

Board Diversity and Corporate Performance: The Indian Evidence

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The paper examines whether board diversity improves corporate performance by considering different parameters of diversity such as gender, age, tenure, nationality, educational background and experience of the directors. No significant link between board heterogeneity and financial performance in Indian firms is found. The possible explanation for this may be that diversity in teams often leads to conflicts, adversely affecting performance unless properly managed.

Introduction

Board diversity refers to the heterogeneous composition of the board in terms of gender, age, race, education, experience, nationality, lifestyle, culture, religion and many other facets that make each of us unique as individuals. The parameters that have been considered to measure diversity are:

Gender Diversity: It refers to the proportion of females to males. Women are believed to be more intuitive in decision making, have the ability to multitask and are better at relation building. Men tend to be more task-focused and their decisions are based on information and procedures.

Age Diversity: Younger people are perceived to be more flexible, have a better understanding of new concepts and technologies and are higher risk takers. The board may on the other hand benefit with the wide experience of senior members. Senior members often have strong networks and clout that companies can leverage.

Regional Diversity: Companies are now a part of the global economy having business activities in different parts of the world. Having a board that understands how different countries operate, their business environment and people is a necessity. Further people from different countries have different lifestyles, culture and upbringing backgrounds that will bring new perspectives and solutions to the table.

Multidisciplinary: Multidisciplinary boards are expected to be useful in decisions that are high in complexity and have many interdependent subtasks. Members with complementary education, knowledge and skills can take a more comprehensive approach towards problem solving. Research indicates that teams that are multidisciplinary tend to be more innovative.

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Cross-Functional: Members with varied experience look at problems differently and focus on different aspects of issues under consideration. This leads to creative problem solving and innovative decision making.

Tenure: Having reputed directors on boards for a long length of time improves corporate reputation. Directors who have been on the board for long have a good understanding of the company. This also puts the directors under pressure to keep up with changes needed in business and defend decisions that may not be applicable in the present situation. It can also affect the independence of directors.

Does Board Diversity Improve Corporate Performance?

Political, social and business views are increasingly calling for demographically spread boards. Research on social and organizational behavior suggests that heterogeneous teams are more productive. Having diverse boards, with directors possessing different traits and viewpoints, is argued to help in formulating suitable strategies, creative problem solving and improving productivity, making boards more effective.

There have been studies arguing in favor of board diversity. Niclas *et al.* (2003) found that gender and ethnic diversity of boards in the US companies had a positive relationship with firm's return on asset and investments. Miller and María (2009) indicated that there exists a positive relationship between the US board's gender and racial diversity and firm's innovation. Kevin and Antonio (2008) suggested that gender diversity in Spanish boards had a positive effect on firms' value. Bear *et al.* (2010) found that corporate reputation is positively impacted by the number of women on the board. Gary *et al.* (2010) supported the view that the ability of women directors to influence profitability and shareholder value is contingent on the specific circumstances of each company.

Other studies did not find any significant relationship between board diversity and firm performance. Carter *et al.* (2010) found that gender and ethnic minority diversity in the US firms did not have any impact on firms' financial performance measured by Return on Assets (ROA) and Tobin Q. Wang and Clift (2009) suggested that gender and racial diversity do not have significant influence on performance. Walt *et al.* (2006), in their study of New Zealand firms, found limited evidence that board diversity and corporate decision quality may be linked. Goodstein *et al.*'s (1994) findings suggest that board diversity may be a significant constraint to implement strategic change when faced with environmental turbulence.

Research Methodology

In continuation to the previous studies, we examine the link between board diversity and firms' financial performance in India. While previous studies have limited board diversity to gender and ethnic diversity, we have expanded the definition to include nationality, age, education, experience and tenure of the board.

Data Variables

The following data variables have been used in the analysis.

Independent Gender Variables

1. Gender Diversity: It is defined as the proportion of female directors, i.e., number of female directors/number of board members.
2. Age Diversity: It is measured as the range of ages of directors, i.e., maximum age – minimum age.
3. Tenure Diversity: Given that a balanced board should have a mix of new directors and directors who have been on board for a long tenure, diversity is measured as: maximum duration – minimum duration.
4. Disciplinary (Educational) Diversity: It is defined as the number of different educational streams from which directors on the board come from. Only the highest education has been considered.
5. Experience Diversity: Only the most prominent experience of each director based on the given profile has been considered. Experience diversity is defined as the number of different fields of experience of directors on the board.
6. Nationality Diversity: The country in which the directors spent the early years of life or to which they belong to has been treated as their nationality. This may not be their country of residence or citizenship. The number of countries represented by the board is used as a measure of nationality diversity.

Dependent Financial Variables: The financial performance of the firms is measured by Earnings Per Share (EPS).

375 directors were covered across 30 boards consisting of the Sensex companies for the year ending March 2011. Sensex is the major stock index of India and is considered as a barometer of the Indian capital market. Information regarding the boards was obtained from the annual reports and websites of the companies. Missing data was obtained from a database maintained by the Prime Directors.¹ Financial data was obtained from Rediff Moneywiz² (Table 1).

Model

The fundamental model tested is as follows:

$$Performance = \alpha + \beta_1 Diversity + \beta_2 Previous Performance$$

The regression equation formed is:

$$\begin{aligned} EPS = & \alpha + \beta_1 Female Proportion + \beta_2 Range of Age + \beta_3 Range of Tenure \\ & + \beta_4 No. of Education Streams + \beta_5 No. of Experiences Diversity \\ & + \beta_6 No. of Countries + \beta_7 Previous EPS \end{aligned}$$

¹ <http://www.directorsdatabase.com>

² <http://money.rediff.com/companies> and <http://www.bseindia.com/about/abindices/bse30.asp>

Table 1: Data of Boards of the 30 Companies of Sensex										
S. No.	No. of Directors	No. of Females	Proportion of Females	Range Age	Range Tenure	No. of Streams	No. of Countries	No. of Exp.	EPS (₹) March 2010	EPS (₹) March 2011
1.	16	1	0.063	35	39	6	1	10	117.51	115.41
2.	12	1	0.083	17	4	7	1	4	17.61	24.56
3.	15	1	0.067	25	15	7	5	6	24.82	20.32
4.	8	0	0	33	37	5	1	6	13.47	12.05
5.	12	3	0.250	11	4	8	1	5	5.82	7.43
6.	12	1	0.083	49	43	7	1	7	4.51	7.48
7.	14	1	0.071	37	33	7	1	8	19.69	24.10
8.	10	1	0.100	21	16	5	2	6	12.88	16.88
9.	13	0	0	35	26	8	1	8	111.76	96.54
10.	10	1	0.100	45	29	7	1	7	10.01	11.16
11.	9	0	0	24	14	4	1	6	10.09	10.68
12.	12	1	0.083	22	13	4	1	8	36.10	44.72
13.	14	0	0	12	29	7	2	9	101.10	112.25
14.	16	0	0	25	26	9	3	6	10.64	6.45
15.	21	0	0	41	15	11	1	5	8.04	5.48

Table 1 (Cont.)

S. No.	No. of Directors	No. of Females	Proportion of Females	Range Age	Range Tenure	No. of Streams	No. of Countries	No. of Exp.	EPS (₹) March 2010	EPS (₹) March 2011
16.	14	1	0.071	32	12	6	1	7	15.89	22.09
17.	16	1	0.063	17	21	7	1	9	72.66	65.01
18.	12	0	0	32	45	8	1	9	36.89	45.33
19.	11	1	0.091	26	6	7	2	5	86.45	79.21
20.	18	0	0	22	5	14	1	12	10.59	11.04
21.	12	2	0.167	11	7	7	1	6	39.20	22.12
22.	13	0	0	44	33	8	1	7	49.65	61.98
23.	10	1	0.100	9	7	7	1	5	144.37	130.15
24.	6	0	0	9	29	3	1	4	4.95	4.22
25.	8	0	0	22	27	4	1	5	8.68	13.36
26.	12	1	0.083	26	18	8	4	7	28.71	38.68
27.	12	0	0	21	18	8	2	7	7.85	5.68
28.	14	0	0	32	19	8	1	8	3.99	4.09
29.	12	0	0	20	31	7	4	5	56.87	71.56
30.	11	0	0	23	42	10	3	7	33.37	19.73

Level of Board Diversity

Gender Diversity: Of the 375 directors, only 18 are women (Table 2). Thus, female proportion in the board is 4.8%, which is the lowest in comparison to that of the more developed economies (35.6% in Norway, 15 % in the US) (UK Davis Report) and much lower than the global average of 12.2% (Fortune 2010). Half the boards have no women. The highest proportion of female directors on the board is 25% (see Table 1), with a maximum of 3 woman directors on the board.

Table 2: Descriptive Statistics									
	Director (No.)	Female (No.)	Age (Years) Range	Tenure (Years) Range	Streams (No.)	Countries (No.)	Experience (No.)	EPS (₹) 2011	EPS (₹) 2010
Total	375	18							
Min.	6	0	9	4	3	1	4	4.09	3.99
Max.	21	3	49	45	14	5	12	130.15	144.37
Average	12.5	0.6	25.93	22.10	7.14	1.60	6.86	36.99	36.81
Median	12	0.5	24.5	20	7	1	7	21.205	18.65
Mode	12	0	22	29	7	1	7	#N/A	#N/A
Variance	9.50	0.52	117.72	154.30	4.91	1.21	3.34	1390.42	1515.56
SD	3.08	0.72	10.85	12.42	2.22	1.10	1.83	37.29	38.93
Kurtosis	1.14	2.73	-0.50	-1.03	2.44	2.72	0.87	0.45	1.13
Skewness	0.48	1.38	0.32	0.20	0.81	1.88	0.75	1.25	1.45
Range	15	3	40	41	11	4	8	126.06	140.38
Count	30	30	30	30	29	30	29	30	30

Age Diversity: The Indian board is quite old with the average age of directors being 62.5 years. The youngest director on the board is 38 years old, while the oldest is 89 years. The minimum age range on a board is 9 and the maximum is 49, indicating large age variance on some boards and low age diversity on others.

Tenure Diversity: The average tenure was 8.4 years and the maximum tenure was 48 years. A variance of 154.3 shows that on some boards, the directors have more or less the same tenure (minimum tenure range is 4), while on others, there are directors who have been for less than one year and those who have been on the board for past 30-40 years.

Education and Experience Diversity: The boards of India are multidisciplinary and cross-functional with directors on boards coming, on an average, from 7 different educational streams and having business expertise and experience, on an average, in 7 different areas.

Nationality Diversity: Indian boards lack international representation (7.5% are foreign directors). Only 25% boards have members from countries other than India. In most of the cases, their presence is as a representative of an associate company, like Suzuki members in Maruti and Singtel representatives in Bharti Airtel. The average number of countries represented on the boards is just 1.6.

Results

Regression statistics presented in Table 3 show that none of the board diversity parameters (all p -values being > 0.2) have a significant impact on the change in financial performance.

Table 3: Regression Statistics						
Multiple R	0.980878					
R^2	0.962122					
Adjusted R^2	0.950069					
Standard Error	8.332135					
Observations	30					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	7	38,794.8	5542.114	79.82939	3.67E-14	
Residual	22	1,527.339	69.42448			
Total	29	40,322.14				
	Coefficients	Standard Error	t -Stat.	p -Value	Lower 95%	Upper 95%
Intercept	−0.03662	8.743188	−0.00419	0.996696	−18.1689	18.09564
Females	−0.10412	0.296939	−0.35064	0.729194	−0.71993	0.511695
Age	0.106608	0.180707	0.589946	0.561238	−0.26816	0.481372
Tenure	−0.01071	0.172929	−0.06195	0.951163	−0.36934	0.34792
Edu. Streams	−1.30113	0.87112	−1.49362	0.149478	−3.10772	0.505466
Countries	1.398695	1.523706	0.917956	0.368597	−1.76128	4.558668
Experience	1.150943	1.049751	1.096396	0.284763	−1.02611	3.327994
EPS 10	0.930014	0.042258	22.00782	1.79E−16	0.842376	1.017653

Female representatives on boards have a marginal negative effect on corporate performance. Age and tenure of board members do not have a significant effect on performance. A multidisciplinary board consisting of members from different educational streams fails to make a favorable impact on financial performance of the firm. Boards comprising members with diverse experiences and from other countries may have a minor positive effect on firm performance.

Conclusion

The absence of any strong link between board diversity and performance could be because of the inherent ills of diverse teams. Social research indicates that diversity in teams can adversely affect processes. Inability to come together with different styles, attitudes and viewpoints increases conflicts, reduces cohesion and hinders communication and coordination within the team. The result is diminished board effectiveness. Appropriately managing diversity is a prerequisite for increasing board performance.

A diverse board, to be effective, must have the right mix of people at a given time or during a particular circumstance, implying that the board mix must be constantly monitored and tailored to the current business scenario. Thus, constituting an effective board requires careful planning, particularly in the selection of directors. □

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