Possible Presence of Cohesiveness amongst Women in Top Management Positions: Evidence from S&P BSE 100 Companies

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ABSTRACT: The present study analyses the effect of gender diversity on boards and in the top management on firm performance of Indian companies. The study extends to analyse the possible presence of 'cohesiveness' between female directors and female managers in the organisation and evaluates the moderating effect of the presence of women CEO or CFO in the company on firm performance. The present study has been performed on BSE 100 companies for a period of 13 years. As a proxy for firm performance, two financial indicators viz. ROA and ROCE have been used. Gender diversity on board has been measured by Blau's index and as proportion of women directors on board. Presence or absence of women CEO or CFO has been measured with a dummy variable. Various other variables that have been proved by previous researches to have an effect on firm performance viz. firm age, firm size, leverage, CEO duality, etc. have been used as control variables. The results of panel data regression analysis reveals that gender diversity on board has a positive and significant effect on firm performance. Presence of women executives in the top management positions of the firm does not have a significant effect on the financial performance of the firm. Concomitant presence of women executives in the company insignificantly but positively moderates the effect of gender diversity on firm performance. This implies that an inprovement in representation of women managers in upper echleons of management may bring about significant cohesion and support amongst women leaders which may lead to better firm performance.

Keywords: Gender diversity, top management, CEO, CFO, firm performance

INTRODUCTION

Gender diversity is a buzz world in today's corporate world after the regulations of SEBI came into effect from April 2014. Women have made considerable advancements in the upper echelons of the corporate structure, be it the managerial positions or as a member of the board of director. (Hillman, S & c, 2007; Melero, 2011) According to a recent report by Egon Zehnder (2020), India's performance in maintaining gender diversity in executive and non-executive positions in the corporate boards is better as compared to other Asian nations. According to the report, on an average, women hold 17 percent board seats in Indian companies. However, presence of gender diversity lags behind in Indian companies when it comes to appointment of women on executive positions. Women hold only 11 percent of committee chair positions in India, whereas this percent increases to 27.3 percent globally. The significant increase in the presence of women directors on board can be attributed to the recent regulations of SEBI and Companies Act, 2013 which have made it mandatory that at least one women director be present on the company board. However, as no regulations have yet been passed for the appointment of women on the executive positions of the companies, women are still underrepresented at the CEO level and at the executive level as a whole.

Women leadership has become a buzzword in the current corporate world as the phenomenon has been successfully linked to significantly better firm performance, measured with varied facets of firm performance. In a recent report by Bureau for Employer's Activities, International Labour Organisation (ILO), where approximately 13,000 firms in 70 countries around the world were surveyed, revealed that gender diversity does improve firm performance, increases profit by 5 to 15 percent, improvements in innovation, creativity and openness was witnessed with significantly higher rate of GDP growth. However, the report also brings to light that 60 percent of such companies do not meet the target of having 30 percent (critical mass at which benefits of gender diversity starts to accrue) of their senior management as women (ACT/EMP, 2019). In a report by IBM, the number of women in leadership roles viz. vice president, director, manager, etc. has further degraded from the year 2019 to 2021, even though gender diversity was found to bring higher customer satisfaction and employee retention. (IBM, 2021)

A large number of studies have examined the role of women directors and women executives on various facets of firm performance. However, the previous studies on gender diversity in the Indian companies have studied the role of women directors and women executive in singularity. There is a derth of studies focusing on the 'cohessiveness' of the female leaders in organisations. However, a few researches have put forward the theory that women show more cooperation with women at workplace as compared

to men. Also, the increasing pressure on women to perform better in a male-dominated workplace, leads to 'women helping women'. Therefore, the present study attempts to analyse the effect of presence of women directors on boards on firm performance and the effect of presence of women in top management on firm performance simultaneously. Moreover, as the previous literature suggests that women power enhances with the presence of women in other powerful positions of the firm, the present study analyses the role of concomitant presence of women leadership on corporate board as well as on top managerial positions on firm performance. As the present position of women directors on boards of Indian companies reflects tokenism and women presence in top management is nominal, an analysis of effect of 'support' provided by the women present in the same corporation in two different leadership positions viz. director and top management on the performance of the firm is imperative.

REVIEW OF LITERATURE

Major theories propounded by previous studies have affirmed the significant role played by diversity in the upper echelons of the organisation and its effect on various indicators of financial as well as non-financial performance of the firm. As per the agency theory of governance, women directors are supposed to have a positive impact on performance of the firm as women directors play a better role as an agent of the shareholders, moreover, the resource dependence theory propounds that gender diversity results in presence of diversity in managerial resources of the company, thereby bringing forth a gamut of diverse thoughts, ideas, intellectual and managerial capabilities. Diversity has been classified by the previous studies into two major classes viz. demographic diversity and cognitive diversity. However, in the case of gender diversity, cognitive diversity forms a component of demographic diversity, as women directors are associated with diverse perceptual views, reflect different cognitive functioning and tend to derive different solutions for same issues (Dutton & Duncan, 1987).

Women managers are supposed to improve firm performance with their critical and creative thinking. Gender diversity in top management brings heterogeniety in beliefs and attitudes, differences in perspective and preferences. The managerial style of women acts complementarily to the managerial style of men. Moreover, it has been postulated that gender diversity in the top management of an organisation would tend to increase recruitment of more females (dicrimination model as propounded by Becker (1957)) in the lower levels of organisation and therefore would reduce the gender disparity in the organisation on a composite level. It has also been suggested by previous literature that women managers must be preferred in the companies that have women-dominated consumer markets, as they would better understand the viewpoints, needs and perspectives of women consumers, as compared to male managers. (Lee & Farh, 2004; Heller,

2011; OECD, 2012; Norris, 2012)

The role of female in the C-suite has been linked time and again to the profitability of the firm. In a study by Noland and Moran (2016) conducted on 22,000 firms globally, it was found that presence of female leaders in a profitable corporate organisation increases the net margin of the company by 1 percent, and results in a 15 percent increase in the profitability of any typical firm. Similarly, according to a study by Zhang and Zhang (2021) on 856 A-listed companies of China, the female-friendly companies enjoy positive performance changes, female-neutral companies show zero performance changes and female-discriminative companies show negative performance changes resultant of presence or absence of female executives in the company. However, the literature still lacks consensus on the subject of effect of presence or absence of women executives on firm performance. Many studies have proved that female managers in the company bring significant positive changes in various aspects of firm performance (Kravitz, 2003; Smith, Smith, & Verner, 2006; Dezso & Ross, 2012; Khan & Vieito, 2013; Nakagawa & Schreiber, 2014; Perryman & Tripathy, 2016; Nekhili, Chakroun, & Chtioui, 2018), while some have shown that there is a negative association between female leadership and performance (Darmadi, 2010; Lenard, Yu, York, & Wu, 2014; Satriyo & Harymawan, 2018; Martínez-Zarzoso & Lo Bue, 2021), moreover, a number of studies have shown that there is no significant association between female leadership in companies and firm performance (Shrader, Blackburn, & Iles, 1997; Dwyer, Richard, & Chadwick, 2003; Adams & Ferreira, 2009).

Gender equality advancement and female representation on the corporate boards has recently become topic of debate in the societal and political spheres. The extent to which gender diversity on board affects the financial success of the corporation may have a crucial role to play in the formulation and implementation of regulations pertaining to promotion of gender diversity (Pletzer, Nikolova, Kedzior, & Voelpel, 2015). The existing literature does not show a clear consensus on the direction of the effect of gender diversity on board on firm financial performance (Webber & Donahue, 2001; Kochan, et al., 2003; Jackson, Joshi, & Erhardt, 2003; Miller & Triana, 2009). Whether gender diverse boards bring positive financial results, negative financial results or no significant changes in financial results are witnessed if the board is made more gender diverse, is still unclear. Various governance theories viz. agency theory, resource dependence theory, human resource theory, social phychology theory, etc. support diversity on board. Advocates of gender diversity on board put forward two lines of arguments i.e. the ethical case of diversity and the business case of diversity (Robinson & Dechant, 1997). The ethical viewpoint of diversity states that gender diversity should be supported on board as it is socially ethical and promotes equality between

genders (Brammer, Millington, & Pavelin, 2007). This viewpoint does not focus on the financial effects of gender diversity on board. On the other hand, the business case of gender diversity holds that higher representation of females on board would result in a significantly positive impact on the financial performance of the company (Robinson & Dechant, 1997).

Furthermore, it has been shown by previous studies that women cooperate more with women as compared to men. There exists higher interdependence and improved cooperation among women in an organisation (Matsa & Miller, 2011;) As women show higher tendency towards cooperation with women than with men, it can be hypothesised that presence of women in top managerial positions of an organisation will have a magnifying effect on the performance of the firm when there are more women directors present on board. This magnified effect on performance with the dual presence of women in top management and on board could be explained with the increase in female-friendly culture in the company, which would bring out the beneficial aspects of women's attributes like resourceful information exchange, better communication and effective diligence, etc. Moreover, the female managers would receive extra advice from women directors as the workplace boundaries between them would be lesser as compared to male directors.

Based on the postulations of the governance theories and the previous studies on women in upper echleons of a corporation, the following are the hypotheses of the study:

H_1: An increase in the proportion of women directors on the boards of the companies has significant positive impact on firm performance.

H_2 : Presence of women in the top management positions of a company has a significant positive impact on firm performance.

H_3 : Presence of women in the top management positions of a company positively moderates the effect of gender diversity on board on firm performance.

Sample

The sample for the study comprises of the companies listed in BSE 100 as on March 31, 2021. S&P BSE 100 index comprises of the 100 large cap and mid cap companies that are the representative of 15 diverse industries of the country. The study ranges for a period of 13 years from financial year 2006-07 to financial year 2018-19. The source of data for the study has primarily been the annual reports of the companies for the study period. Elimination of 14 companies was done from the study due to lack of availability of required information in the annual reports or due to unavailabilty of the annual reports of the company for the complete time period of the study.

VARIABLES

Dependent Variables

In order to ensure robustness in the results, two accounting-based firm performance measures viz. Return on Assets (ROA) and Return on Capital Employed (ROCE) have been used in the study as dependent variables.

Return on Assets (ROA) having been calculated as the ratio of net income of the company to its total assets reflects the ability of the company to generate profits from the use of its assets. On the other hand, Return on Capital Employed (ROCE) which has been calculated as a ratio of the Earnings Before Interest and Tax (EBIT) to capital employed by the company reflects the efficiency with which the company has employed it's capital.

Independent Variables

Gender diversity on the board of the companies has been used as the main independent variable in the study. The proportion of women directors on the board (WDirProp) has been used as a measure of gender diversity. As the proportion of women directors on the board did not exceed 50 percent during the study period, the Blau's index of diversity (Blau) was also used to measure gender diversity on board. Blau's index of diversity is similar to Herfindahl Index, i.e. it increases as the diversity on the board increases. The value of Blau's Index ranges from 0 to 0.5, where 0 represents absence of gender diversity on board and 0.5 represents equal representation of male and female directors on board.

Control Variables

Various variables that may have a significant effect on the financial performance of the firms have been used as the control variables in the study. The selection of such variables has been done after a through review of the usage of these variables in the previous literature. The control variables for the present study consist of the age of the firm, firm leverage, size of the firm, CEO duality, ratio of independent directors on board and presence of a woman executive in the firm. The age of the firm (LogAGE) has been calculated as the natural logarithm of the total number of years the firm had been in operation from the year of its inception. The natural logarithm of the total assets of the firm has been taken as the proxy for firm size (LogTA). The natural logarithms of the firm age and firm size helps in reducing the scale factor and heterogeneity to a considerable extent (Jaisinghani & Tondon, 2016). The debt-equity ratio has been taken as the proxy for measuring financial leverage (DE) of the firm. CEO duality (CEOD) has been measured with the help of a nominal dummy variable that takes the value 1 in presence of CEO duality on board and 0 otherwise. The proportion of independent directors on board (IndpRatio) has been measured as the ratio of independent directors on board of the firm in a particular year to the total number of directors on board for the year. The presence of a woman executive (WCEOCFO) in the firm has been measured with a nominal dummy variable that takes the value 1 if either a woman CEO or a woman CFO is present in the firm, else takes a value 0. The variable has been used to study whether concomitant presence of a woman executive in the company significantly moderates the effect of gender diversity on board on the financial performance of the company.

Method

Based on the objectives of the study the effect of gender diversity on board on financial performance of the firm and the moderating effect of concomitant presence of female executives in the firm on performance has been examined with the help of regression analysis. As the data for the study is longitudinal in nature, panel data regression analysis has been used in the study. Panel data estimation techniques consider the individual aspect as well as the time aspect of the data and therefore take the heterogeneity element of the data into account and therefore 'allowing for individual-specific variables' (Gujarati, 2004). Fixed Effects Estimation (FE) and Random Effects Estimation (RE) are the two basic panel data estimation technique. However, as fixed effects estimation technique applies time-demeaning process, it cannot be applied on variables with low or zero 'within-subject variability' (Battaglia & Gallo, 2015; Williams, 2017). As the corporate governance variables do not show much variablity over time (Kumar & Singh, 2014; Battaglia & Gallo, 2015), fixed effects estimation technique was not applied on the data. Moreover, as the study focuses more on drawing a general inference for the study population rather than on obtaining individual specific effects, random effects estimation technique was applied (Schaeck & Čihák, 2007). Random effects estimator also aids in reducing the issue of endogeneity in the model to some extent (De, 2003). As stationarity of the variables is a pre-requisite to the application of econometric models, Levin-Lin-Chu test of stationarity has been applied. Cluster-robust standard errors have been used in the models to control for the possible presence of autocorrelation and heteroscedasticity in the models, using companies as the cluster variable.

Model Specification

The effect of gender diversity on the financial performance of the firm has been studied with the help of two random effects estimation models, wherein two firm financial performance variables viz. ROA and ROCE have been regressed on the two variables used to measure gender diversity viz. Blau and WDirProp, along with the other control variables included in the study.

$$Performance_{it} = \alpha_i + \sum \beta_k Gender\ Diversity_{kit} + \sum \beta_n CV_{nit} + \lambda_i + \varepsilon_{it} \quad (1)$$

Performance is measured by ROA and ROCE. Gender Diversity represents the proportion of women directors on board (WDirProp) or the Blau's Index which measures diversity of the board in terms of gender representation (Blau). CV denotes the control variables used in the study viz. age of the firm, firm leverage, size of the firm, CEO duality, ratio of independent directors on board and presence of a woman executive in the firm. The symbol λ_i represents the unobserved heterogeniety in the model and the symbol ε_{it} represents the error term of the model.

The interaction effect between gender diversity and presence of women executive and financial performance of the firm has been studied with the

help of two random effects estimation models.

$$Performance_{it} = \alpha_i + \sum \beta_k Gender\ Diversity_{kit} + \sum \beta_n CV_{nit} + \sum \beta_k Interaction_{kit} + \lambda_i + \varepsilon_{it} \quad (2)$$

The term Interaction in the model represents the interaction between gender diversity variables (WDirProp and Blau) and WCEOCFO. The Table 1 depicts the direction of the expected relationship of the independent variables used in the study with firm performance. The expected relationships as shown in the Table have been based on the postulations and findings of the previous literature.

Table 1: Expected Relationship of the Variables with Firm Performance

Symbol	Variable	Expected Relationship	Previous Literature
WDirProp & Blau	Gender Diversity on Board	±	Carter, Simkins, and Simpson (2003), Campbell and Mı´nguez-Vera (2007), Adams and Ferreira (2009),
IndpRatio	Proportion of Independent Directors on Board	+	Bhojraj and Sengupta, (2003) Jackling and Johl, (2009)
LogAGE	Age of the Firm	+	Majumdar (1997), Ang, Cole, and Lin (2000)
LogTA	Size of the Firm	–	Williomson (1967), Raja and Kumar (2005)
DE	Firm's Financial Leverage	+	Campbell and Mı´nguez-Vera (2007), Iqbal and Usman (2018)
CEOD	CEO Duality	–	Lam and Lee (2012), Dogun, Elitas, Agca, and Ogel (2013)
WCEOC-FO	Interaction Term between Gender Diversity on Board and Presence of Women CEO/CFO	+	Matsa and Miller, (2011)

Results and Discussion

The Table 2 depicts the descriptive statistics of the dependent variables and independent variables used in the study along with two measures of multicollinearity viz. VIF and tolerance values. The mean value of WDirProp shows that on an average the mean proportion of women directors on the boards of the firms used in the study was 8.4 percent. This shows that albeit the various regulatory measures of SEBI regarding women directors, the position of gender diversity in Indian

firms is still at its infancy. The mean of IndpRatio depicts that on an average the boards of the Indian firms comprise of 52.60 percent independent directors, thereby satisfying the regulatory norms. The antilog of LogAGE, if calculated, will disclose that majority of the firms in the sample are approximately less than 39 years in age. Out of the 1118 cases, a women executive (CEO or CFO) was present in 100 cases (8.90 percent) meaning thereby that in approximately 91 percent of cases, there were no women executives employed in the firm. Some of the many reasons cited for such low representation of women as executives by the previous studies are presence of gender stereotyping, group favouratism, fewer qualified women, family pressure and responsibilities being more restraining on women than men, etc. (Holmes, 2019; Bollavaram, 2021). The presence of CEO duality was witnessed in approximately 49.30 percent of cases. The multicollinearity between the independent variables was examined with the help of Variance Inflation Factor (VIF) and Tolerance Values. As shown in Table 2 the VIF values for the independent variables are less than 10 and more than 1 (Cho & Kim, 2007; Jackling & Johl, 2009; O'Connell, 2010) along with the tolerance values being more than 0.40 (Allison, 1999), confirms absence of multicolliniearity in the models. Levin-Lin-Chu test of stationarity was used to check the presence of unit root in the variables and as depicted by the Table 3 all the variables were stationary at level.

Table 2: Descriptive Statistics, VIF and Tolerance Values

Variables	Mean	S.D.	Min	Max	VIF	Tolerance
1. ROA	9.84	18.92	-34.10	250.43	-	-
2. ROCE	17.13	25.69	-305.73	421.74	-	-
3. Blau	0.143	0.11	0	0.48	1.19	0.8432
4.WDirProp	0.084	0.07	0	0.41	1.15	0.8702
5. IndpRatio	0.526	0.11	0.11	1.00	1.03	0.9672
6. LogTA	6.276	0.77	3.48	8.69	1.35	0.7432
7. LogAGE	1.595	0.34	0	2.32	1.04	0.9574
8. DE	2.220	4.40	-9.36	23.05	1.28	0.7810
9. CEOD	-	-	-	-	1.05	0.9554
10. WCEOCFO	-	-	-	-	1.06	0.9471

Table 3: Levin-Lin-Chu Test of Stationarity

Variable	t	p-value
1. ROA	-13.4751	0.0000
2. ROCE	-1.5892	0.0000
3. Blau	-1.6920	0.0000
4.WDirProp	-8.4596	0.0000

5. IndpRatio	-8.7677	0.0000
6. LogTA	-6.1546	0.0000
7. LogAGE	-40.0972	0.0000
8. DE	-7.5224	0.0000

Gender Diversity

The Table 4 depicts the results of regression analysis conducted on board level gender diversity and firm financial performance, concomitantly controlling for the effects of other variables in the model. The first hypothesis (H_1) of the study states that an increase in the proportion of women directors on the boards of the companies has significant positive impact on firm performance.

Table 4: Gender Diversity and Firm Performance

	ROA		ROCE	
	(1)	(2)	(3)	(4)
Blau	10.526* (4.960)	-	25.457*** (6.720)	-
WDirProp	-	3.357** (1.250)	-	39.445*** (10.432)
WCEOCFO	-2.960 (2.008)	3.182 (1.959)	-2.602 (2.721)	0.735 (2.669)
IndpRatio	1.007 (0.808)	1.176 (0.814)	-5.988 (6.315)	-5.014 (6.342)
DE	0.704 (1.611)	1.164 (1.624)	0.015 (0.190)	-0.012 (0.190)
LogTA	31.123*** (4.661)	31.347*** (4.655)	5.734*** (1.095)	-5.507 (1.109)
LogAGE	0.704*** (0.140)	0.695*** (0.139)	16.431*** (2.182)	16.161 (2.212)
CEOD	3.311** (1.116)	3.252** (1.113)	3.852** (1.512)	3.453* (1.517)
Intercept	-12.272 (6.283)	-13.363* (6.306)	26.204** (8.512)	25.989 (8.592)
N	1118	1118	1118	1118
Adjusted R^2	0.7350	0.7579	0.7742	0.7166
LM Test	3799.14***	3764.90***	652.89***	654.77***
Wald Test	41.71***	39.10***	43.22***	42.12***
OLS / RE	RE	RE	RE	RE

As the results depict, the beta co-efficients for the variables Blau and WDirProp are positive numbers and are significant at 0.05, 0.01 and 0.001 significance level for both the proxies of firm performance i.e. ROA and ROCE. This implies that an increase in proportion of women directors on board would result in a significant increase in ROA and ROCE of the company. Therefore, the first null hypothesis of the study stands rejected. If one women director is added to the board of 10 directors, it would result in an increase in the ROA of the company by 10 percent of 3.357 i.e. 0.3357 and and increase in ROCE will be witnessed by 10 percent of 39.445 i.e. 3.9445 (Dezso & Ross, 2012).

Women Executives

The Table 4 depicts the results of regression analysis conducted on presence of women executives in the firm and firm financial performance, concomitantly controlling for the effects of other variables in the model. The second hypothesis (H_2) states that presence of women in the top management positions of a company has a significant positive impact on firm performance. As the results suggest, the beta co-efficients for the variable WCEOCFO are insignficant at 0.05 significance level for both the proxies of firm performance i.e. ROA and ROCE. This implies that presence or absence of women executives in a firm does not have a significant impact on the firm's financial performance. Therefore, we fail to reject the second null hypothesis of the study.

Gender Diversity in the Presence of Women Executives

According to the third hypothesis of the study (H_3), presence of women in the top management positions of a company positively moderates the effect of gender diversity on board on firm performance. Table 5 presents the results of the regression analysis of the effect of gender diversity on firm performance along with the interaction effect of the gender diversity on board and presence of women executives in top management of the company.

Table 5: Gender Diversity in the Presence of Women Executives and Firm Performance

	ROA		ROCE	
	(5)	(6)	(7)	(8)
BlauIndex	11.057* (5.019)	-	25.443*** (6.802)	-
WDirProp	-	3.5101** (1.2658)	-	39.384*** (10.548)
WCEOCFO	-9.223 (9.214)	10.283 (9.224)	-2.765 (12.486)	4.0283 (12.5714)

Interaction	6.985 (4.006)	7.447 (4.071)	4.218 (3.152)	3.453 (2.409)
IndpRatio	1.013 (0.808)	1.188 (0.8144)	-5.981 (6.338)	-4.879 (6.365)
DE	0.737 (1.612)	1.220 (1.625)	0.016 (0.190)	-0.009 (0.191)
LogTA	31.381*** (4.677)	31.639*** (4.670)	5.734*** (1.096)	5.502*** (1.109)
LogAGE	0.697*** (0.140)	0.687*** (0.140)	16.432*** (2.184)	16.187*** (2.215)
CEOD	3.267** (1.118)	3.2034** (1.1153)	3.851** (1.515)	3.431* (1.520)
Intercept	-12.432* (6.288)	-13.572* (6.312)	26.200** (8.521)	25.893** (8.603)
N	1118	1118	1118	1118
Adjusted R^2	0.7301	0.7542	0.7669	0.7162
LM Test	3799.91***	3763.46***	652.87***	654.32***
Wald Test	41.72***	38.84***	42.65***	43.41***
OLS / RE	RE	RE	RE	RE

The main effect of gender diversity on the financial performance of the firm and the main effect of presence of women executives on the financial performance of the firm is unchanged i.e. gender diversity has significant positive impact on both the proxies of firm performance viz. ROA and ROCE and presence of women executives has insignificant effect on the same. However, the co-efficient for the interaction term in the model viz. Interaction is insignificant at 0.05 significance level, denoting thereby that the concomitant presence of women executives in the top management positions of the firm does not significantly moderate the effect of gender diversity on firm financial performance. Therefore, we fail to reject the third null hypothesis of the study. Granting the insignificance of the interaction term, the co-efficients for the interaction term are positive, indicating that an increase in gender diversity on board in the concomitant presence of women executives in the firm would result in a positive effect on the financial performance of the firm. If a women director is added to a board of 10 directors in a firm where a woman CEO or CFO are appointed, it would result in an increase in the ROA of the firm by 10 percent of 7.447 i.e. by approximately 0.7447 and ROCE would increase by 10 percent of 3.453 i.e. by approximately 0.3453. (Dezso & Ross, 2012) However, this could not be supported with a conclusive evidence.

As expected, LogAGE shows a significant positive effect on the performance of the

firm. Therefore, as the age of the firm increases, it gains higher returns. This may be explained with the fact that with time the company gains experience, gains market share, customer loyalty increases, the firm reaches its optimum capacity of operation, etc. LogTA, which was used in the model as the proxy for firm size also shows a positive and significant effect on firm performance viz. ROA and ROCE. The larger sized companies enjoy economies of scale, experience growth in the market and as a result enjoy higher returns. The debt-equity ratio (DE), which is a measure of leverage of the firm shows an insignificant effect on firm's ROA and ROCE implying thereby that capital structure decisions of a firm might be immaterial in determining its financial performance. Similarly, the results depict that the proportion of independent directors on the the board of the firm (IndpRatio) does not significantly affect the performance of the firm in terms of ROA and ROCE. Previous studies on board independence have concluded that the insignificant contribution of independent directors on board to the performance of the firm could be the attributed to the factors like insufficient knowledge of these directors about the company and its internal functioning, lack of motivation as they only receive sitting fees to attent the board meetings, lack of training provided to them, etc. However, the significant positive co-efficient for the variable CEOD proves that in the presence of CEO duality in the company, i.e. when the CEO of the company also holds the position of the Chairperson of the board, the firm would experience a significant decline in its financial performance.

CONCLUSION

The present study examines the relationship between gender diversity on board and firm financial performance of S&P BSE 100 companies and analyses whether a concomitant presence of women executives in the top management of the company significantly and positively moderates the effect of gender diversity on firm performance. The findings of the study reveal that (a) gender diversity on board has a significant and positive impact on the financial performance of the firm. (b) presence of women executives in the top management positions of the firm does not have a significant effect on the financial performance of the firm. (c) concomitant presence of women executives in the company does not significantly moderate the effect of gender diversity on firm financial performance.

The positive impact of gender diversity on firm financial performance corroborates with the findings of previous studies viz. Brahma, Nwafor, and Boateng (2020), Khidmat, Khan, and Ullah (2020), Dwaikat, Qubbaj, and Queiri (2021), etc. The positive relationship could be explained with the fact that gender diversity brings more innovative and diverse thinking to the board, wider pool of experience, better decision making capabilities, wider perspective to a situation. Moreover, women directors are considered more universally concerned, less self-centered

and more compassionate which would boost better working culture amongst the board members. The insignificant relationship between women executives in top management and firm performance corroborates with the findings of previous studies viz. Shao and Liu (2014), Satriyo and Harymawan (2018), etc. The insignificant relationship can be attributed to the fact that women are still under-represented in the upper echleons of the companies. In our sample firms out of 1118 cases women executives were present in only 100 cases (8.90 percent). Such a low representation of women leads to intense pressure on women executives in a male majority organisation to prove their capabilities. Moreover, the presence of pre-concieved notions about women being weak and less capable to act as an executive has led to women being unable to show their competency to the greatest extent. However, the results of the interaction analysis proves that concomitant presence of women on boards and in top management positions does not significantly and positively affect firm performance. This could be explained with the view that due to minority status of women in upper echleons of the firm, and the dire position of underrepresentation of women managers in Indian companies, the 'cohesiveness' between the female leaders in the two critical leadership positions of the firm lacks to be on a significant scale. In India, representation of women is only upheld among board of directors by regulatory norms, and there is absence of regulations concerning representation of women in top management positions of the firm. However, witnessing the positive (although insignificant) impact of cooperation of women in different positions of the top management of the firm, regulations must be framed regarding higher representation of women in executive positions of the company. The findings of the study need to be viewed in the light of the following limitations. It has been assumed in the study that a linear relationship exists between gender diversity on board and firm performance, where a cusrvilinear relationship could exist. The present study uses financial ratios as proxy for firm performance. However, other variables viz. market linked measures, productivity measures, etc. could be used for clearer view on the relationship. Lastly, an increase in the time period of the study along with larger and diverse sample could result in more consistent and robust results.

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