Board Gender Diversity and Firm Performance: Evidence from Family-Owned Firms in India

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Abstract: This study investigates the impact of board gender diversity (BGD) on firm performance (FP) for family-owned Indian firms. To do so, this study selects a sample of the 75 top-listed family-owned firms for a period of 5 years. For empirical analysis, the study used appropriate panel data models. For robustness, the three-stage least square (3SLS) model was used. The findings obtained from panel data models reveal a significant positive impact of BGD in terms of its different measures on FP after controlling corporate governance and firm-specific characteristics. Such results are further substantiated through the 3SLS model. This study provides novel evidence on the impact of BGD in terms of its diverse constructive measures on FP for family-owned firms in the Indian context, thereby extending the ongoing debate about the outcomes of the mandatory gender quota on board for an emerging market.

Keywords: board gender diversity, family-owned firms, firm performance, India.

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INTRODUCTION

In recent times, board gender diversity (BGD) has become one of the luxuriant topics of research. The subject has been discussed against the various theoretical backdrop, including agency perspective highlighting the relevance of the presence of women directors for improving the quality of monitoring (Adams & Ferreira, 2009; Rhode & Packel, 2014) and resource dependency (Pfeffer & Salancik, 1978) and human capital perspective (Schultz, 1961), which emphasize on the superior external network and unique human capital of female directors that gets reflected in terms of better firm performance (FP) (Erhardt et al., 2003; Liu et al., 2014; Kiliç et al., 2015; Maji & Saha, 2021; Laskar et al., 2022). In addition, the feminist ethics perspective underlines the need for female directors for encouraging ethical and legitimate business practices (Abdullah & Valentine, 2009).

Empirical research on BGD is particularly enriched by the introduction of mandatory gender quotas in several European countries (such as Norway, Spain, Finland, France, Iceland, and Denmark). In this regard, India is one of the pioneer Asian countries to mandate the presence of a minimum of one female director on board under the Companies Act, 2013. Accordingly, the empirical literature has focused on the effect of BGD on diverse areas like quality of firm-level monitoring (Adams & Ferreira, 2009); quality of firm-level disclosures (Gul et al., 2011), and firm performance (FP) to a greater extent (Liu et al., 2014; Duppati et al., 2020). Though, BGD is backed by



a growing number of policy initiatives that require boards to have a minimum number/proportion of females to reduce the existing gender disparity at the board level as well as to improve corporate monitoring and overall FP, yet empirical evidence on monitoring as well as performance effects of female directors is surprisingly mixed. For instance, some scholars like Liu et al., (2014), Kiliç & Kuzey (2015) and Maji & Saha (2021) in context of US, China, India and Turkey respectively observe positive impact of female directors on FP. In contrast, researchers like Ye et al. (2010); Duppati et al. (2020) and Ararat & Yurtoglu (2021) find no significant performance impact of female directors. There can be some contextual factors responsible for this variation.

Moreover, scrutiny of BGD literature reveals that much of the relevant body of research is confined to the analysis of the role of female directors in widely held corporations with separation of ownership and control. Extant literature ignores the public listed firms that are characterized by closely held ownership structure with strong dominance of families in terms of ownership and control, even though the concentration of ownership (especially family ownership) has become a rule rather than an exception around the world, except US (La Porta et al., 1999). Moreover, the countries that are facing increased institutional pressure to constitute more gender-balanced boards are dominated not by widely held firms, but by firms with concentrated family ownership like Spain, Denmark, Belgium, India, Kenya, Hong Kong, and Brazil. Notwithstanding this, evidence on the impact of BGD on performance outcome for firms with concentrated ownership structure, particularly for family-owned firms is scanty at the global level and unexplored at the national level.

Against this backdrop, the present study raises the following research question: RQ: What is the impact of board gender diversity on performance for family-owned firms in India?

The rationale for answering this research question is dictated by some considerations. First, given the growing concern about corporate governance (CG), family firms have governance structures that are distinctly different from those of non-family firms, giving rise to CG challenges that are specific to such firms (DeMott, 2008). Family firms are unique in terms of agency problems as manifested in ownership patterns, governance structure, management, motivation, objectives, and social value systems (Pieper, 2010). Considering the distinct governance issues of family firms, it becomes pertinent to study the impact of BGD on the FP of such firms. Second, encompassing the first consideration, the larger quest is to find whether the effect of BGD on FP is sensitive to the CG structure of firms since the literature on governance of family firms suggest that the board of directors (BODs) of such firms may require different strategies and skills as well as incentives to impart their fiduciary monitoring and advisory role (DeMott, 2008). Finally, because female directors mostly constitute minority group on board owing to their underrepresentation, regulatory gender quota of family-owned firms are generally asserted to be occupied by female family members of the substantial owners' group that is likely to provide them the requisite comfort and power to raise their voice in board discussion, which female directors in case of other firms might be lacking. Hence it necessitates investigating the performance impact of BGD for family-owned firms.

India provides an ideal setting for exploring this topic for certain reasons. First, the most obvious reason for choosing India as a platform to conduct this research is the ancient history of the family business in the country, which is still pervasive in the majority of public listed firms as about 73% of the top 500 companies listed on Bombay Stock Exchange (BSE) are family-owned'. Second, in view of family dominance of Indian firms it is often asserted that female representation of board in India has resulted in tokenism and nepotism, which makes the requirement of gender quota less effective (Sanan, 2016; Duppati et al., 2020). Hence, it is necessary to investigate whether tokenism and nepotism influence the performance contribution of female directors for

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family-owned firms. Finally, unlike developed and other emerging countries, Indian society is traditionally male-dominated, and females are expected to follow stereotypical gender roles like performing domestic chores. Thus, there is a constant skepticism about the ability of females in understanding the technicalities of business and their contribution towards overall FP (Sanan, 2016). Given the exceptional features of India, it would be interesting to address the above-mentioned research question to enrich the empirical literature of BGD.

METHODS

This study considers a sample of the top 75 family-owned firms listed at Bombay Stock Exchange (BSE) as of 31st March 2014, based on market capitalization. The sample excludes financial and utility firms as such firms are additionally governed by special regulations like Banking Regulation Act, 1949 and Electricity Act, 2003. We have purposively selected the top 75 firms that constitute around 70% of BSE's total market capitalization to observe the participation of women in the boardroom since the concept of BDG is at a nascent stage in India. We have used the common definition of family-owned firms in the literature (Anderson & Reeb, 2003) i.e., members of the founding family (referred to as promoters in India) owning at least 20 percent of voting equity.

The study is based on a period of five years from 2013-14 to 2017-18. The initial year is selected on the ground that the gender quota on the corporate board is imposed under the Companies Act, 2013, which becomes applicable from 29th October 2014. In addition, many CG reforms such as revision of Clause 49 of the listing agreement of Securities Exchange Board of India (SEBI), replacement of clause 49 with Listing Obligation and Disclosure Requirement (LODR), Regulation, 2015 were implemented during the mentioned period for the betterment of overall governance structure of corporations, which can be expected to promote BGD. The data relating to BGD, and CG variables are collected from annual reports of sample firms. On the other hand, the financial information of the sample firms over the study periods is obtained from the 'CapitalinePlus' corporate database.

The dependent variable considered in this study is firms' financial performance and it is captured by using the market-based measure. We have used the natural logarithm of the market capitalization of sample firms (LnMCAP) as investors' expectation about the prospect of the firm gets reflected in their market performance, given its competitive advantage and talent of corporate management (Wolfe & Sauaia, 2014).

The key explanatory variable of interest in this study is BGD. To capture it, we have employed three measures of which one is the most common measure of BGD, while the other two measures are barely used. The first measure of BGD used in this study is the percentage of female directors to total board size, which is the most common measure of BGD in the prior studies (Adams & Ferreira, 2009; Ahern & Dittmar, 2012). The second measure of BGD that we have used is the Blau index (BI) (Blau, 1977) The BI is computed as $1 - \sum_{i=1}^{K} P_i^2$ where Pi includes the percentage of each group member in the gender categories and K is the total number of members in the group. The value range of BI varies from 0 to (K-1)/K. The maximum value of BI indicates an equal proportion of members from both the gender categories in the group. The maximum value of BI indicates an equal proportion of members from both the gender categories in the group. Though this measure is not widely used in the empirical literature, except for a few (Campbell & Mínguez-Vera, 2008; Sanan, 2016; Maji & Saha, 2021), it can be regarded as a superior measure to capture BGD as it considers both the gender categories in computing diversity and the uniformity in distribution of group members among them. The third measure of BGD used in this study is the three sub-groups of female directors, which they can form in a board based on their level of representation. We have opted for this measure following the critical mass propounded by Kanter as

it suggests that contributions of female directors towards any board activities or overall FP are determined by their level of concentration on board. Accordingly, we have identified three types of sub-groups based on the level of concentration of female directors in the Indian context such as (1) skewed groups dominated by males in which, females comprise below 10%; (2) tilted groups where the percentage of females is between 10% to 20%; and (3) groups with sizeable female representation [where the percentage of the female is above 20%].

Following the extant literature, we consider several control variables that are supposed to influence FP. Particularly, we have developed a corporate governance index (CGI) based on OECD methodology (OECD, 2008). CG is widely recognized as a significant predictor of FP. For instance, the agency perspective advocates for CG mechanisms for alignment of owners' interest with that of managers, which collectively assists in maximizing overall FP (Fama & Jensen, 1983).

The OECD methodology for computing composite index is based on the principal component analysis (PCA), which is a technique of factor analysis that helps to reduce the dimensionality of the data set and helps to identify new meaningful underlying variables. For conducting PCA, we consider seven variables- board size, board independence, percentage of directors with professional qualifications (like Chartered Accountant, Cost and Work Accountant, Lawyer, Administrative Service Official), Audit committee independence, promoters' shareholding, FII ownership and Govt. ownership. Before conducting PCA analysis, we compute Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. We find KMO test value 0.697 and the chi-square value of Bartlett's test is significant at a 1% level. The observed results thus advocate in favor of conducting PCA. To select the number of factors, we adopt two criteria: eigenvalue greater than one and individual contribution of the factor to the explanation of overall variance by more than 10 percent. We use varimax rotation to maximize the shared variance to identify the factor upon which data load. After obtaining the factor loadings, we employ OECD methodology (OECD, 2008) for the construction of composite index (CG index) using the following steps:

In the first step, we compute the normalization of factor loadings by dividing the square of factor loading by summation of the square of factor loadings of all the variables. Next, factors are aggregated by assigning a weight to each of them equal to the proportion of the explained variance in the data set. The weight is computed by:

$$weight = \frac{maximum \, normalized \, factor \, loading}{ratio \, of \, explained \, to \, total \, variance \, of \, the \, respective \, factor}$$

Where, the ratio of explained to total variance = $\frac{explained\ variance\ of\ the\ respective\ factor}{total\ explained\ variance}$

Finally, the composite index is estimated by applying the following formula:

Composite index = $\sum_{i=1}^{n}$ (weight of each variable x original value of the variable)

Where, n is the number of variables.

In addition, firm specific factors like SIZE can be expected to have a positive influence on FP, since large firms enjoys better competitiveness, economics of scale and intensive monitoring by regulators (Singh & Gaur, 2009). Similarly, LEV also acts as a monitoring mechanism since the interest burden of debt pre-commit managers performs better (Sarkar, 2009). Likewise, profitability represented by ROA can be anticipated to make a positive contribution towards FP, owing to it signaling impact (Arora & Sharma, 2016). The detailed measurement of all variables is presented in Table 1.

Table 1 Measurement of	۰f V	/ariab	oles
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Variables	Acronyms	Measurement
Dependent Variables:		
Firm Performance	LnMCAP	Natural logarithm of market capitalization
Independent Variables:		
Share of Female Directors (BGD1)	SFD	Percentage of female directors to total number of directors on board
Board Gender Diversity (Blau Index) (BGD2)	BGD(BI)	Blau Index for board gender diversity
Board Gender Diversity represented by various groups (BGD3):		
 Skewed Group of Female Directors 	FD1	It is a dummy variable that assumes the value 1 if a board has less than 10% of female directors; o otherwise
Tilted Group of Female Directors	FD2	It is a dummy variable that assumes the value; 1 if the percentage of female directors is between 10-20%; 0 otherwise.
• Sizable Representation of Female Directors	FD3	It is a dummy variable that assumes the value 1 if the percentage of female directors is above 20%; o otherwise
Control Variables:		
Corporate Governance Index	CGI	CGI based on OECD methodology
Firm Size	SIZE	Natural logarithm of total sales
Leverage	LEV	Ratio of total debt by total asset
Profitability	ROA	Ratio of earnings before interest and taxes by total asset

To examine the impact of BGD on FP after controlling CG and other firm-specific variables, we use an appropriate panel data regression model based on the outcomes of the Breusch-Pagan test and Hausman test. Based on the test results, we find that the random GLS model is more appropriate for the present dataset. We use the following general form of the random GLS model.

$$Y_{it} = \beta_o + X'_{it} \beta_k + \omega_{it}$$
 (i)

Where, X' represents the number of regressors and $\omega_{it} = \varepsilon_i + \mu_{it} \cdot \varepsilon_i$ is the cross-section error component and μ_{it} is the combined time series and cross-section error component and both ~N(0, σ^2).

Based on the notations used for the response variable and explanatory variables, the following model is used to examine the impacts of BGD on FP.

$$LnMC_{it} = \beta_o + \beta_1 BGD_{it} + \beta_2 CGI_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \beta_5 PROF_{it} + \theta_{it}$$
 (Model 1)

Where

 θ_{it} is the error component, which is ω_{it} for random effects model and v_{it} for fixed effects model. We use three measures of BGD, namely the percentage of female directors (BGD1), Blau Index (BGD2), and categorization of the share of female directors under three groups (BGD3).

Arora & Shrama (2016) state that there may be an endogeneity issue between CG variables and FP. Although we use the CG index instead of employing the CG variables separately in the regression model, for the robustness of the results of panel data regression model three stage least square (3 SLS) model is used. 3 SLS model provides consistent results in the event of correlation between regressors and disturbances.

RESULTS AND DISCUSSIONS

Table 2 summarizes the descriptive statistics of all variables under consideration. The observed standard deviation of LnMCAP suggests less variability among sample firms in terms of their market performance. The BGD in terms of the percentage of female directors reveals that female directors are well represented in family-owned firms, which indicates that such firms are considering BGD as a strategic priority rather than mere regulatory compliance. This observation is also supported by other BGD measures, thus implying that family-owned firms are pro-active towards having BGD. Consistent with the agency perspective, the CGI scores of family-owned firms are quite good, implying superior CG compliance plausibly owing to severe agency issues. Regarding other firm-specific variables like SIZE and LEV variability is not high among sample firms, while in terms of PROF, the sample firms are widely scattered.

Table 2 Descriptive Statistics

Variables	Minimum	Maximum	Mean	Standard Deviation	Skewness
LnMCAP	5.74	2.83	4.51	0.43	0.32
BGD (% of Female Directors)	0	0.44	0.13	0.07	0.91
BGD (BI)	0	0.49	0.21	0.10	0.24
FD1	0	1	0.38	0.72	8.41
FD2	0	1	0.46	0.49	0.12
FD3	0	1	0.16	0.36	1.82
CGI	28.13	52.58	41.23	5.09	-0.18
SIZE	2.59	5.59	3.89	0.52	0.28
LEV	0	2.29	0.29	0.39	1.90
PROF	-23.11	161.16	23.87	22.64	2.31

The results of panel data regression models as presented in Table 3 The R-square values as well as highly significant Wald chi-square values of all the models employing diverse measures of BGD advocate in favor of their predictive power. The observed result indicates that BGD represented by BGD1 and BGD2 have a highly significant positive impact on FP, thus supporting H. To put it in a different way, it can also be said that an increase (decrease) in the number of women in the board lead to increase (decrease) the FP. It indicates that overall, the theoretical benefits of BGD like meticulous monitoring skills as per agency theory, better access to external resources as per resource dependency theory, collective pool of intelligence as per human capital theory and reputational capital as per signaling theory holds true in case of family-owned firms in Indian context. Likewise, BGD proxied by FD2 and FD3 exhibits significant positive impact on FP, while FD1 documents no significant impact on the same, thus extends support the assertion of the critical mass theory that female directors can only contributes towards FP when they are represented by a critical mass i.e., FD2 and FD3 in the present context, while mere presence of a single women directors will not be able to make any significant contribution towards FP. The overall finding obtained from this study is consistent with our hypothetical assertion, which is developed by amalgamating the diverse theoretical notions of BGD along with the literature on the family-owned firms. Thus, it can be inferred that BGD is highly effective for family-owned firms for addressing their unique agency problems owing to the core characteristics female like universalism and benevolence and their exceptional

monitoring and leadership skills (Shleifer & Vishny, 1997). Our finding is also upholding the results of previous studies from both developed as well as developing countries Liu et al., (2014), Kiliç & Kuzey (2015), Maji & Saha, (2021), Simionescu et al. (2021), Amin et al. (2022) indicating that female directors enhance FP. Moreover, contradictory to the general belief of tokenism and nepotism regarding BGD especially in case of family-owned firms, our findings shed light to the fact female directors owing to their superior traits as advocated by various theoretical perspectives are capable to addressing unique agency conflict experienced by the family-owned firms in Indian context, thereby making significant positive contribution towards FP. Thus, our results support the findings of Magnanelli et al. (2020) as they observe a significant positive relationship between BGD and FP, specifically in family-owned businesses. Nevertheless, our result contradicts the findings of Amin et al. (2022) for listed firms in Pakistan Stock Exchange (PSX). This variation can be attributed some socio-cultural effects of the contextual setting under which the studies are undertaken. Moreover, if we compare our findings with that of García-Meca et al., (2022) who suggests that excess family ties amongst female directors have adverse impact on family firm performance, it can also be inferred that not all female directors in Indian firms are associated with families of the substantial owners, but certain percentage of independent directors also exist, thus overall BGD is making significant positive contribution towards FP.

Regarding control variables, consistent with our theoretical assertions, CG is observed to have a highly significant positive impact on FP for family-owned firms (Fama & Jensen, 1983). SIZE and PROF document a significant positive impact on FP (Arora & Sharma, 2016), while LEV document negative impact on FP, as higher debt reduces the relative power of equity shareholders over debt holders that reduce the control of shareholders in the firm (Diwadi & Jain, 2005).

Variables BGD1 (% of Female Directors) BGD₂ (BI) BGD 3 (3 groups) Coefficient Coefficient Coefficient z-stat. z-stat. z-stat. 0.569** SFD 3.714 BGD (BI) 0.4471*** 4.18 FD₁ 0.017 0.091*** FD₂ 0.127 FD₃ 0.062*** 3.42 1.71 CGI 0.077*** 2.82 0.077*** 2.83 0.083*** 3.02 SIZE 0.663*** 15.85 0.661*** 15.85 0.670*** 15.18 LEV -0.098*** -2.26 -0.091** -0.109*** -2.21 -2.50 0.016*** 0.001*** ROA 2.01 2.28 0.001** -1.25 1.532*** 1.514*** Constant 1.503*** 7.85 7.78 7.62 299.71*** 305.08*** 362.88*** Wald-Chi-square

Table 3 Results of Panel Data Model (Dependent variable LnMC)

Notes: ***, ** and * indicate significant at 1%, 5% and 10% level respectively; Model used: Random effect GLS

To ensure the robustness of the results obtained from the panel data regression model, we use the 3SLS model to examine the impact of BGD on FP after controlling CG and firm characteristics. The findings as presented in Table 4 reveal that the results are largely in consensus with that of the panel data model. The impact of BGD

on FP is observed to be positive and significant for all its measures, thus confirming the fact that BGD makes a significant positive contribution towards the performance of family-owned Indian firms.

Table 4 Results of 3SLS model for family-owned firms (Robustness Test)

Variables	BGD1 (% of Female Directors)) BGD ₂ (BI)		BGD3 (3 groups)	
	Coefficient	Z stat.	Coefficient	Z stat.	Coefficient	Z stat.
SFD	0.393**	2.44				
BGD (BI)			0.332***	2.75		
FD1					-0.012	-0.54
FD2					0.067**	1.81
FD3					0.047**	1.07
CGI	0.017***	6.35	0.017***	6.36	0.016***	6.53
SIZE	0.639***	26.38	0.639***	26.44	0.645***	26.46
LEV	-0.155***	-4.28	-0.154***	-4.25	-0.154***	-4.26
ROA	0.021***	3.35	0.023***	3.51	0.025***	3.56
Constant	1.308***	9.45	1.287***	9.29	1.282***	8.92
R ²	0.6807		0.6821		0.6831	
Chi-square	799.44***		804.62***		808.19***	

Notes: ***, ** and * indicate significant at 1%, 5% and 10% level respectively; Model used: 3 stage least square

Given the questionable outcomes of the mandatory inclusion of gender quota on board, the present study enriches the extant literature by providing the first empirical evidence on the impact of BGD on FP for family-owned firms in the Indian context by using diverse measures of BGD. Our result of panel data regression model reports that BGD represented by the percentage of female directors on board a significant positive impact on FP. Likewise, BGD represented by Blau index also documents highly significant positive impact on FP. In the similar vein, BGD proxied by three sub-groups of female directors based on their level of representation viz, FD1, FD2 and FD3 comprising of i) skewed groups in which, females comprise below 10%; ii) tilted groups where the percentage of females is between 10% to 20%; and iii) groups with where the percentage of the female is above 20%, respectively, FD1 documents insignificant, thereby supporting the theoretical assertion of Kanter (1977) stating that BGD represented by single women director is barely capable of making any significant contribution towards FP. Nevertheless, when BGD is represented by FD2 and FD3, they make highly significant positive contribution towards FP yet again supports the argument of critical mass theory propounded by Kanter, which suggests that the contributions of female directors towards any board activities are determined by their level of representation on board. The results obtained from the panel data regression model are further substantiated by 3SLS model.

The findings obtained from this study should be of interest to regulators, practitioners, and other related groups. First, the main concept arising from the present study is that BGD adds a sense of relatedness, trustworthiness, and benevolence for the diverse stakeholders, which indeed play an important role in how a board operates towards making a significant contribution to the market performance of firms. Moreover,

diligent monitoring behavior of female directors also gives a boost to FP. Hence, in a country like India, which is dominated by closely held firms, they should give more emphasis on BGD to reduce horizontal agency issues for the minority groups of family firms. Secondly, the outcome is particularly relevant due to the typical agency problems of family firms that can be mitigated by the presence of female directors due to their attitudes and behavior (Rhode & Packel, 2014), which result in a better balance for the typical governance issues of family firms. Moreover, it also suggests the regulators that, though female directors of many large Indian firms are related to substantial owners' groups, such female members owing to their core characteristics can make a favorable perception about firms in the market. Finally, by analyzing this phenomenon regarding Indian firms, this paper provides empirical evidence on the relationship within a specific type of ownership structure that is typical in many other countries around the world.

CONCLUSION

The impacts of BGD on FP for family-owned firms still represent an unexplored area that requires to be further addressed. Hence, our findings are useful as a baseline for future research on this topic. Our study makes several contributions to the existing science. First, unlike prior works, which mostly investigated the impact of BGD on FP ignoring the exceptional characteristics of family firms, we extend the current gender diversity literature by investigating the impact of BGD on FP by taking into consideration family capitalism context characterized by different corporate governance mechanisms. Second, departing from existing work that mostly uses the absolute number or percentage of female directors as a proxy measure of BGD, this study used three constructive measures of BGD and obtained analogous results with the use of different measures. Accordingly, it provides more robust findings. Finally, the findings obtained ratify the prediction of agency theory, resource dependency theory, human capital theory, and critical mass theory in the context of BGD for family-owned firms in India. We also acknowledge some limitations of our study, which provide the pathway for future research. First, to improve the analysis of the effects of female directors, future studies could investigate the characteristics of females (i.e., age, nationality, educational background) on corporate boards in greater depth and their impact on FP. Second, future studies could analyze the impact of BGD for family-owned firms by using independent as well as executive female directors as proxy measures of BGD. Finally, a cross-country analysis could identify cultural and governance aspects that might differ among contexts characterized by the strong presence of family businesses, such as in India.

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REFERENCES

Abdullah, H., & Valentine, B. (2009). Fundamental and ethics theories of corporate governance. *Middle Eastern Finance and Economics*, 4(4), 88-96.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. Journal of financial economics, 94(2), 291-309. https://doi.org/10.1016/j.jfineco.2008.10.007

- Ahern, K. R., & Dittmar, A. K. (2012). The changing of the boards: The impact on firm valuation of mandated female board representation. *The quarterly journal of economics*, 127(1).137-197. http://dx.doi.org/10.2139/ssrn.1364470
- Amin, A., Ali, R., Rehman, R. U., Naseem, M. A., & Ahmad, M. I. (2022). Female presence in corporate governance, firm performance, and the moderating role of family ownership. *Economic Research-Ekonomska Istraživanja*, 35(1), 929-948. https://doi.org/10.1080/1331677X.2021.1952086
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. The journal of finance, 58(3), 1301-1328. https://doi.org/10.1111/1540-6261.00567
- Arora, A., & Sharma, C. (2016). Corporate Governance and Firm Performance in Developing Countries: Evidence from India Article information. *Corporate Governance International Journal of Business in Society, 16*(2). 420–436. https://doi.org/10.1108/CG-01-2016-0018
- Ararat, M., & Yurtoglu, B. B. (2021). Female directors, board committees, and firm performance: time-series evidence from Turkey. *Emerging Markets Review*, 48. https://doi.org/10.1016/j.ememar.2020.100768
- Blau, P. M. (1977). Inequality and Heterogeneity: A Primitive Theory of Social Structure. New York: Free Press.
- Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of business ethics*, 83(3), 435-451. https://doi.org/10.1007/s10551-007-9630-y
- DeMott, D. A. (2008). Guests at the table: Independent directors in family-influenced public companies. *Duke Law School Legal Studies Paper No.* 165. 33, http://dx.doi.org/10.2139/ssrn.1010732
- Duppati, G., Rao, N. V., Malani, N., Scrimgeour, F., & Patnaik, D. (2020). Gender diversity and firm performance: evidence from India and Singapore. *Applied Economics*, 52(14), 1553-1565. https://doi.org/10.1080/0003684 6.2019.1676872
- Diwadi, N., & Jain, A. K. (2005). Corporate governance and performance of Indian firms: The effect of board size and ownership. *Employee Responsibilities and Rights Journal*, 17(3), 161-172. https://doi.org/10.1007/s10672-005-6939-5
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate governance: An international review, 11*(2), 102-111. https://doi.org/10.1111/1467-8683.00011
- Fama, E. F. & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325. http://dx.doi.org/10.1086/467037
- García-Meca, E., & Santana-Martín, D. J. (2022). Board gender diversity and performance in family firms: exploring the fault line of family ties. *Review of Managerial Science*, 1-36. https://doi.org/10.1007/s11846-022-00563-3
- Gul, F. A., Srinidhi, B., & Ng, A. C. (2011). Does board gender diversity improve the informativeness of stock prices?. *Journal of Accounting and Economics*, *5*1(3), 314-338. https://doi.org/10.1016/j.jacceco.2011.01.005
- Kanter, R. M. (1977). Men and women of the corporation. New York: Basic Books.
- Kiliç, M., Kuzey, C., & Uyar, A. (2015). The impact of ownership and board structure on Corporate Social Responsibility (CSR) reporting in the Turkish banking industry. *Corporate Governance*. 15(3), 357-374. https://doi.org/10.1108/CG-02-2014-0022
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The journal of finance*, 54(2), 471-517. https://doi.org/10.1111/0022-1082.00115
- Laskar, N., Debnath, P., & Gunardi, A. (2022). Does Corporate Governance Affect Firm Performance? Empirical Evidence Based on the BSE 200 Index. *Indonesian Journal of Sustainability Accounting and Management,* 6(1), 107–118. https://doi.org/10.28992/ijsam.v6i1.513

- Liu, Y., Wei, Z., & Xie, F. (2014). Do women directors improve firm performance in China?. *Journal of corporate finance*, 28(1), 169-184. https://doi.org/10.1016/j.jcorpfin.2013.11.016
- Magnanelli, B. S., Nasta, L., & Raoli, E. (2020). Do female directors on corporate boards make a difference in a family-owned business?. *Journal of International Accounting Research*, 19(1), 85-102. https://doi.org/10.2308/jiar-17-561
- Maji, S. G., & Saha, R., (2021). Gender diversity and financial performance in an emerging economy: empirical evidence from India. *Management Research Review*, 44(12), 1660-1683. https://doi.org/10.1108/MRR-08-2020-0525
- OECD. (2008). Handbook on constructing composite indicators: Methodology and user guide. Paris: OECD Publishing. available at https://www.oecd.org/sdd/42495745.pdf
- Pfeffer, J., & Salancik, G. R. (1978). A resource dependence perspective. In *Intercorporate relations*. The structural analysis of business. Cambridge: Cambridge University Press.
- Pieper, T. M. (2010). Non solus: Toward a psychology of family business. *Journal of Family Business Strategy, 1*(1), 26-39. https://doi.org/10.1016/j.jfbs.2010.02.003
- Rhode, D. L., & Packel, A. K. (2014). Diversity on corporate boards: How much difference does difference make?. *Delaware Journal of Corporate Law (DJCL)*, 39(2), 377-389. http://dx.doi.org/10.2139/ssrn.1685615
- Sanan, N. K. (2016). Board gender diversity, financial and social performance of Indian firms. *Vision*, 20(4), 361-367. https://doi.org/10.1177/0972262916673006
- Schultz, T. W. (1961). Investment in human capital. *The American economic review, 51*(1), 1-17. https://www.jstor.org/stable/1818907
- Sarkar, J. (2009). Board independence & corporate governance in India: Recent trends & challenges ahead. *Indian Journal of Industrial Relations*, 44(4), 576-592. https://www.jstor.org/stable/27768232
- Simionescu, L. N., Gherghina, Ş. C., Tawil, H., & Sheikha, Z. (2021). Does board gender diversity affect firm performance? Empirical evidence from Standard & Poor's 500 Information Technology Sector. *Financial Innovation*, 7(1), 1-45. https://doi.org/10.1186/s40854-021-00265-x
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x
- Singh, D.A., & Gaur, A. S. (2009). Business group affiliation, firm governance, and firm performance: Evidence from China and India. Corporate Governance: An International Review, 17(4), 411-425. https://doi.org/10.1186/s40854-021-00265-x10.1111/j.1467-8683.2009.00750.x
- Wolfe, J., & Sauaia, A. C. A. (2014). The Tobin q as a company performance indicator. In Developments in Business Simulation and Experiential Learning: Proceedings of the Annual ABSEL conference, 30, 155-159. https://abselojs-ttu.tdl.org/absel/article/view/715/684
- Ye, K., Zhang, R., & Rezaee, Z. (2010). Does top executive gender diversity affect earnings quality? A large sample analysis of Chinese listed firms. *Advances in Accounting*, 26(1), 47-54. https://doi.org/10.1016/j. adiac.2010.02.008