

IMPACT OF DIRECTORS AGE AND GENDER ON FIRMS' PERFORMANCE: A CASE OF NON-FINANCIAL FIRMS LISTED ON PAKISTAN STOCK EXCHANGE

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Received: 08 September, 2023 Revised: 29 October, 2023 Accepted: 05 November, 2023 Published: 18 November, 2023

ABSTRACT

This research was taken to comprehend any relation between director age (DA), firm performance (FP) and board diversity (BD). The research was taken on non-financial firms listed on PSX. Data was collected from 136 firms and 637 observations from the period of 2018-2022. Panel data and random effect model techniques were used to analyze data. The findings showed a significant relation among DA, BD and FP in non-financial firms. Person correlation revealed significant relationship between FP, DA and DB, as well as a negative relationship between DA and BD. The conclusion and future research form the last part of the paper.

Key words: Non-financial firms, gender diversity, PSX, firm performance, director age

INTRODUCTION

The independence of board recognised as central to supervisory position, and its effect on a variety of organizational variables to results are two of the most widely discussed topics in the corporate governance literature. This has contributed to the examination of variables such as board size, independent director percentage, separation of chairman and CEO positions, and board meeting frequency (Hermalin and Weisbach, 2003), all of which contribute to the company's so-called structural diversity. Many recent studies have linked governance problems to the recent financial crisis (Berglof, 2011).

In this sense, boards have been chastised for failing to avert the crisis, which has opened up new research avenues. In the academic and regulatory circles, therefore, more emphasis was given to board features which could affect the usefulness of decision-making processes, Demographic diversity refers to factors such as the board members' age, gender, education, and nationality. The objective is to determine how these variables affect the operation of the board and its firm performance. Johnson et al. (2013) acknowledges the significance of any of these

variables and stresses the need to investigate the explanations for the broad range of conclusions.

Best corporate/firm performance is a key element last any strong nation, and business leaders and shareholders at all levels are concerned about corporate performance (Pimentel & Major, 2014) Whether or not such persons in a board increase organisational performance remains a subject of analytical and theoretical discussion. It is extensively recognised that board composition of directors of a corporation can have a major effect on its performance. Essentially, previous research indicates that the implication of suspects on the board would strengthen the management of the company and that weak corporate governance may have detrimental effects on shareholder value and company performance (Carter et al., 2010).

Child (1974), claims that older managers favour conservative low-growth tactics, while younger managers are more likely to adopt ambitious high-growth initiatives. In their study of Japanese firms, Nakano and Nguyen (2011) discovered that there is a negative correlation between director age and firm

performance, they justify this by saying that because older managers have shorter decision horizons and more vested interests, they are more risk averse in their decisions.

As a consequence, however, there is a greater degree of transparency and disclosure of information. Boards consist historically the composition of males only. Women presence in the board will result in gender equality. Meanwhile, they are not part of the "old boys" network, women are traditionally supposed to be more independent in the Gender Board (Carter et al., 2010). Agreeing to Ryan and Haslam (2005), said that women are further expected to be elevated to management positions while the economy is in a recession. It is assumed that the participation of shareholders in the Board is a symbol of fundamental change, increasing their trust and confidence in the firm's performance, resulting in an increase in the stock price. In general, diversity is thought to enhance and increase organisational value as well as firm efficiency by providing new ideas and viewpoints, as well as ensuring that different stakeholders are represented for equality and justice.

Problem Statement

The inconclusive existence of the association among directors' age, GD, and firm results is shown by these internal contradictions arising from differing theoretical positions and mixed empirical reactions. The issue's viewpoint from the perspective of developed economies has not gotten the recognition it deserves, As a result, despite some attempts from the perspective of firm scale, there has been a scarcity of serious empirical consideration (Babalola, 2013; Akuyomi & Olagunja, 2012). The main goal of our contribution is to look into the relation among directors' age, GD and FP in light of the contradictions mentioned above, and to provide a developing country perspective.

RESEARCH OBJECTIVES

The Following Are Main Objectives of the Study:

1. To investigate the influence of Directors age on FP.
2. To evaluate the effect of gender diversity on FP
3. To find out any negative or positive relations exist between directors' age, firm performance and gender diversity.

LITERATURE REVIEW

Directors Age (DA) and Firm Performance (FP)

Study showed a significant relationship between director age and organisational progress (Jhunjhunwala & Mishra 2012). In the study of Knight et al. (1999), explained that diversity in gender and director age had negative impact on strategic decision of organization. According Hafsi and Turgut (2013), they explained that there is a connection between board diversity, director age, and financial performance of a company. Mahadeo et al. (2012), emphasize how important age diversity is among the members of the Board, and it has a positive effect on firm results, according to the authors, who point to synergies between the productivity generated by younger board members and the experience of senior board members. Age is considered to be a double-edged sword, since it is connected with a higher maturity and loss of productivity and risk aversion (Kim & Lim, 2010). Other study of Ahn and Walker, (2007) explained that older directors are less likely to change and adopt to organizational policies while the younger are more likely to adopt the strategic decision while interrupting all other things.

Gender Diversity (GD) and Firm Performance (FP)

Impact of GD on corporate results is the part of board diversity most often debated. Gender diversity on the board of directors is a significant aspect of corporate governance, as a result gender are different, culturally, historically and in social aspect. The number of women on boards has received much coverage in recent years. This interest has emerged due to the pervasiveness of enactment in most created nations necessitating that female portrayal on board be expanded to the mark of equality. Aside from moral concerns, the effect of gender orientation equality on corporate productivity also, other business attributes is discussed in economic circles. Research shows good, negative and no relationships (Bart and McQueen, 2013; Ahmadi et al., 2018). A mixed bag of findings or no relationship at all exists between gender and performance (Bennouriet al., 2018). Some studies look at samples from Norwegian companies to try to solve this issue. In 2008 Norway enacted legislation requiring at least 40% membership of the Board of Directors by

supplying exogenous data (Bohren & Staubo, 2016). According to Owen and Temesvary (2018), the Gender diversity on boards has a non-linear U-shaped relationship and success has recently been used to explain these inconclusive findings, with female representation having a positive impact when gender diversity threshold is achieved. Bennouri et al. (2018) have found that women managements increase accountability while at the same time reducing Tobin's Q. Loukil et al. (2019) discovered that bond liquidity is positively related to bond prices, linked to women managers' roles. Similarly, Adeabah et al. (2019) conclude that having on a nine-member board, including two female directors boosts bank efficiency and thus has a threshold impact. The omnipresent problem of endogenous nature in corporate governance research is one reason for these performance differences.

HYPOTHESES

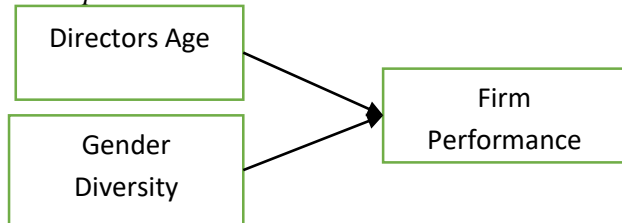
We expect that, based on the arguments presented in this section and the relationships shown:

H₁: Directors' age (DA) diversity on the board positively affects performance of firms

H₂: Gender diversity (GD) has a significant impact on performance of firms

Figure 1

Conceptual Model



RESEARCH METHODOLOGY

The key challenge in conducting this research on the age and GD of directors on the boards of Pakistani companies was collecting the requisite data, which was eventually gathered from annual audited reports and financial statements available on websites. As a result, a number of 136 stock-listed non-financial firms, all of which had such data at their disposal, accounted for more than 70% of Pakistan's stock market capitalization, with the exception of financial companies. For this study only five years data were taken to analyze the relationship between all

variables. The data period started from 2018 to 2022. The total number of observation was 637. Fixed (FEM) and random (REM) models were tested and panel data was used to verify the data.

Model of the Study

$$MVA_{it} = a_i + \beta_1(Directors\ Age_{it}) + \beta_2(Gender\ Diversity_{it}) + e_{it}$$

Where

MVA is market value added to measure firm performance (Dependent variable). The following metrics assess the financial performance of a company. We use market value added (MVA) to measure firm performance:

$$MVA = V - K$$

Where

MVA is the market value added of the firm

V is the firm's market value, which includes the value of its equity and debt.

K is the total amount of money invested in the business.

Age and gender diversity among directors (independent variables): The board of directors' average director age is measured in years, and gender diversity is calculated as the proportion of female directors compared to the total number of directors on the board.

Results and Discussion

All variables were first subjected to a descriptive analysis. The descriptive statistics of the dependent and independent variables are summarized in Table 1. Statistics such as mean, median, minimum, maximum, and standard deviation are included in the descriptive statistics table. The average Market Value Added is 0.632, with a SD of 1.342 and a range of -0.432 to 5.321. According to the average rating, 63.2 percent of companies looked at Market Value Added. The percentage of women on board appears to be poor, as it only hits 7.5 percent with a standard deviation of 0.321. It's been suggested that only 7.5 percent of board directors are female. The average age of the directors in the companies is 52 years, with a standard deviation of 5.786.

Table 1
Descriptive Analysis of variables

Items	obs	Mean	SD	Min	Max
Market Value Added	602	.632	1.342	-.432	5.321
Gender Diversity	635	.075	0.321	0	.432
Director Age	636	.520	5.786	22.543	71

The correlation matrix between the variables shows that there is a strong relationship between them. MVA has a positive relationship with the age and gender diversity of its directors. The age and gender diversity of executives, on the other hand, are negatively linked. There was also strong link found between directors' age, gender with firm performance (MVA). Since the correlations between variables do not surpass 0.8, there is no evidence of multicollinearity. As a result, multicollinearity isn't a major issue.

Table 2
Correlation Matrix

Variables	MVA	GD	DA
Market value added	1		
Gender Diversity	0.58	1	
Director Age	0.69	-.321	1

Table 3
Result of the Hausman Fixed/Random Effect

Variable	Fixed	Random	Var (Diff.)	Prob.
Directors Age	0.021	0.166	0.000007	0.2576
Gender Diversity	-0.258	0.28	0.000009	0.0000

Table 4
Hausman specification test

Items	Coefficients.
Chi-square.	13.579
p-value	.184

The FEM was rejected in the analysis based on the Hausman test. The fixed effect model is null since the $p > 5$ percent ($p = 0.184$ and $CS = 13.579$). As a result, the analysis is conducted using the random effects model.

REM (Random Effect Model)

Both values of adjusted R and R square for the Random effect model were .56 and 0.54, respectively. This means that the explanatory variables of director age and gender diversity account for 56 % variability in firm performance that is MVA. The associated probability value of 0.0000 is strong, implying a strong link between firm performance and the explanatory variables.

Directors' Age probability value is 0.003, the variable of directors' age maintained significance. The positive coefficient of 0.28 indicates that 1 unite increase in the age of the board of directors will result in a 28% percent increase in profitability. Our alternative hypothesis of a significant relationship between director age and firm performance is supported in line with Mahadeo et al., (2012). the result, however, contradicts Jhunjhunwala and Mishra's (2012) findings, which found a negative relation between firm directors' age and firm performance. MVA was found to have a significant positive relationship with gender diversity. At the 5% level of significance, the variable had a t-value of 0.26, a probability value of 0.041, and a positive coefficient of 0.166. As a result, as gender diversity rises, firm performance is likely to rise by 16.6 percent. As a result, the null hypothesis of no significant relationship between firm MVA and gender diversity was rejected. With the result, it's a win-win situation (Homroy, 2018). Gender diversity has been found to have a positive and meaningful relationship with firm success.

Table 5
MVA Panel Data Random Effect Selection

MVA	Co.value	SE	t test	Sig.	{ level of confidence, 95%	Interval
Gender Diversity	.166	.674	0.26	.003*	-1.154	1.486
Dirac. Age	.28	.016	1.57	.041**	-.003	.059
Constant	.138	1.349	0.10	.919	-2.507	2.782
MDV*	0.765	SD			1.668	
R ²	0.56	Observations			483.000	
CMR	52.147	P.value			0.000	
R ² (adjusted)	0.54					

*** $p < .01$, ** $p < .05$, * $p < .1$ (* mean dependent variable)

CONCLUSION

The researchers used existing literature, the theories specific to the analysis (stakeholder agency and stakeholder theories) and observed evidence to formulate two hypotheses. In light of the outcomes, researchers conclude that the age of managers has a large impact on corporate efficiency and performance and corporate performance is greatly influenced by gender diversity. The findings of this study can have a huge effect. Practical guidelines that can enable organizations to follow all ideal board characteristics are available. A review of the previous literature revealed a lack of study in global countries, especially world companies, as demonstrated by the fact that previous studies of board characteristics' effect upon firm performance zeroed in on a solitary relationship without connecting the age of the directors with the variety of the gender orientation and on the absence of experimental effect of corporate performance.

Limitation and Study Forward

This study has taken sample size 136 non-financial firms of Pakistan stock exchange. It is desirable that the sample should be extended for more reliable results. Similarly, this study has taken only two main independent variables director age and gender diversity, more variables should be used to have more reliable and generalized results.

RECOMMENDATIONS

This investigation consequently aids in gaining a better understanding of the status and impact of director age and gender diversity on the performance of non-financial enterprises. This research will help to increase or improve the understanding of financial results among decision makers.

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