cash flow by the managers which is the more cash flow required to finance all projects that have a positive Net Present value (NPV) (Jensen & Posner, 1996). The managers carry on so as to expand organization's free cash flow in financing corporate activities while investors request the dispersion of free cash flow as dividends.

Various theories were developed to explore why it is necessary for the management to make decisions for dividend. Gordon (1962) in Bird-in-the-hand theory argued that "outside shareholder prefer the large amount of dividend policy. They prefer today's higher uncertain capital gain from a questionable future investment." The Signaling Theory suggested that "dividend policies assume the task of special knowledge transfer tool from dividend management policies to shareholders" (Short et al., 2002). The payment of dividend is directly associated with ownership structure. The ownership structure is defined as; capital contribution and viewed as inside (equity claimed by managers), outside (equity claimed by others outside the organization) and debt (possessed by others outside the organization). Sumartha (2016) contended another way in lessening agency conflicts and it is by expanding command over management performance with expanded proprietorship outside the organization through institutional share ownership. Moreover, Annuar (2015) demonstrated that the institutional investors perform a well-functioning job in corporate management, not just utilizing their voting rights. Moreover, Cleary and Wang (2017) expressed that institutional investors have solid incentives and, great capacity to accumulate information to screen out corporate behavior viably. Institutional investors additionally play a profoundly compelling supervisory job which can improve corporate execution (Tahir, 2017). The ownership of managers means the proportion of equity possessed by block holders and insiders which, are defined as the managers and firm directors. The managerial ownership has a positive significant relation with return on assets (ROA) (Kamardin, 2014). Thus, the structure of ownership is a factor affecting the policies of the company such as dividend policy.

The firms usually prefer not to pay dividend because of tax system which is different from the other developed markets, the income earned by shareholders in the form of dividend are subject to 10 % withholding tax. Besides the firm is liable to pay 35 % corporate income tax if it earns profit in a year. Thus, double taxation system is an adherence for the development of dividend policies and the investors rely on capital gains. The *capital gains* are also taxed if arising on or *after* 1st day of July *2010*. The payment of dividend is a solution to minimize agency problems in which the

prospect of expropriation can be minor through the sharing of free cash flow as dividend (Lin, Chen, & Tsai, 2017).

The concept of leverage is very important for a bank or a company because it is the optimal ratio of debt and equity that makes a good combination of capital structure. Companies should maintain their capital structure (debt and equity) in such an efficient way to improve shareholder's wealth. This acts as sound financial tool that allows to reduce more financial distress and, will increase financial security of a company. This may protect the financial atmosphere and appeal new foreign investment (Alkhatib, 2012)**.**

The research chains the dividend policy, structure of ownership and financial performance relationship. The research work is ordered as: Section 2 gives the study objective; following the literature. The 3rd section defines the research methodology. The further sections explain the empirical analysis, conclusion and recommendations.

1.1 Objective of the Study

The objective of the study is as follow:

To explore the interrelationship between ownership structure, dividend policy and financial performance of banks of Pakistan listed at PSE.

2. Review of Literature

"The best test of good governance is to pay good dividends" (Hua Min, 2004). In understanding the corporate dividend policy, ownership structure is very pertinent (Huda & Abdullah, 2013). This ownership portion facilitates the managers at one hand and shareholders on the other. There literature explores the phenomenon enormously and still has inconsistent results. Huda and Abdullah (2013) explored a significant positive effect of director's ownership with dividend per share. So, the companies which are having higher owners shareholding pay higher dividends (Shukla, 2014). On the contrary, literature also explored an inverse relationship between managerial ownership and dividend payouts (Miko & Kamardin, 2015; Ullah, Fida, & Khan, 2012; Sakinc & Gungor, 2015; Ehsan, Tabassum, Akram, & Nasir, 2013; Wen & Jia, 2010). Moreover, Mirza and Azfa (2010) explored that the managerial ownership and cash flow sensitivity have negative relationship with cash dividend. The literature has also explored the relationship between dividend payout with multiple ownership structures, Al-Nawaiseh (2013) has explored that dividend policy has insignificant negative relationship with multiple ownership structures. The results are consistent with (Al-Malkawi et al., 2005). Giriati (2016) found that dividend payment ratio has positively affected corporate values in the light of the fact that distributed dividends can be a positive signal for financial investors to reinvest and demonstrate that the organization is in a decent position.

Institutional ownership is an important ownership type. Whereas, the literature provides mixed results, there is a positive association between institutional ownership and dividend payouts (Ullah et al., 2012; Al-Nawaiseh, 2013; Han, Lee, & Suk, 1999; Miko & Kamardin 2015). While as, the ownership of Institutions has no significant relationship with dividend policy (Mossadak, Fontaine, & Khemakhem, 2016; Bushra, 2012; Wen & Jia, 2010). Huda and Abdullah (2013) have explored that institutional ownership has significant and negative effect on dividend payment.

Share ownership structure has inverse and significant impact to the policy of dividend. This implies that by expanding the ownership of managers and institutions in an organization leads to decrease in the policy of the dividend. The share ownership structure demonstrated to have an insignificant positive impact on the firm performance. It demonstrates that, the share structure of ownership is insignificant association with the firm performance. The policy of the dividend demonstrated to have a positive impact on the firm value because the increased dividend per share, dividend payout ratio and dividend yield impact the growth in firm value (Iqbal et al., 2018). From another point of view, the block-holders can benefit minority investors by their job in checking managers and furthermore can be a hurdle in the event that they endeavor to accomplish their own private objectives (Shleifer & Vishny, 1997). The outcomes demonstrated that the managers in low governed firms are bound to start modified dividends to address he needs of outside large shareholders while at the same time utilizing expensive external capital to find new investment ventures (Ngo et al., 2018).

Another dimension that effects the dividend payout ratio is probability. Simply, because dividends are paid out of net profit. Thus, profitability and ownership structure have imperative impact on the dividend yield (Zhang & Fu, 2014). This relationship is explored by many researchers. Profitability ratios impact dividend policy positively (Bushra, 2012; Ehsan et al., 2013; Mirza & Azfa, 2010). Furthermore, the companies with more profitability (ROE) have also paid high dividends (Shukla, 2014). The financial performance positively and significantly relates with the choice to pay dividend (Arshad et al., 2013).

The financial leverage has negative effect on dividend payout. In Pakistani corporate sector, debt ratio (leverage) and yield of dividend are the utmost noteworthy variables impacting the dividend payout policy. The negative coefficient of the relation amongst ratio of debt and dividend policy means that the firms of Pakistan are confronting the issue of over debt management (Asif, Rasool, & Kamal, 2011). While as, leverage and size have inverse effect on dividend policy (Ehsan et al., 2013; Mirza & Azfa, 2010). Some researchers on the contrary found an insignificant positive association with dividend decision payment variable (Arshad et al., 2013). Leverage has displayed insignificant effect on dividend policy (Zhang & Fu, 2014). Farahani &

Jhafari (2014) also explored that the ratio of debt has no eloquent association with dividend payout. If the proportion of ratio of debt is fewer than the yield of dividend, it has positive association and when the degree of ratio of debt is more than the yield of dividend; it has negative association. Vo and Nguyen (2014) have explored that the ownership of managers has adverse association with leverage. Supporting the Pecking Order Theory, leverage and dividend have negative relationship with each other. The ownership of managers has positive effect on dividend. The association among debt and performance of the firm is moderated by ownership of the managers, with the relationship being negative (positive) in existence (nonexistence) of the managerial ownership concentration (Wahba, 2014).

Much of the research conducted on the relation of institutional and managerial ownership with policy of dividend. While as, few of the studies investigate the effect of leverage on the connection between managerial ownership and dividend policy (Afza & Mirza, 2010). This study makes an extension of the work of (Vo & Nguyen, 2014) by adding ownership of institutions and ownership concentration in the work. Earlier studies have explored that there is relationship between structure of ownership and the policy of dividend (Ramli, 2010; Zhang & Fu, 2014; Al-Nawaiseh, 2013). Though, there are mixed results and the reason is difference of unit of analysis.

3. Conceptual Framework

The study conducted an analysis to determine the impact of leverage on the connection amongst the structure of ownership and the policy of dividend by using the secondary data for the period of 2009-2015, extracted from the annual reports of 23 commercial banks as sample. The simultaneous equations are made for panel data estimation with E-Views software.

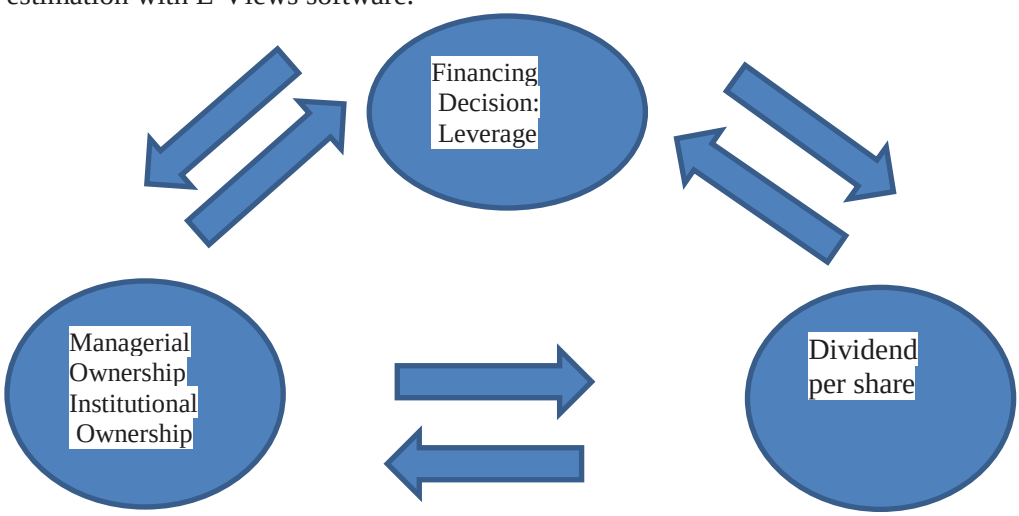

Figure 1. "The interrelationship between managerial ownership, financing decisions and dividend policies"

4. Research Methodology

4.1 Sample Selection

The study has conducted regression analysis to determine the impact of leverage on the association amongst ownership structure and the dividend policy from 2009-2015. The study sample consists of all the commercial banks listed at Pakistan Stock Exchange.

4.2 Data Analysis

The descriptive statistics and regression analysis was for data analysis. The linear regression assumptions were tested using "multicollinearity, heteroscedasticity and autocorrelation."

4.3 Variables' Description

The operational definitions and author's contribution of the variables of study are described in given table 1 below[1]:

4.4 Models for Estimation

The interrelationship between the study variables is described as follow:

$$lev_{it} = \beta_0 + \beta_1 MO_{it} + \beta_2 Size_{it} + \beta_3 Risk_{it} + \beta_4 Roe_{it} + \mu_{it} \dots\dots\dots\dots (i)$$

$$Dps_{it} = \beta_0 + \beta_1 MO_{it} + \beta_2 Size_{it} + \beta_3 Risk_{it} + \beta_4 Roe_{it} + \mu_{it} \dots\dots\dots\dots\dots (ii)$$

$$lev_{it} = \beta_0 + \beta_1 insown_{it} + \beta_2 Size_{it} + \beta_3 Risk_{it} + \beta_4 Roe_{it} + \mu_{it} \dots\dots\dots\dots (iii)$$

$$Dps_{it} = \beta_0 + \beta_1 Insown_{it} + \beta_2 Size_{it} + \beta_3 Risk_{it} + \beta_4 Roe_{it} + \mu_{it} \dots\dots\dots\dots (iv)$$

5 Research Findings

5.1 Descriptive Statistics

Table 2 Summary of Descriptive Measures

Variables	Mean	Std. Dev	Min.	Maxi.	Skewness
DPS	1.12	9.46	1.10	82.6	.08

[1] see appendix I

Lev	11.86	10.05	-38.73	51.4	.12
MO	.49	.08	0.29	0.73	.81
Insown	.04	.02	.00	0.09	.55
ROE	.06	.38	-1.99	2.35	1.25
Risk	0.14	1.85	-9.96	9.92	0.36
Lnsize	19.3	1.06	16.98	21.52	0.26

Source: Author's calculations

Table 2 demonstrates that the DPS mean value is 1.12 with high standard deviation of 9.46. The wide range is seen between the maximum values (82.6) to minimum values (1.10) of DPS. Similarly leverage of the banks shows high variability (10.05) through the difference of the maximum (51.4) and minimum (-38.73) values. It indicates that the banks prefer more debt as compared to the equity. The MO shows the mean value (0.49) with low standard deviation (0.08). The maximum and minimum values range from 0.73 to 0.29. IO mean value is 0.04 with the standard deviation of 0.02. The maximum and minimum values range from 0.09 to 0.00 depicts that institutes are less interested to invest in banks as owner. The control variables *i.e.*, risk and bank size mean values are 0.14 and 19.3 respectively. They depict low variation in the value 0.38, 1.85 and 1.06. All the variables show the normal distribution with skewness value near to 0.00.

5.2 Panel Model Regression Results

The study performs the panel regressions. First of all, pooled OLS is performed following the fixed effect and random effect model. The Hausman test was applied to select between fixed and random effect model. The study performs the diagnostic test of heteroscedasticity, serial correlation and cross-sectional dependency. All four models suffer from the issues of "serial correlation, cross-sectional dependency" and heteroscedasticity. To remove these issues, the feasible generalized least square (FGLS) regression was performed.

Table 3 Panel Regression Results with Managerial ownership: Dependent Variable (Leverage)

VARIABLES	OLS	FE	RE	FE Robust	FGLS
Mo	9.148	-12.76	0.736	-12.76	9.148
	(10.77)	(11.77)	(10.85)	(19.26)	(10.58)
Lnsize	1.356*	1.969	1.417	1.969*	1.356*
	(0.800)	(1.962)	(0.957)	(0.964)	(0.786)
Risk	0.282	0.105	0.209	0.105	0.282
	(0.450)	(0.424)	(0.426)	(0.138)	(0.442)
Roe	2.323	3.102	2.681	3.102	2.323

	(2.213)	(2.269)	(2.161)	(2.292)	(2.175)
Constant	-19.10	-20.27	-16.18	-20.27	-19.10
	(16.03)	(38.02)	(18.93)	(22.21)	(15.76)
Observations	147	147	147	147	147
R-squared	0.45	0.31	0.44	0.31	0.44
Number of var1	21	21	21	21	21

"Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1"

Table 2 shows the results of pooled OLS, fixed and random regression which selected through Hausman test and feasible generalized least square (FGLS). The results show that the managerial ownership is having negative insignificant impact on leverage in the fixed effect model. In FGLS the results are insignificant but have positive effect on leverage. So, the estimation rejects the null hypothesis H_1.

Table 4 Panel Regression Results with Managerial ownership: Dependent Variable (Dividend Per Share)

VARIABLES	OLS	FE	RE	RE Robust	FGLS
Mo	-7.175	1.055	-3.556	-3.556	-7.175
	(10.10)	(11.29)	(10.28)	(3.438)	(9.932)
Lnsize	2.094**	0.685	1.838*	1.838	2.094***
	(0.808)	(1.915)	(1.000)	(1.688)	(0.794)
Risk	-0.126	0.00480	-0.0586	-0.0586	-0.126
	(0.421)	(0.406)	(0.399)	(0.0691)	(0.414)
Roa	-45.98	-28.41	-37.85	-37.85	-45.98
	(36.70)	(40.47)	(37.13)	(41.08)	(36.07)
Constant	-35.55**	-12.43	-32.43*	-32.43	-35.55**
	(15.97)	(37.05)	(19.60)	(30.19)	(15.69)
Observations	147	147	147	147	147
R-squared	0.48	0.44	0.53	0.54	0.55
Number of var1	21	21	21	21	21

"Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1"

Table 4 show that managerial ownership describes an insignificant negative relationship with dividend per share, hence we can reject the alternate hypothesis H_2. The findings are consistent in all regression form pooled OLS to fixed/ random model. The model also has issue of autocorrelation and heteroskedasticity. To remove these problems, the feasible generalized least square (FGLS) has been employed. The results are consistent with the findings of Hofler *et al* (2004), Chen et al. (2005), Naceur, Goaied & Belanes (2006), Jakob and Johannes (2008) and Elston, Hofler & Lee (2011).

Table 5 Panel Regression Results with Institutional Ownership: Dependent Variable: Leverage

VARIABLES	OLS	FE	RE	RE Robust	FGLS
Insown	38.72	-21.67	21.87	21.87	38.72
	(36.57)	(68.51)	(45.71)	(31.43)	(35.94)
Lnsize	1.397*	1.774	1.444	1.444*	1.397*
	(0.797)	(1.964)	(1.043)	(0.757)	(0.783)
Risk	0.265	0.147	0.201	0.201	0.265
	(0.448)	(0.425)	(0.416)	(0.185)	(0.440)
Roe	2.583	3.021	2.851	2.851	2.583
	(2.209)	(2.294)	(2.147)	(2.638)	(2.171)
Constant	-16.92	-21.91	-17.18	-17.18	-16.92
	(15.50)	(38.28)	(20.32)	(14.66)	(15.24)
Observations	147	147	147	147	147
R-squared	0.47	0.22	0.55	0.67	0.65
Number of var1	21	21	21	21	21

"Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1"

Table 5 show that institutional ownership demonstrates an insignificant but positive relationship with the leverage of the bank. So, we can reject the alternate hypothesis H_3. The findings are consistent in all regression form pooled OLS to fixed/ random model. The model also has issue of autocorrelation and heteroskedasticity. To remove these problems, the feasible generalized least square (FGLS) has been employed.

Table 6 Panel Regression Results with Institutional Ownership: Dependent Variable (Dividend Per Share)

VARIABLES	OLS	FE	RE	RE Robust	FGLS
Insown	-37.95	-75.20	-45.82	-45.82	-37.95

	(34.86)	(64.92)	(42.34)	(47.31)	(34.26)
Lnsize	2.111***	0.704	1.845*	1.845	2.111***
	(0.806)	(1.899)	(1.004)	(1.717)	(0.792)
Risk	-0.118	-0.0305	-0.0629	-0.0629	-0.118
	(0.419)	(0.402)	(0.395)	(0.0794)	(0.412)
Roa	-53.36	-32.69	-43.53	-43.53	-53.36
	(37.21)	(40.42)	(37.39)	(47.74)	(36.57)
Constant	-37.89**	-9.346	-32.51*	-32.51	-37.89**
	(15.48)	(36.84)	(19.40)	(30.15)	(15.21)
Observations	147	147	147	147	147
R-squared	0.52	0.55	0.66	0.73	0.54
Number of var1	21	21	21	21	21

"Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1"

Table 6 shows that the ownership of institutions and dividend per share shows an insignificant negative relationship, therefore we can reject the alternate hypothesis H_4. The findings are consistent in all regressions form pooled OLS to fixed/ random model. The model also has an issue of autocorrelation and heteroskedasticity. To remove these problems, the feasible generalized least square (FGLS) has been employed. The results are consistent with the findings of Hofler et al (2004), Chen et al. (2005), Naceur, Goaied & Belanes (2006), Jakob and Johannes (2008) and Elston, Hofler & Lee (2011). But these result vary from many different studies (Miko & Kamardin, 2015; Ibrahim & Shuaibu, 2016). "The result shows that companies make higher dividend payout as the shareholding of the largest shareholder increase. The magnitude of dividend payout is also larger when there is presence of the substantial second largest shareholder in the company (Ramli, 2010)."

5. Conclusion and Recommendations

The essence of the work is to find out that how ownership structure affects dividend policy and financing decision of commercial banks of Pakistan as an emerging market. The study uses data of twenty-one banks listed at PSE from 2009-2015. The data was extracted from the annual reports of banks. This study empirically investigates the effect of leverage (Debt/Equity ratio) on the relationship between ownership structure (institutional ownership, managerial ownership) and dividend policy (dividend payout ratio) to provide new means to motivate the investors and creditors to build sound relationship with the company. Based on the results the study suggests that the managerial ownership is having negative insignificant impact on leverage and the managerial ownership shows an insignificant inverse relationship with dividend per share while, institutional ownership depicts an insignificant but

positive relationship with leverage. Furthermore, institutional ownership shows an insignificant negative relationship with dividend per share. The investors of the firm bear low risk as compare to the mangers who have owned shares. Debt is the one cause of the risk that is why, the mangers of the firm try to acquire more shares of the company in order to get the higher control of firm which are affecting the financial policies of the firm. They take financial decisions in order to avoid the high leverage and get more dividend to compensate their financial risks. In the result of these decisions the money is concentrated in few hands; the policy makers should focus to formulate the policies which are in the favor of all the investor's especially small investors. That might generate equality in the economy.

The sample size of the investigation is not large and limited to the banking sector of Pakistan only and thus the results can't be summed up for the whole Pakistani capital market. The examination would be more interesting if all the listed banking companies at PSE is to be incorporated into the investigation. There is likewise a requirement for further examination regarding the impact of ownership structure on dividend policy. Further research may include concentrating different types of ownership, for example, family, foreign and concentrated ownership in connection to the dividend policy. Looking at the impact of CEO duality, director's residency and other such board attributes on profit approach likewise offer adequate extension for further research.

The future research can include other segments of the economy of Pakistan; in order to assess the reliability of outcomes across numerous industries. While adding different variables or other market-based measures to test the relationship of ownership structure and performance can reveal new insights for Pakistani markets. Further studies can be conducted by opting data of cross countries which might provide generalized results.

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Appendix I

Table 1 Operational Definition of the Variables

Variables	Symbol	Definition	Author Contribution
"Managerial ownership"	MO	"Ratio of shares owned by the directors to total outstanding common stocks"	(Shukla, 2014; Huda & Abdullah, 2013; Ullah et al., 2012; Sakinc & Gungor, 2015; Ehsan et al., 2013).
"Institutional ownership"	Insown	"Ratio of shares owned by the financial institutions to total outstanding common stocks"	(Al-Nawaiseh, 2013; (Han et al., 1999; Miko & Kamardin, 2015); Mossadak, Fontaine, & Khemakhem 2016).
"Leverage"	Lev	"Ratio of total liabilities to total assets"	(Alkhatib, 2012**;** Asif et al., 2011; Ehsan et al., 2013; Arshad et al., 2013; Zhang & Fu, 2014).

"Return on assets"	ROA	“Ratio of profit before taxes to total assets”	(Zhang & Fu, 2014; Bushra, 2012; Ehsan et al., 2013; Mirza & Azfa, 2010; Shukla, 2014; Arshad et al., 2013).
"Bank size"	SIZE	“Natural logarithm of total assets”	(Ehsan et al., 2013; Mirza & Azfa, 2010)
"Dividend per share"	DPS	“Ratio of total dividend by net income”	(Shukla, 2014; Huda & Abdullah, 2013; Miko & Kamardin, 2015;Sakinc & Gungor, 2015; Ehsan et al., 2013).