

IPO Underpricing are Affected by the External and Internal Factors - An Evidence from Pakistan Stock Exchange

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The purpose of this research is to provide insight into how the qualifications of the board of directors affect the exhibition of companies offering a basic public offering. The hypothesis shows that the organization accusations of the board and the investors are compared normally. As an organization depicts a surprising corporate governance model, it will be generally accepted that confidence close to the idea of monetary disclosure increases among market individuals and the targeted rate of return falls. We are investigating the effect of board qualifications on IPO implementation in Pakistani stock market in 2010-2020 period. The Securities and Exchange Commission of Pakistan aggregates Pakistani stock trading area. Also, during this period, 100 organizations and 99 organizations referred to were settled for sampling the assessment was coordinated with a relapse of an OLS, linkage research, and clarifying metrics. Because the structure of the card is modestly consistent on the sample, and the variation between firm perception is almost nothing. Thus, the conclusion is concluded with the view that the qualifications of the board of directors have a moderate effect on the IPO underpricing. In the interim period, the sole quality of the board of directors, which was found to have a critical negative relationship with the public offering in the post-study impact, was the size of the board of directors. With the implementation of IPOs, the various segments of board quality are certainly enormous.



Key words: *Corporate Governance, Board characteristics, initial public offering, Pakistan.*

Introduction

Corporate governance can be characterized as many systems as possible that guarantee an initiative made by the funders of enterprises (Shleifer & Vishny, 1997). (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 2000) described corporate governance as many systems used to protect investors from seizure danger by controlling investors, namely insiders. The truth of this research is to add to this list of factors and acknowledge some other factors related to the board structure and ownership that fall under the common corporate governance umbrella. Institutional tricks and debates in any country economy have offered investors' trust everywhere and a good time has been spent. Therefore, they try to discover the comfort in the corporate management of an organization (Jackling & Johl, 2009).

The initial public offering (IPO) represents an extremely simple period in the existential rotation of a private firm operating on an exchange / public trade basis in the past (S. T. J. A. o. M. R. Certo, 2003). The turning point in an IPO has several consequences for individuals of various classes. For a few people, it is a gateway to a whole new universe of relationships with the IPO firm, for example an IPO for dispersed investors and other people as well as inventors and additional investors is an important permits methodology that offers them an opportunity. The chance to present market offers to the general population everywhere (He & Wan, 2013).

Surviving literature on public offerings confirms the existence of a feature with low value (Ritter, 1991). (Loughran, Ritter, and Rydqvist, 1994) found the proximity of low valuation as well as enormous volatility in cross-country studies covering over 25 countries. Some informative signs used by IPO firms to prevent information asymmetry by helping investors to better evaluate the IPO firm (Sahoo, 2017). Some of these verification tools include risk capitalist membership (Megginson & Weiss, 1991), insurance company's reputation (Carter & Manaster, 1990), auditors reputation (Beatty, 1989), and public offering assessment (Chhabra, Kiran & Sah, 2017). The purpose of this research is to add to this list of factors and to verify some other factors related to the structure and ownership of the board of directors under the common corporate governance umbrella. Institutional tricks and debates in any country's economy reassured investors everywhere and had a good time. Therefore, they try to discover the comfort in the corporate management of an organization (Jackling & Johl, 2009).

However, the impact of board characteristics on the performance of public offerings has not been examined in previous studies, particularly in Pakistan. This is a fascinating area, as organizations looking to initiate an IPO will likely evaluate their governance structure and improve the structure to get the most extreme incentives for offers from the market.

We aim to fill the gap identified by the lack of IPO and corporate governance work in the emerging economy (Weiland, 2018). In an emerging economy like Pakistan, the valuation of

the public offering has been influenced by many aspects of corporate governance. To fill this gap, we used different tools and procedures to add our contributions to the literature. An OLS regression analysis measurement was conducted to conduct this study to assess the relationship between initial public offering performance and board characteristics discussed in previous chapters. Ability to determine the impact of board characteristics on firm performance through regression analysis, initial public offering. First, we show how to calculate the output of the dependent IPO factor. Next, we will examine the independent and control variables of regression analysis. The performance of the dependent variable is measured in different periods that change from time to time.

The objectives of this study are

- To explore bits of knowledge on how the impact of board characteristics influence underpricing of initial public offering of companies.

Literature Review and Hypothesis development.

We review board specification literature and impact of IPOs; this will help us develop hypotheses based on past studies. This section has explicitly focused on variables to check the relationship in previous studies conducted in some other economies related to this research. This section discusses the past studies separately according to the variables.

Despite previous articles on developing to undermine the value of the initial IPO, little attention has been paid to the underlying exhibition of Corporate Governance Function Relationships and the underlying IPO, particularly relative to Asian economies (Yong, 2007). The review was moved to the abstract sign that reflects the legitimacy of new trades in open market firms due to the waning importance of quantitative and monetary data. Kim and Ritter (1999) suggest that the link between monetary data and value forms is sketchy, especially in the public offering environment. It is thought that corporate governance and proof practices are drawn at the level of distinctive data imbalance (Becker-Blease, Irani, & Accounting, 2008).

In corporate governance, where it is important to adjust the interests of managers and investors to increase efficiency and increase returns, the regulation of the board of directors is paramount. A senior executive staff or board of directors determines the course of the organization through the arrangement, supervision, and remuneration of senior executives, as it surrounds the corporate procedure (Campbell & Mínguez-Vera, 2008). Numerous studies have explored the impact of board formation on the forecast of the firm, focusing on perspectives, e.g. degree of internal directors (Agrawal, Knoeber & Analysis, 1996), residency of managers and managers (Hermalin & Weisbach, 1991), many landlords (Weisbach, 1988), the scope of the directorate (Kini, Kracaw and Mian, 1995) and the repetition of the executive meetings (Vafeas, 1999).

There are unified confirmations of the relationship between the independence of the board of directors and firm performance. Past research has discovered a positive link between board independence and firm performance. In their tests (Byrd and Hickman, 1992) they found that organizations with more than half-board independent members earned higher profits in their bid bid compared to fewer independence boards. The comparative results were reviewed by (Cotter, Shivdasani, & Zenner, 1997) and showed that organizations with increasingly independent boards are rewarded with large percentages for bidding. This is an interesting perception, pointing to the valuation of the public offering, as well as there is a great valuation driven by the independence managers. Meanwhile, different studies have failed to trace a positive link between tween's independence board and firm implementation. (Hermalin & Weisbach, 1991) used Tobin's Q to measure the impact of board independence on organizational performance and became famous for the variable connectivity of both. Comparable results have been covered by their last report (Bhagat & Black, 2002).

While the previous study examined mixed results through board independence and firm valuation, various procedures were also analyzed by defining the independence of the board. (Weisbach, 1988) showed when an organization was underperforming and showed that independent members would be filled with board members, recommending that independent members be viewed as more successful executives than board representatives. (Klein & Economics, 2002) Negative link in quantitative testing between the coverage of independence directors and estimated board acquisition through irregular collection. (Lefort & Urzúa, 2008), in their overviews, suggested comparable considerations, assuming that the board organization was not extensively approved to link with the performance of an organization. In any case, it seems that they have stated that they are decisively related to problems in corporate governance, including board regulation, CEO replacement, achievements, poison pills, and formal synthesis. All things considered, these perceptions show that the independence of the board can contribute to the viewpoint of the company's management as well as the investor's perspective, thereby contributing to the valuation of a firm. We can say that the emergence of this governance contributed to the decrease in value. Henceforth, there may be an inverse relationship between the independence of the board and the low value of the IPO. Of course, the fragility stemming from potential problems with the low independence of the board, so investors can encourage them for a higher pricing point (Juan García-Teruel & Martínez-Solano, 2007).

Hypothesis development.

- H1:** There is a positive effect of the board independence on IPO underpricing.
- H2:** There is a Positive effect of no of women in the IPO underpricing.
- H3:** There is a positive effect of the board size on IPO underpricing.
- H4:** There is a negative effect of CEO Duality on IPO underpricing.

3 Data, Sample, and Research Methods.

3.1 Data collection and Sample Selection

We focused on the last 10 years of public offerings of the Pakistani capital market, which gradually received real data for a solid result. To measure the performance status of IPOs as well as to investigate the strength and potential impact of board characteristics on the performance of IPOs in Pakistan. Historical data of the last 10 years (2010-2020) have been compiled for this object for all IPOs launched in Pakistan. The source of the data will be the official sites of the securities of the Pakistan and Pakistan stock exchange commission, the statistical verification sites of Pakistan and the annual reports of the organizations to be listed.

Variables Measurement

Variable Name	Sign	Measurement	Reference
IPO Board size	IPOR	Measured as First Day Return	
Board size	BSIZ	Measured by total number of board of directors	Ismail et al. (2008); Lam and Lee (2008)
Board independence	BIND	Measured by non-executive directors in board composition	Ismail et al. (2008), Abdel and Street (2007) and Afify (2009)
Women Director	NWD	Measured by total no. of women on Board	Gill & Mathur, (2011); Afify,(2009)
CEO Duality	CEO	is measured by a dummy variable 1 if CEO-Chairman roles combined; 0 if separated	Gill & Mathur, (2011); Afify,(2009)
Profitability	Pro	Profitability is measured by EPS	Ibadin et al., (2011)
Firms Size	FSIZE	Measured By Total Assets	Ibadin et al., (2011)
Firms Age	AGE	Number of years from the foundation to the IPO	Ibadin et al., (2011)
Firm Tangibility	TAN	Ratio of Fixed Asset to Total Assets	Zingales, (2000)

3.4.1 Dependent Variable

We center around IPO underpricing, measured as the first day return. Based on past research, IR is the contrast between the last final cost at the end of the first day of the current exchange and the opening price and the isolated bid cost. Due to the systematic skewness of IPOR, precise studies use the normal logarithm $(1 + \text{IPOR})$ as the dependent variable (Chahine, Filatotchev, Zahra, & Practice, 2011). Since the last portion of the inventory cost is the initial return (along a horizon of several months in any case), it is exclusively related to returns on other instantaneous lines. The initial returns are equally obvious and practically the same. This perceptibility idea was discovered by (Kaustia & Knüpfer, 2008).

Research Method

The following model is developed for the variable's measurement, IPOR is representing Initial Public Offering Return which is dependent variable. An OLS regression analysis measuring is performed for conducting this study to evaluating the relationship between the IPO performance and the board characteristics discussed in the previous sections. The ability we can detect the effect of board characteristics on firm performance through the regression analysis, initial public offering. First, we show how to calculate the output of dependent IPO factor. Next, we will examine the independent and control variables of the regression analysis. And the other side independent variables which are board characteristics are showing in the equation.

$$\begin{aligned} [(IPOR)]_{it} = & \alpha_0 + \beta_1 [(BIND)]_{it} + \beta_2 [(BSIZ)]_{it} + \beta_3 [(CEO)]_{it} \\ & + \beta_4 [(NWM)]_{it} + \beta_5 [(BFSIZ)]_{it} + \beta_6 [(PROFIT)]_{it} \\ & + \beta_7 [(AGE)]_{it} + \beta_8 [(TAN)]_{it} + \epsilon_{it} \end{aligned}$$

4. Results and Discussions

Table 4-1 Descriptive Analysis

	Mean	Median	Maximum	Minimum	Std. Dev.
BIND	2.000000	1.000000	3.000000	0.000000	2.188988
BSIZ	7.224490	7.000000	11.00000	0.000000	1.674133
CEO	0.163265	0.000000	1.000000	0.000000	0.373438
AGE	19.59184	13.00000	76.00000	0.000000	19.59264
FSIZE	46168.96	4835.000	1043051.	0.000000	167056.7
GDIV	0.428571	0.000000	3.000000	0.000000	0.763763
PROF	3.394061	2.060000	19.14000	-4.43	4.746501
TG	39.40512	40.52922	92.10748	0.000000	30.39438
AVG1IPO	0.260223	0.000000	10.52963	-0.09836	1.517746

Board Size is a very important component of board characteristics, the size of the board is mentioned in the corporate governance act 2012 is minimum 7 number of board of directors. When the size of the board is near to the minimum level then the performance of any firm at any stage may perfect and when the board size is large then the performance of the firm may not be good. When there is large board the decisions are not perfectly taken because the large no of the board of director's perceptions about the decision not match and they are not reached at any final correct decision, and the remuneration of the large board also increases the expenses, therefore the firms having large board are not performing well.

Endogeneity Problem

In pooled data endogeneity problem can be exist sometime. To see the endogeneity problem in data we take Lags value of the dependent variable(T-1). Because some time their previous value should be directly affected the results of our study. In our study we take Durbin Watson test that has results 1.3656 that shows that there is no endogeneity problem exist in our data. If our results change with taking lags, then we take another lag value to see its full effect.

Regression analysis is a pioneering statistically measurable technique that allows you to look at the relationship between at least two premium factors. While there are many types of Regression analysis, they all look at the effect of at least one independent variable on a dependent variable.

Model 4-1 First day return

$$IPOR_{it} = \alpha_0 + \beta_1 BIND_{it} + \beta_2 BSIZ_{it} + \beta_3 CEO_{it} + \beta_4 NWM_{it} + \beta_5 FSIZ_{it} + \beta_6 PROFIT_{it} + \beta_7 AGE_{it} + \beta_8 TAN_{it} + \epsilon_{it}$$

Regression analysis in table 4-3, Model 4-1 is showing in our results when we take First day return as performance measure then our results are, Board independence is significant and positive impact on performance, it means that presence of independent directors has increased the IPOs performance by the consulting the issue with proper valuation techniques and tool. The valuation of the IPO is a very important process of valuation takes success then performance has greater value. Board size has a significant negative relationship if there is large board then the performance may divert as the large no of systematic thinking and different views in any activity may discourage the decisions, and the decision is very important and rationally part of any activity at any stage which is very important for the firm performance. It is also notified that the large no of the board may affect the firm at different level like as a huge number of remunerations which is paid to the board of directors is also a financial expense for the firm. So, in light of the above views the large size of the board hurts IPO's performance.

Table 4-2 Regression Analysis

Variables		C	BIND	BSIZ	AGE	CEO	FSIZE	GDIV	PROF	TN
	prob.		0.098	0.0890	0.038	0.909	0.986	0.985	0.809	0.987
	t-value		0.1673	-0.0983	6.146	-0.098	0.956	-0.960	1.470	0.907
	Coefficient	C	0.119	-0.002	0.024	-0.045	0.007	-0.197	0.089	0.009

Also, we will include it in the regression control variable to represent external factors influencing performance. We will include the control variable in the regression analysis to represent the different components that contribute to firm performance. The principal control variable is the size of the organization, estimated as a characteristic logarithm of the total asset ledger specified in the prospectus. For example, Yermack (1996) used the same dimension to control firm size. The profitability of the firm naturally has an effect on the performance. In this study, the regression results of control variables are different in different models. In model number 1, firm age is a very important component of the external factor and age results are represented as the control variable. Positive significant relationship between firm age and return on public offerings. Firm size is also an important component taken as a control variable in this model, there is a strong positive relationship between firm size and public offering performance. Profitability (measured as earnings per share) is a control variable in this study and has a significantly positive relationship with the performance of the public offering.

5. Conclusion and Recommendations

In this section, we will examine the conclusion of this study and how our observation identified and contributed to past research. The focus of this study was to examine the relationship between panel characteristics and IPO performance. Descriptive statistics show that the board is determined on the sample at a medium level and the difference between the perceptions of the organization is shorter. When we examine the patterns in time arrangement, we can also see continuous developments in load structures.

The independence of the Board is positively correlated with the regression analysis and the positive correlation of 0.08711 coefficient in public offering performance. This is reliable in our H2 hypothesis, which assumes that board independence is also related to the firm's IPO performance. Hypothesis and scholastic research in scholastic studies have shown that board independence is positively associated with firm performance (Coles et al., 2008). (Byrd and Hickman, 1992). However, there are mixed affirmations regarding the relationship between independence and firm performance (Hermalin & Weisbach, 1991). Everything we look at in this research reveals the results of past research that failed to find the relationship between the independence of the board. The lack of a relationship between the independence of the board



and the public offering performance may be affected by the pace of independent individuals. As shown in descriptive statistics, the median estimate of board independence is 1. In this capacity, this is independent as companies receive guidance in including the majority of independence directors in their independence directors. Thus, the regression analysis results increase the idea of the independence of the board of directors and rehearse the public offering companies.



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