

## Board Heterogeneity and Financial Performance

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### ABSTRACT

*There has been insufficient research investigating the ramifications of board heterogeneity for board's working and succeeding business result of consistency in firm execution. Aftereffects of testing the speculations uncover that board heterogeneity in hierarchical directorate, age, residency, utilitarian back ground, involvement, and instructive claim to fame, sexual orientation, is identified with the strength of profit. Besides, expanded possession position by executives and composed financial specialists fortifies the connection between board heterogeneity and consistency of income. While board heterogeneity would prompt higher choice esteem payable to the collaboration of numerous points of view, encounters, and age, heterogeneity can likewise result in wasteful aspects in board's vital basic leadership forms. Other non-task-related heterogeneity degrees, for example, age and instructive foundation have little effect on firm execution in the vital setting of inconsequential variety. The aftereffects of this examination propose that board heterogeneity increments managerial knowledge and further the soundness in firm execution through its increasingly powerful control and advice capacities to the board. The conceivable control impact of sexual orientation standards on the connection between board heterogeneity and firm execution is watched. This exploration adds to the writing through a superior comprehension of the connection between governing body, board heterogeneity and firm execution, and by considering the unexamined control impact of gender orientation amounts.*

**Keywords:** *Board size, age heterogeneity, return on equity, board of directors, national diversity*

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### INTRODUCTION

Our objective in this research is to examine the relationship between board heterogeneity conformation and firm performance. Diversification decisions are critical creativities that involve large-scale resource commitments with major implications for firm performance. We chose the strategic decision context because successful formulation and employment of unrelated diversification strategies require a breath of information, knowledge, and industry experiences for finding and realizing emerging opportunities in different industries. The boards of directors of unrelated diversified firms must be

capable of advising and effectually counselling top management regarding the more heterogeneous environments and more complex strategic issues than atypical single-business firm faces.

Therefore, we posit that the suggestions of board heterogeneity are not universal, but contingent on the strategic decision background. Businesses will benefit from board heterogeneity when there is a suitable alignment between board-level diversity and decision context. That is, the benefits of board heterogeneity would be more related in the informational setting of unconnected diversification than in

relatively simple contexts or settings that require specialized knowledge in scarcely defined settings as in the case of single business firms or even related diversifiers. We believe that our research concentrating on the relationship between board heterogeneity and performance of unrelated diversified firms can provide important insights regarding the context specificity of the board heterogeneity—firm performance relationship [1–2].

To better understand the relationship between men and women in the board of directors and firm performance, the effect of board heterogeneity on firm performance have to be investigated. In this research, board heterogeneity refers to specific characteristics and expertise of women in the board that diversifies the board of directors. Some factors that influence the board heterogeneity are the educational level, age and background. A better understanding of the relationship between board heterogeneity and firm performance is important.

## REVIEW OF LITERATURE

This chapter provides an overview of the existing literature. First, literature about firm performance is discussed. After that, the influence of board heterogeneity on firm performance is described. The resource addiction theory and human capital theory are discussed to understand the link between board heterogeneity and firm performance. Then gender is difficult, because of their encouragement on board heterogeneity and firm performance. Gender diversity have different appearances and expertise in comparison with male and female board members, which increases board heterogeneity. Finally, this chapter comprehends literature about gender quotas. The aim and different types of gender quotas, and the use of gender allowances in Indian countries are conversed. The reason for conversing gender quotas is the possible influence of gender quotas on the

relationship between men and female in the board of directors, board heterogeneity, and firm performance [3].

### Firm Performance

The objective of the firm is to build and sustain bigger performance, this means performance which is higher than the average performance of firms in the same industry [4]. But, the definition of performance can vary broadly between firms, and between researchers. A lot of research is done using firm performance as dependent variable. These studies used various different indicators for firm performance [5]. Financial performance, by using accounting measures of profitability is the most common firm performance indicator used.

### Gender Quotas

The aim of gender quotas is to promote the occurrence of women in the board of directors. These quotas could influence the relationship between women and firm performance, and the relationship between board heterogeneity and firm performance which is just discussed in the earlier paragraph.

The aim of gender quotas and the different types the aim of gender quotas is more women at the top, because the problem to be addressed is the underrepresentation of women in the board of directors. The underrepresentation is a phenomenon which deserves attention because women usually constitute around fifty percent of the population in almost all countries (IDEA and Stockholm University). Therefore, gender quotas promote the presence of women in decision-making and thus, more women in the board of directors.

Gender quotas could be established by the use of a quota-instrument. According to the European commission's Network (2011), the definition of a quota instrument is:

The quota-instrument is a constructive quantity that establishes a fixed percentage or number for the representation of a specific category of persons. Quotas can be included in regulation (in electoral, equality, labour, and constitutional law) or applied on a voluntary basis (like voluntary political party quotas, soft targets).

According to the definition of European commission's network, two types of gender quotas can be described. The first type of gender quota is the binding quota regulation. The necessary quotas are included in the legislation and firms have to comply with these laws.

The second type of gender quota is the soft quota regulation. These soft quotas are included in the guidelines on good corporate governance. Other examples of these types of quotas are prizes and awards for companies promoting gender equality, companies signing tables about the focus on women at the top, and rankings focused on companies with women or male in the board of directors.

### Tenure

Researchers may conceptualize it as a departure. Similarity in time of entrance into the group may facilitate both attraction and interaction. It can be theorized as variety Differences in experiences, information bases, internal and external network ties It can be conceptualized as disparity Individual tenure can be positively associated with status or authority within a team Tenure heterogeneity within a team may result in empowerment or disempowerment.

### Gender Diversity

It might be conceptualized as partition when it mirrors a dispersion of contrasting suppositions about the appropriateness of basic group procedures or qualities. When it is contrarily identified with consistency

and documentation inside a part. It might be theorized as assortment when it might motivator creativity and development. It might be conjectured as distinction "control" fluctuations understanding. The point of sexual orientation portions is to advance the event of ladies in the directorate. These quantities are influencing the connection among ladies and firm execution, and the connection between board heterogeneity and firm execution.

### RESEARCH METHODOLOGY

The project will expose A corporation is nexus of contracts that means the corporation is nothing more than the sum of all the agreements leading to its creation. The functioning of any corporation depends upon the integrity, ability and cohesiveness of the members of the board, who are set up to function as an institutional layer between owners and managers. The board of directors is the top most and important decision-making body in a corporation. The board has to perform the functions of strategic decision making, establishing objectives, policies formulation and monitoring or evaluating the performance of the management. Substantial research focuses on the workings of corporate boards. But particularly, gender diversity in firm performance has attracted attentions from scholars, corporations as well as governments and regulators. The role of women in the corporate world is significant because women represent half of the population and nearly half of the active workforce.

- A board of directors is a group of individuals, elected to represent shareholders.
- A board's mandate is to establish policies for corporate management and oversight, making decisions on major company issues.
- Every public company must have a board of directors.

- The terms *Board of Trustees*, *Board of Managers*, or *Board of Regents* mean the same as the Board of Directors.
- The Board members' responsibilities vary, depending on the nature of the organization.
- What they do also depends on how the founders originally set up the business.
- Companies with publicly trading shares have comprehensive rules and regulations regarding their Board.

### INITIAL PUBLIC OFFERING

The purpose of this study is to see the presence of women on Indian companies listed with national stock exchange during the year 2017 by taking IPO 30 as a base. The study also attempted to look at the relationship between certain characteristics like age, size, and the gender heterogeneity. Age was defined as the number of years in business. Size of the company was measured in terms of sales, total assets, net profits and market capitalization. The research made use of secondary data. Secondary data was collected from the companies' corporate governance and financial data has been taken from PROWESS database maintained by CMIE. Descriptive statistics is used for the presentation and analysis of the empirical results.

### Research Design Objectives

- To analyse the board diversity of the IPO 30 firms selected
- To analyse the effect of the board's gender heterogeneity on the financial performance of the firm
- To analyse the effect of women's presence in the board on the financial performance of the firm
- To analyse the effect of the board's qualification/Functional/background diversity on the financial performance of the firm
- To analyse the effect of the board's experience on the financial performance of the firm

### DATA COLLECTION

#### Secondary Data

In this research report using the secondary data. We found out the all information which I record from the review of those paper and also collect data from the 30 IPO Company's firm performance with the female and male candidate and his background information.

#### Data Collection Tools

Secondary data has been collected from: Journals, annual reports and internet sources and website

#### Sources of Data

Here, given the objectives of the research, instrument was developed to measure the study focuses on wide study of secondary data collected from various books, corporate governance Journals, published annual reports, and companies from various websites which focused on various aspects.

### DATA ANALYSIS AND INTERPRETATION

#### Interpretation

In Table 1, we are showing that number of companies is 30 and defined of the mean, std. deviation and std. error mean. In high mean is p/e ratio 38.073 and lowest mean is return of average. And high std. deviation value is 18922.89 is market capital (in Cr.) and compare of the low value is 5.81. Std. error mean high is 6420.544 and low is ROA 1.0625.

Above Table 2, it is descriptive statistics. In this Table 2, we show that define of the minimum, maximum, mean and standard deviation. There in minimum value in show of the minus. And maximum in high value is total assets in 141818.87 and compare of this level in low value is nationality 2. And mean and standard deviation is high value is 16398.21 and 35166.77 and lowest value is mean 0.9333 female and standard deviation is nationality in 0.3457.

In Table 4, it is correlation. In this Table 4, the age, experience, ROA, ROE, book value, PE ratio, total assets, market capital, NPA and EPS is 30 different IPO company's data analyse. And this table is show that eps, net profit, market capital are minus level result. And roe, total assets significant of the variables. And 0.005 under the significant variables are affected of the firm variables significant and when 0.005 above results is not significant variables.

Above table 5 we are showing that numbers of board of directors is which being IPO 30 Company's member. Here total 30 companies board of directors' members of company wise number of directors.

And the lowest number of members is 5. And there in three companies' names are AU Small Finance Bank, Central Depository Services (India) Ltd. and V-mart retail Limited. In this table we are observing that number of directors are between 13 to 5 numbers.

High percent or valid percent of the 21.4 is AU Small Financial Bank. And after Avenue Supercars Limited is 12.5. And lowest percent of 0.4 is 5 companies their names are SBI Life Insurance Limited, Sharda Cropchem Limited, Shemaroo Entertainment Limited, Team Lease Services Ltd. and V-Mart Retail Limited.

In Table 6 showing nationality frequency. 26 companies under the directors are Indian and only 4 companies under directors are foreigner. And cumulative percent of the nationality categories Indian in 86.7.

In Table 7, we are showing that Anova Test use of the data analyses and board of director's age, experience, qualification, nationality and tenure show of this test. In age of the mean square is within groups is 94.17 and between groups 737.09.

And experience in mean square is 74.168 and between groups 443.65. Also, other mean square show of there. In this test we are showing of the what director categories have significant different in impact of the firms. In Qualification and nationality is 0.267 and 0.935 result show that means its significant different not impact of the directors' firm performance.

Also, directors age, experience and tenure are significant is 0.00 it means their impact is firm performance. And high mean square is tenure in 857.085 it is a between groups. And lowest is nationality in 0.07 it is an also between groups.

In Tables 8 and 9, we are showing that qualification is under the graduate and post graduate. In total number board of directors are 248. And Graduate directors are 85 and post graduate directors are 163. In Tables 8 and 9, in mean graduate members are 59.93 and post-graduate members are 59.36 in variable age. And experience variable in mean is graduate members are 30.28 and post graduate members are 30.40.

And age and experience variables are not significant variables. Because their significant age in 0.676 and experience in significant is 0.919. And its mean square is high 104.93 in within group age. And low mean square is 0.839 is experience in between groups.

Tables 10–12 show of the descriptive analyses for director's nationality. In this table show that total numbers of directors are 248. And Indian directors are 240 and foreign directors are 8. And mean is 59.21 is Indian and foreign directors mean is 69.75.

Directors lower bound is low is 28.39 and high is 61.57. Upper bound in high is 77.93 foreign directors. Tables 10–12

show that the variables are significant. Nationality in age variables is 0.04 significant and experience variable is 0.01 significant. It means we are finding out that these variables are significant so that's are impact of the firm performance.

Above the Table we are showing create of independent test is the find out of the director's data. In to variables select of this test age and experience. In standard error difference is high in experience 1.911 and low is experience in equal variance assumed in 1.736. And mean difference is age in 5.326 and experience mean is 2.826. In this table in lower level in experience is minus level results.

In this table in significant is age in 0.451 and experience significant is 0.940 it means not significant and that's impact is not affected firm performance.

In Table 13, it is descriptive statistics. And variables are age, experience, director, qualification, nationality, tenure, board size and female. And directors Minimum age is 27 and maximum age is 88. And maximum directors' numbers are 5 and minimum directors in company is 1.

And qualification variable in two groups one graduate and second post graduate so minimum number is 1 it means graduate directors and maximum number is 2 it means post graduate directors.

Board size in directors' maximum number of directors are 13 and minimum number of directors are 5.

And mean is high in age 59.55 and low mean is 0.93 female variable. Nationality variable in low 1.03 mean. And standard deviation is high age in 10.22 and low standard deviation is nationality in 0.177.

**Table 1. One-Sample Statistics.**

	N	Mean	Std. Deviation	Std. Error Mean
Book Value (Rs)	30	148.846333	92.1603506	16.8261010
EPS	30	24.783333	15.3505847	2.8026205
P/E	30	38.073000	23.9953463	4.3809308
ROA	30	8.068000	5.8196234	1.0625130
ROE	30	16.223667	6.7431700	1.2311288
TOTAL ASSETS	30	16398.219667	35166.7711324	6420.5446079
Market capital (Rs cr)	30	13509.319333	18922.8954240	3454.8322257
NPA (Margin)%	30	15.538667	27.5826078	5.0358722
Net Profit Amount (Cr.)	30	377.183000	518.0366207	94.5801143

**Table 2. Descriptive statistics.**

	N	Minimum	Maximum	Mean	Std. Deviation
Book Value (Rs)	30	47.7900	416.9600	148.846333	92.1603506
EPS	30	1.7700	58.1700	24.783333	15.3505847
P/E	30	8.6600	131.0200	38.073000	23.9953463
ROA	30	-4.6500	19.4700	8.068000	5.8196234
ROE	30	-7.8200	31.6800	16.223667	6.7431700
TOTAL ASSETS	30	368.3300	141818.8700	16398.219667	35166.7711324
Market capital (Rs Cr)	30	296.1900	83805.1900	13509.319333	18922.8954240
NPA (Margin) %	30	-73.9800	89.7700	15.538667	27.5826078
Net Profit Amount (Cr.)	30	-187.6000	2242.3200	377.183000	518.0366207
Board Size	30	5.00	13.00	8.2667	2.24274
Female	30	.00	3.00	.9333	.82768
PCT Female	30	.00	60.00	15.0203	15.10629
Nationality	30	1.00	2.00	1.1333	.34575
Valid N (listwise)	30				

**Table 3. Correlations.**

		Age	Board Size	Total Assets
Age	Pearson Correlation	1	.403*	-.036
	Sig. (2-tailed)		.027	.851
	N	30	30	30
Board Size	Pearson Correlation	.403*	1	.271
	Sig. (2-tailed)	.027		.147
	N	30	30	30
Total Assets	Pearson Correlation	-.036	.271	1
	Sig. (2-tailed)	.851	.147	
	N	30	30	30

\* Correlation is significant at the 0.05 level (2-tailed).

**Table 4. Correlation.**

	Age	Book Value (Rs)	EPS	P/E	ROA	ROE	TOTAL ASSETS	Market capital (Rs Cr)	NPA (Margin) %	Net Profit Amount (Cr.)	
Age	Pearson Correlation	1									
	Sig. (2-tailed)										
	N	30									
Book Value (Rs)	Pearson Correlation	0.05	1								
	Sig. (2-tailed)	0.795									
	N	30	30								
EPS	Pearson Correlation	0.012	.915	1							
	Sig. (2-tailed)	0.949	0								
	N	30	30	30							
P/E	Pearson Correlation	-0.169	-0.293	-0.295	1						
	Sig. (2-tailed)	0.372	0.116	0.113							
	N	30	30	30	30						
ROA	Pearson Correlation	0.239	-0.056	0.13	-0.005	1					
	Sig. (2-tailed)	0.203	0.768	0.494	0.98						
	N	30	30	30	30	30					
ROE	Pearson Correlation	0.043	0.067	0.244	-0.187	.605	1				
	Sig. (2-tailed)	0.823	0.726	0.194	0.322	0					
	N	30	30	30	30	30	30				
TOTAL ASSETS	Pearson Correlation	-0.036	-0.089	-0.156	-0.06	-.475	0.107	1			
	Sig. (2-tailed)	0.851	0.64	0.41	0.752	0.008	0.574				
	N	30	30	30	30	30	30	30			
Market capital (Rs Cr)	Pearson Correlation	-0.138	-0.13	-0.17	0.325	-0.068	0.208	.574	1		
	Sig. (2-tailed)	0.467	0.495	0.37	0.079	0.72	0.271	0.001			
	N	30	30	30	30	30	30	30	30		
NPA (Margin) %	Pearson Correlation	0.031	-0.203	-0.161	-0.124	0.102	.534	.662	.395	1	
	Sig. (2-tailed)	0.872	0.282	0.394	0.515	0.593	0.002	0	0.031		
	N	30	30	30	30	30	30	30	30	30	
Net Profit Amount (Cr.)	Pearson Correlation	-0.134	0.081	-0.03	-0.003	-0.11	.480	.659	.693	.466	1
	Sig. (2-tailed)	0.479	0.671	0.873	0.987	0.561	0.007	0	0	0.009	
	N	30	30	30	30	30	30	30	30	30	30

**Table 5: Frequency table**

	Frequency	Percent	Valid Percent	Cumulative Percent
1	8	7.3	7.3	7.3
2	12	9.7	9.7	16.9
3	5	21.4	21.4	38.3
4	6	12.5	12.5	50.8
5	5	2.0	2.0	52.8
6	6	1.2	1.2	54.0
7	9	3.2	3.2	57.3
8	10	6.9	6.9	64.1
9	12	4.8	4.8	69.0
10	7	2.4	2.4	71.4
11	6	2.4	2.4	73.8
12	10	4.4	4.4	78.2
13	13	1.2	1.2	79.4
14	6	4.4	4.4	83.9
15	9	1.2	1.2	85.1
16	10	.8	.8	85.9
17	8	1.2	1.2	87.1
18	10	.8	.8	87.9
19	7	3.6	3.6	91.5
20	7	1.2	1.2	92.7
21	8	.4	.4	93.1
22	7	2.4	2.4	95.6
23	9	.4	.4	96.0
24	9	.8	.8	96.8
25	10	.4	.4	97.2
26	8	1.2	1.2	98.4
27	6	.4	.4	98.8
28	8	.8	.8	99.6
29	5	.4	.4	99.7
30	12	.5	.5	100.0
Total	248	100.0	100.0	

**Table 6. Nationality**

	Frequency	Percent	Valid Percent	Cumulative Percent
Indian	26	86.7	86.7	86.7
Foreign	4	13.3	13.3	100.0
Total	30	100.0	100.0	

**Table 7. ANOVA**

		Sum of Squares	Df	Mean Square	F	Sig.
AGE	Between Groups	2948.365	4	737.091	7.827	.000
	Within Groups	22884.954	243	94.177		
	Total	25833.319	247			
Experience	Between Groups	1774.599	4	443.650	5.982	.000
	Within Groups	18022.739	243	74.168		
	Total	19797.339	247			
Qualification	Between Groups	1.178	4	.295	1.309	.267
	Within Groups	54.689	243	.225		
	Total	55.867	247			
Nationality	Between Groups	.026	4	.007	.207	.935
	Within Groups	7.716	243	.032		
	Total	7.742	247			
Tenure	Between Groups	3428.339	4	857.085	16.928	.000
	Within Groups	12303.403	243	50.631		
	Total	15731.742	247			

**Table 8. Descriptive**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Age	Graduate	85	59.93	10.605	1.150	57.64	62.22	32	85
	Post Graduate	163	59.36	10.052	.787	57.80	60.91	27	88
	Total	248	59.55	10.227	.649	58.27	60.83	27	88
Experience	Graduate	85	30.28	8.969	.973	28.35	32.22	5	55
	Post Graduate	163	30.40	8.972	.703	29.02	31.79	2	57
	Total	248	30.36	8.953	.568	29.24	31.48	2	57

**Table 9. ANOVA**

		Sum of Squares	Df	Mean Square	F	Sig.
AGE	Between Groups	18.380	1	18.380	.175	.676
	Within Groups	25814.938	246	104.939		
	Total	25833.319	247			
Experience	Between Groups	.839	1	.839	.010	.919
	Within Groups	19796.500	246	80.474		
	Total	19797.339	247			

**Table 10. Descriptive**

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Age	Indian	240	59.21	10.084	.651	57.93	60.49	27	88
	Foreign	8	69.75	9.780	3.458	61.57	77.93	48	79
	Total	248	59.55	10.227	.649	58.27	60.83	27	88
Experience	Indian	240	30.01	8.765	.566	28.89	31.12	2	57
	Foreign	8	41.00	8.468	2.994	33.92	48.08	22	49
	Total	248	30.36	8.953	.568	29.24	31.48	2	57

**Table 11. T-test equality.**

		Levine's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Age	Equal variances assumed	.572	.451	2.84	143	.005	5.326	1.871	1.629	9.024
	Equal variances not assumed			2.49	39.097	.017	5.326	2.138	1.002	9.650
Experience	Equal variances assumed	.006	.940	1.62	143	.106	2.826	1.736	-.605	6.257
	Equal variances not assumed			1.47	40.569	.147	2.826	1.911	-1.034	6.687

**Table 12. ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	859.656	1	859.656	8.468	.004
	Within Groups	24973.663	246	101.519		
	Total	25833.319	247			
Experience	Between Groups	935.355	1	935.355	12.199	.001
	Within Groups	18861.983	246	76.675		
	Total	19797.339	247			

**Table 13. Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Age	248	27	88	59.55	10.227
Experience	248	2	57	30.36	8.953
Director	248	1.00	5.00	2.2258	1.35479
Qualification	248	1.0	2.0	1.657	.4756
Nationality	248	1	2	1.03	.177
Tenure	248	1	43	8.47	7.981
Board Size	30	5.00	13.00	8.2667	2.24274
Female	30	.00	3.00	.9333	.82768
Valid N (Listwise)	30				

## CONCLUSION

In this research report we have known that what type of variables is impact of the firm performance. This report in firm of gender heterogeneity significant different is affected of the firm performance. And board of directors age and qualification impact of the firm performance.

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