

The Economic Research Guardian - Vol. 11(1)2021

Semi-annual Online Journal, www.ecrg.ro ISSN: 2247-8531, ISSN-L: 2247-8531 Econ Res Guard 11(1): 156-169



Gender Diversity and Firm Performance: Evidences from Emerging Markets

Minibhayan Chandrasekharan Minimol

Rajagiri College of Social Sciences, Kochi, India

Email: minimol@rajagiri.edu

Phuong Lan Khong

Foreign Trade University, HaNoi, Vietnam

Email: phuonglankhong@gmail.com

Abstract

Diversity in board memberships has gained a lot of attention recently. Generally, diversity is measured by a wide range of aspects such as gender, ethnicity or cultural background. This research mainly focuses on gender diversity in boardrooms and the equivalence between ratio of women on board and men on board. Firm performance in this study is proxied by 3 indicators such as return on assets, return on equity and return on investment. Although there are many empirical studies throughout time in order to investigate impact of gender diversity on firm performance with the evidence from many countries, those studies are still rare in Asian countries. Especially, it is hard to find out a research comparing the effect of board gender diversity on firm performance in India with that in Vietnam. Both of the two nations have recently gained strong economic growth and foreign investment. That's why this study is expected to be significantly contributes to the existing literature.

Keywords: Gender diversity; Firm performance, Emerging markets; Board room diversity; Women on board

JEL classification: G30, G34, J16

Received: 3 February 2021; Received in revised form: 03 June 2021; Accepted: 03 June 2021

1. Introduction

In the open-minded society these days, gender equality has literally become a primary concern of governments, ordinary people and even economists. Gender diversity in general and the parity between male ratio and female ratio in particular has a considerable influence on social issues, economic growth and sustainable development. Therefore, a widespread empirical question which has been raised by economists and businessmen is whether there is a relationship between gender diversity and performance of firms; and how that connection will affect business results (if any). In fact, almost all of companies all over the world save more space for men to get involved in managing and running businesses. Despite no such theoretical backing framework, diversity in board memberships has gained a lot of attention recently. Generally, diversity is measured by a wide range

of aspects such as gender, ethnicity or cultural background. Yet this research mainly focuses on gender in boardrooms and the equivalence between ratio of women on board and men on board. Meanwhile, firm performance is often presented by market-base (Tobin's Q) and accounting-base (ROA, ROE, ROI). In this research, firm performance is estimated by 3 indexes including ROA, ROE and ROI. Although there are many empirical studies throughout time in order to investigate impact of gender diversity on firm performance with the evidence from many countries, those studies are still rare in both Vietnam and India. Especially, it is hard to find out a research comparing the effect of board gender diversity on firm performance in India with that in Vietnam. Both of the two nations have recently gained strong economic growth and foreign investment. That's why this study is expected to be significantly supportive. Although there exist correlation between performance variables such as ROA, ROE, ROI, gender diversity variable Percentage of women directors on board as well as other control variables, it is not strong enough and statistically not significant. Apart from its obvious implication, the research also suggests that board experience and board educational level positively affect the variance of financial performance in India. It indicates that higher average ages as well as well-educated directors on board benefit firms to boost its value. The research has contributed to managerial affairs in corporates as well as partially oriented Board of Directors how to structure or appoint different positions in BODs.

1.1. Theoretical framework

The research objective of the current study is to find out the impact of Board gender diversity on firm performance. To address the research objective, the author has considered corporate governance as the root, then traced back to previous studies conducted on the relationship between gender diversity on board of directors and business performance. In general, there are a wide range of definitions for corporate governance throughout time. According to La Porta et al. (2000), corporate governance is a collection of devices where investors external to the company protect themselves against difficulties emanating from conflicts of interest from the management and owners. Meanwhile, corporate governance may be considered as a process conducted by the director board members, and its associated committees, on behalf of the company; it is undertaken for the benefit of the company's stakeholders, and shareholders in particular; the objective is to direct the management, though exercise of authority over management (Tarek, 2007). However, the author follows the definition of Tricker (2015) which considers corporate governance as a group of mechanisms, processes and relations by which power is transmitted over corporate entities. Specifically, corporate governance identifies the rights and responsibilities of the board of directors, its relationship with shareholders as well as firm management, and stakeholders or any other related third parties in order to ensure that the whole entity is running in the most efficient way and in the best interest of shareholders.

It is widely believed that good corporate governance is positively associated with board diversity (Carter, Simkins, & Simpson, 2003). In the academic research of Deloitte (2016), the author listed out 6 factors which decide how corporate governance affects corporate performance. They are board independence, board diversity, remuneration, CEO characteristics, oversight and ownership structure. Therefore, the author assumes that there is a correlation between gender diversity on

board of directors and top-level management. Previous studies are contradictory in their findings – ranging from negative impact, positive impact, and some have reported no effect of gender diversity on performance.

Some of the previous studies highlight that gender composition of board of directors and managers has a positive influence on the managerial quality of the board of directors and as well as businesses' financial position (Campbell & Minguez-Vera, 2010). Ruchika (2017) gives the same result for business non-financial performance by the evidence from Indian companies. Sarkar & Selarka (2021) analyzed more than 10,000 firms over a 10-year period to find that gender diversity in the boardroom has a positive impact 29 on both firm value and firm profitability. Examining the presence of independent women directors, another recent study of large listed Indian companies also concluded that independent gender diverse boards positively influenced 30 the financial performance of companies. Supporters of gender equality between men and women in the top director seats also claim that women are likely to bring divergent perspectives, experience and knowledge to a board. For instance, more female directors own university degrees or advanced degrees in comparison to male directors (Hillman et al., 2002; Carter, Simkins, & Simpson, 2003; and Luckerath-Rovers, 2013). It means the higher the number of female directors on board, the better the firm performance.

On the other hand, researches also announce the opposing findings. Thuy & Nha (2017) indicate that female directors on board are somehow detrimental to firm's financial performance. Furthermore, Darmadi (2011) also finds that the anticipation of women in top managers affected negatively on the performance of the business, which is concluded by analyzing ROA index. According to Vietstock's data, almost all listed companies in Vietnam have more male directors than female ones. Moreover, Cam (2017) emphasizes on the negative impact of women on top executive who directly manage companies' operation. Likely, Dankwano & Zubair (2018) released a research which points out the detrimental effects of female directors to business results based on financial indexes such as ROA and ROE. In fact, the percentage of female directors is relatively low. For example, in the US, Australia, Canada, Japan and Europe, it is estimated to be 14.8%, 8.7%, 10.6%, 0.4% and 8.0% respectively.

On top of that, Adams & Ferreira (2009) found that there was negative or no relation between gender diversity and firm performance. Joana, Janneke & Chantal (2010) pointed out that there is no considerable link between board gender diversity and firm performance with the evidence from Dutch and Danish boardrooms. Yaseer (2012) also found out the similar result in Pakistan. According to research of Irean, Chan & Rozaimah (2017), the presence of women on board has no impact on firm performance, which is tested with Malaysian firms. Many other European countries' studies also concluded that firm performance does not depend on percentage of women directors on board. Another question which is raised here is that what channels through which gender diversity affects firm performance are. Based on the literature review, the authors have identified the following variables for the current study.

1.1.1. Board's Size

Studies have reported contradicting arguments between board size and firm performance. Pfeffer (1972); Klein (1998); Coles, Daniel & Naveen (2008) reports that a larger size of the boards can improve firm's performance. A large board of directors can provide very effective advices and lend support to the firm management more effectively. Within the context of complex business environment and organizational culture, such support is important (Klein, 1998). Given such complexities, a large board size is very likely to enhance firm performance (Dalton et al., 1999). Yermack (1996) used Tobin's Q to measure firm's market value and found inverse relation between board size and firm's market value. It was found that companies having small board of directors had more favorable financial ratios. They also provide higher incentive and compensation for better performance of the CEOs.

1.1.2. Duality of the CEO

Dahya, Garcia & Bommel (2009) indicated that there was a recommendation that the chairperson and the CEO have to be different persons; such recommendation was made in advanced countries including the UK. In Europe, 84% of firms separate the roles of a board chairperson and a CEO of a firm (Heidrick & Struggles, 2009). Rechner & Dalton (1991) said that though there were strong advocates for the board leadership to be independent, many firms decide to have the CEO as its chairperson. If CEO and the chairperson were the same, it is argued that it facilitates clarity and focus on firms' goals and activities (Stoeberl & Sherony, 1985). The duality was found to be connected with performance of independent directors by Freire (2019). Some countries have made legislations to ensure a balance of power within the firm to ensure bias and undue influence in the form's decision making process (Hewa-Wellalage & Locke, 2011). Fama (1980) argued that separation of ownership and control can prove to be an efficient form of organization, where management and risk bearing are naturally separate factors. Fama & Jensen (1983) proposed that organizations characterized by separation of decision-making and risk-taking functions can have better chances of survival. Jensen (1983) found that there are evidences that corporations and large partnerships are characterized by separation of decision making and control functions.

1.1.3. Board's educational level

The Malaysian Code of Corporate Governance recommend that the directors should have high qualities related to knowledge and professionalism (Adnan et al., 2016). Studies have found relation between the education level of board of directors and company's performance, and reported mixed results. For example, Bathula (2008) found direct relationship and Mahadoe, Soobaroyen & Hanuman (2012) found inverse relationship between education level and performance. A board is a control system in a business (Fama & Jensen, 1983). That is why directors with higher educational level are believed to manage the business more effectively.

1.1.4. Board's experience

For most the part, people believe that higher – average – working – age employees have better experiences than youngsters. This experience is definitely important to the effectiveness and efficiency of jobs. However, Carlson & Karlsson (1970) indicated that board members who are older can be more belligerent and tyrannical with decisions. Such board members may be the reason for a risky decision which may undermine firm's performance. The relationship between board's experience and firm value is still a big query. There are theories that argues that board members with greater experience can be equipped better to handle and win over a business environment by gelling with the group. This can result in contributing positively to firm's performance (Wegge et al., 2008).

1.2. Objectives

The present study attempts to inspect whether the board gender diversity and firm's financial performance is related. The study will further attempt to understand whether such relations (if any) are positive or negative. Data from companies in countries such as India and Vietnam were used for the study. The study also intends to do a cross cultural comparison of the impact of gender diversity on financial performance of Indian and Vietnamese firms to understand the similarities and differences in the two nations.

2. Materials and methods

In order to measure firm performance in both countries, accounting-base is applied with the following ratios. Firm performance in this study is represented by ROA – return on assets; ROE – return on equity and ROI – return on investment. ROA, a ratio of net income to average total assets, gave an idea as to how efficient management is at using its assets to generate earnings. ROE, which is ratio of net income to total owner's equity, measures corporation profitability by revealing how much profit a company generates with the money shareholders have invested. Meanwhile, ROI is calculated by dividing net profit by investment cost (total assets). These variables are used in previous researches (Shrader, Blackburn & Iles 1997; Lehobo, 2011; and Yasir, Saba & Hina 2014). In this research, independent variable is PCW – percentage of women directors on the board of directors to size of board of directors. It is directly used to measure board gender diversity in different companies. Board's size, Duality of CEO, Board's Experience, and Board's Educational level are the four control variables used in the study.

Table 1 - Description of Variables: Summary

Panel A: Firm performance						
(1) ROA (%)	Indicator of how profitable a company assets' is in generating					
	earnings.					
	ROA = (Net profit / Average total assets) x 100					
(2) ROE (%)	The net income of a company relative to the value of its equity					
	ROE = (Net profit / Shareholder's Equity) x 100 = Net profit /					
	(Total assets – Liabilities) x 100					
(3) ROI (%)	Measure the amount of return on a particular investment, relative					
	to the investment's cost					
	$ROI = (Net profit / Investment cost) \times 100 = (Net profit / Total)$					
	assets) x 100					
Panel B: Board gender diversity						
(1) Percentage of women in	Estimate how much women seats account in comparison with					
BODs (PCW)	total board seats					
	PCW = (The number of women on board of directors) / The total number of directors on board) x 100					
Panel C: Control variables	total number of directors off board) x 100					
(1) Board's size	The total number of directors on board					
(2) CEO duality	Indicate whether the CEO of the company is coincidentally					
(2) CLO duanty	Chairman or not. It is a dummy variable which is defined as:					
	1 – Same CEO and Chairman					
	2 – Different CEO and Chairman					
(3) Board's Educational level	Measure the education level of directors on board. It is also a					
	dummy variable which is defined as:					
	1 – Low level of education (if the number of					
	Master/Dr/Professor on board is equal to 0)					
	2 – High level of education (if the number of					
	Master/Dr/Professors on board is >= 1)					
(4) Board's Experience	It is a dummy variable to estimate the experience of directors on					
	board. The experience is basically measured by the number of					
	working years. It is coded as below:					
	1 – Low experience					
	2 – High experience					

The researchers basically chose cross sectional data (a number type combining both time series and control panel) during the 5-year period from 2014 to 2018. The fact that 2019 data was not involved is coming from missing data issue. As different countries have their own searching sources, the author respectively found out data of each country with some software and websites. On the one hand, 257 listed firms in the stock market are extracted from 1000 companies by Prowess IQ using BSE command, which ensures that the whole sample contains large, medium and small firms' sizes. Due to data omission, the final sample for India consists of 152 observations. On the other hand, 350 Vietnamese companies which are currently listed on HOSE (Ho Chi Minh Stock Exchange

Market) are collected from Vietstock website. However, as missing data is inevitable, the ultimate sample for Vietnam is shortened at 98 firms. The total sample's size is 250 observations. Other indexes to measure firm performance and board gender diversity are referred to annual reports of those firms from 2014 to 2018.

2.1. Model specification

The regression model to test the relationship between the gender diversity and firm performance is as follows:

Firm performance_{it} =
$$b_0 + b_1 PCW_{it} + b_2 Board_size_{it} + b_3 CEO_duality + b_4 Board_Edu_{it} + b_5 Board_Exp_{it} + e_{it}$$
(1)

3. Descriptive statistics

The researcher used SPSS to get descriptive statistics of the two countries. The results are shown in the two tables as followings:

Table 2 - Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation		
Indian Firms							
PCW(%)	152	.000	80.000	15.27524	10.112533		
Board_size	152	5	21	10.44	2.913		
CEO_duality	152	1	1 2		0.480		
Board_Edu	152	1	2 1.75		0.434		
Board_Exp	152	1	2	1.98	0.140		
ROA	152	-3.61	33.13	8.9772	7.03459		
ROE	152	-92.73	107.26	16.5172	16.85881		
ROI	152	-3.73	28.30	8.3605	6.46264		
		Vie	tnamese Firms				
PCW (%)	98	.000	71.429	29.13779	16.136256		
Board_size	98	7	26	14.47	3.756		
CEO_duality	98	1	2	1.79	.412		
Board_Edu	98	1	2	1.94	.241		
Board_Exp	98	1	2	1.93	.259		
ROA	98	-6.592	55.456	7.96624	8.138680		
ROE	98	-33.464	64.582	13.78163	12.919924		
ROI	98	-7.961	53.583	7.52310	8.028756		
Valid N	98						
(listwise)							

Source: SPSS Analysis.

As we can see from Table 2, mean return on assets for 152 Indian firms is 8.98 and for 98 Vietnamese firms it is 7.97. Mean ROE and ROI for Indian firms are 16.52 and 8.36 while for Vietnamese firms they are 13.78 and 7.52 respectively. There are some companies without female directors (shown by Minimum of PWC is 0.00); some companies' women directors percentage even accounts for 80%, which is a good signal in terms of gender equality in those firms. However, looking at mean of 15.26, we can deduce that the ratio of women on board is still really low compared to that of male directors. It just marks up one-eighth or one-seventh of the whole BOD. Moreover, there are normally 10 directors on board in Indian companies, which is fairly high. Mean of CEO duality is 1.36 and 1.79, which indicates that more boardrooms are running by combining functions of CEO and Chairman. Most of the firms own high board education and board experience (mean of 1.75 and 1.98). Taking a look at PCW (%) in this table, we can see that Mean of PCW in Vietnamese firms(29.13779 %) is almost double 15.27524% of PCW in India. It indicates that there are more female directors involving in management affair in Vietnamese firms than those in Indian firms. However, some cases with no woman in BOD still exist. Taking a look at board size variable, it is not too hard to realize that the average number of members in Board of Directors (BOD) in Vietnamese firms presented by 14.47 of mean is higher than that of India. In other words, Vietnamese firms normally have a bigger board size with more participants. CEO duality also has tendency to gain higher mean than that of India (1.79). It indicates that Vietnamese boardrooms split up CEO and Chairman positions more clearly than Indian BOD. Educational level of the board as well as the and board experience are high (mean is respectively 1.94 and 1.93). Regarding firms' performance measured by ROA, ROE and ROI, the average values are literally slightly lower than that of Indian firms.

4. Results and discussion

In order to test the proposed model above, the authors basically used regression analysis. Two regression models were run using SPSS software to find out relationship between the variables. First model is to test the impact of gender diversity in Board room on the financial performance of the Indian firms. The second model was used to test the same relationship among the Vietnamese firms. The results are given in tables 3 and 4.

4.1. Gender diversity and performance of firm - Model I

The model was proposed to endorse the linear relationship between gender diversity and performance of the firm in India by controlling for Board Size, CEO duality, Board education and Board experience. While looking into the results, first and foremost, one can understand that R-Square value is 0.104 in ROA model which indicates that 10.4 % of the variance in ROA can be explained by the variables PCW, Board Size, Board experience, Board Educational Level and CEO Duality. Note that this is an overall measure of the strength of association, and does not reflect the extent to which any particular independent variable is associated with the dependent variable. Moving onto ROE model adjusted R square (0.058) implicates that 5.8% the variance of ROE can be predicted from other independent variables. As for ROI model, the strength of correlation among variables is slightly bigger than the other two models. The proportion of 32.7% shows the high

association between ROI and firm's gender diversity. It is also significant at 0.05 per cent level of significance. In conclusion, we can say that the independent variables (PCW, Board size, Board Experience, Board Educational Level, CEO Duality) and control variables reliably predict dependent variable (firm performance which is measured by ROA, ROE and ROI).

The ability of each individual independent variable to predict the dependent variable is addressed in the table below where each of the individual variables is listed.

Table 3 - Gender Diversity and Firm Performance of Indian firms

Dependent Variables: ROA, ROE, ROI

Method: Least Squares

Sample: 152

Dependent Variables	Variable	R-squared& F Adjusted R-squared	statistic & Model Significance	Coefficient	Std. Error	t-Statistic	Sig.
ROA 1	Constant	0.104 (0.073)	3.382 (0.006)	17.804	8.930	1.994	0.048
	PCW			0.076	0.055	0.957	0.340
	Board_size			0.241	0.192	1.256	0.211
	CEO_duality			-0.299	1.160	-0.258	0.797
	Board_Edu			3.707	1.281	2.895	0.004
ROE Bo CF ROI Bo CF ROI Bo CF ROI Bo	Board_Exp	0.089 (0.058) 0.107 (0.076)	2.843 (0.018) 3.487 (0.005)	-9.206	3.981	-2.312	0.022
	Constant			14.623	21.580	.0678	0.499
	PCW			0.146	0.133	1.099	0.274
	Board_size			0.544	.464	1.172	0.243
	CEO_duality			0.689	2.803	0.246	0.806
	Board_Edu			9.664	3.095	3.123	0.002
	Board_Exp			-12.050	9.621	-1.252	0.212
	Constant			16.181	8.190	1.976	0.050
	PCW			0.048	0.051	0.942	0.348
	Board_size			0.241	0.176	1.367	0.174
	CEO_duality			-0.249	1.064	234	0.816
	Board_Edu			3.440	1.175	2.929	0.004
	Board_Exp			-8.455	3.652	-2.315	0.022

Source: Regression results.

Note: Figures in parenthesis indicates the adjusted R-squared and model significance values.

P-value of all the independent variables in the ROA model for Indian firms are 0.340 (percentage of women in board), 0.211 (size of board), 0.797 (CEO duality), 0.004 (education level of board) and 0.022 (board experience), respectively. It means that only educational level of board and board experience are found to be significant in this model. All other factors (CEO duality and women board members in board) are insignificant as is revealed by the results. In ROE model for Indian firms, p-values for the variables are as follows: 0.274 (percentage of women in board), 0.243 (size of board), 0.806 (CEO duality), 0.002 (education level of board) and 0.212 (board experience). This means that only board educational level is significant. Coefficients of all other variables are statistically insignificant. In the ROI model for Indian firms, p-values of the variables are: 0.348 (percentage of women in board), 0.174 (size of board), 0.816 (CEO duality), 0.004 (education level of board) and 0.022 (board experience). Thus it is inferred that only education level and board experience are significant. In conclusion, the whole linear regression model measuring the effect of

gender diversity (women board members) on performance of Indian firms is not statistically significant.

4.2. Gender diversity and performance of firm – Model 2

The second model intended to evaluate the influence of gender diversity on firm performance in the context of Vietnamese firms. The results are given in Table 4.

Table 4 - Gender Diversity and Firm Performance of Vietnamese Firms

Dependent Variables: ROA, ROE, ROI

Method: Least Squares

Sample: 98

Dependent Variables	Variable	R-squared& Adjusted R-squared	F statistic & Model Significance	Coefficient	Std. Error	t-Statistic	Sig.
	Constant		-	-5.459	8.831	-0.618	0.538
	PCW			-0.074	0.051	-1.446	0.152
ROA	Board_size	0.075 (0.024)	1.482 (0.203)	0.072	0.220	0.329	0.743
	CEO_duality			2.833	1.992	1.422	0.158
	Board_Edu			-0.796	4.259	-0.187	0.852
ROE B	Board_Exp			5.720	3.994	1.432	0.156
	Constant	0.134 (0.086)	2.837 (0.020)	-18.083	13.564	-1.333	0.186
	PCW			-0.116	0.079	-1.474	0.144
	Board_size			0.740	0.338	2.190	0.031
	CEO_duality			4.363	3.060	1.426	0.157
	Board_Edu			-5.474	6.542	-0.837	0.405
ROI	Board_Exp	0. 073 (0.023)	1.453 (0.213)	14.193	6.135	2.313	0.023
	Constant			-7.448	8.718	-0.854	0.395
	PCW			-0.078	0.051	-1.534	0.129
	Board_size			0.133	0.217	0.613	0.541
	CEO_duality			2.677	1.967	1.361	0.177
	Board_Edu			0.759	4.205	0.181	0.857
	Board_Exp			4.698	3.943	1.191	0.237

Source: Regression results.

Note: Figures in parenthesis indicates the adjusted R-squared and model significance values.

In the ROA model, Adjusted R square is 0.024 indicating that independent variables explain only 2.4% for the variance of ROA. Moreover all the figures are not significant because p-value is more than 0.05 (0.203). 8.6% of the variance of ROE can be predicted from PCW, Board size, Board Educational level, Board Experience and CEO Duality. All of these proportions are significant because p-value is equal to 0.020 which is less than 0.05. Subsequently, correlation proportion between ROI and independent variables in Model 3 is quite weak (27.1%) and it is statistically not significant with a p-value of 0.213. In terms of overall regression test, only model 2 with dependent variable ROE is significant because p-value is 0.020 which is less than 0.05. Hence independent variables can reliably predict ROE. Other models of ROA and ROI are not significant. None of the three models here are not significant because p-values are all more than 0.05. Merely coefficients of Board size and Board Experience of ROE model are significant (p-values are respectively 0.031 and 0.023).

5. Implication and scope for future studies

Based on these findings the authors concluded that there exists no statistically significant relationship between percentage of women directors (PCW) on board and ROA, ROE and ROI in particular; and between gender diversity and firm performance in general. Using dataset of two Asian countries -Vietnam and India. The findings from both the countries are alike, which boosts the reliability of the research. Although there exist correlation between performance variables such as ROA, ROE, ROI, and gender diversity variables, percentage of women directors on board as well as other control variables is not strong enough and statistically not significant. Apart from its obvious implication, the research also suggests that board experience and board educational level positively affect the variance of financial performance in India. It indicates that higher average ages as well as well-educated directors on board benefit firms to boost its value. The research has contributed to managerial affairs in corporates as well as partially oriented Board of Directors how to structure or appoint different positions in BODs. This study is expected to recommend further scope for other researchers in the up-coming time. Firstly, the authors propose that the presence of women on board is very important and inevitable, though the number of female directors is not decisive to firm performance. Another point is to clear the relationship between board experience, board educational level and firm performance. In other words, future studies might focus on answering the query: Do age and educational level affect firm performance? For studies on this topic Gender diversity and Firm performance, variable add-ons should be included.

6. Limitations of the study

In fact, although the author tried to conduct data collection process as fully and accurately as possible, limitations are inevitable. One of the shortcomings of the study is the sample size. Because the gross number of listed firms in both markets is definitely huge, the author was not able to conduct the research with all of those companies. Moreover, datasets are extracted and collected from different sources, so it is hard for author to avoid the divergence of statistics. However, implication has been given on a scientific basis, which is good reference for further researches of board gender diversity and firm performance or for board of directors and board of management of companies to adjust their operation if needed, especially as for firms in India and Vietnam. Further research should be conducted by including more variables and by large sample size.

7. Conclusion

The research has pointed out that there exist no significant relation between board gender diversity and firm performance. These two factors are presented by percentage of female directors on board, controls variables and financial indexes including ROA, ROE and ROI. This result homogenizes with other previous empirical studies of many authors which have been mentioned in Literature Review. Those research studies are written by Adams and Ferreira (2009), Joana, Janneke & Chantal (2010) and Yaseer (2012). Irean, Chan & Rozaimah (2017) concluded that there is no relationship between women presence on board and firm performance, but percentage of female directors is

positively and significantly related to firm performance. This suggests that the mere fact of there being at least one female on the board has no impact on firm performance, but a higher degree of female representation does increase the firm's financial performance. However, firm performance in the case of India and Vietnam is not affected by proportion of female directors on board. These findings are expected to effectively assist not only board of directors in companies to structure their board members but also researchers who are longing for conducting studies regarding this topic. Gender equality is far much concerned in our society, but it does not mean that the proportion of male and female directors on board should be equal. On the other hand, the number of women is not detrimental to firm performance according to this study.

References

Adams R, Ferreira K (2009). Women in the Boardroom and their Impact on Governance and Performance. *Journal of Financial Economics*. 94: 291-309.

Adnan M, Sabli N, Rashid M, Hashim A, Paino H, Abdullah A (2016). The Impact of Educational Level of Board of Directors on Firms' Performance. *Regional Conference on Science, Technology and Social Sciences.* Springer Science and Business Media. DOI 10.1007/978-981-10-1458-1_4. (Accessed on 10 August 2019).

Bathula H (2008). Board Characteristics and Firm Performance: Evidence from New Zealand. *PhD Thesis*. Auckland University of Technology.

Cam Tu N (2017). The impact of Female Board of Directors on Firm Performance and Dividend Payout Policies: Evidence from Vietnam. *International Research Journal of Finance and Economic.* 164. 56-67.

Campbell A, Mingquez-Vera A (2010). Female Board Appointments and Firm Valuation: Short and Long-term effects. *Journal of Management and Governance*. 14(1): 37-59.

Carlson R, Karlsson K (1970). Age, Cohorts, and the Generation of Generations. *American Sociological Review*. 35(4): 710-718.

Carter D, Simkins B, Simpson W (2003). Corporate Governance, Board Diversity, and Firm Value. *Financial Review*. 38(1): 33-53.

Coles J, Daniel N, Naveen L (2008). Boards: Does One Size Fit All? *Journal of Financial Economics*. 87(2): 329-356.

Dahya J, Garcia L, Bommel J (2009). One Man Two Hats: What's All the Commotion! *The Financial Review*. 44(2): 179-212.

Dalton D, Daily C, Johnson J, Ellstrand A (1999). Number of Directors and Financial Performance: A Meta-Analysis. *The Academy of Management Journal*. 42(6): 674-686.

Dankwano R, Zubair H (2018). Impact of Gender Diversity on Indian Firm's Financial Performance. *International Journal of Management, Accounting and Economics.* 5(5): 319-341.

Darmidi S (2010). Do Women in Top Management Affect Firm Performance? Corporate Governance International Journal of Business in Society. 13(3): 1-34.

Deloitte (2016). Good governance driving corporate performance? Deloitte - Nyenrode Research Program.

Fama E (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy*. 88(2): 288-307.

Fama E, Jensen M (1983). Separation of Ownership and Control. *Journal of Law and Economics*. 15(2): 301 - 325.

Freire C (2019). Duality CEO-Chairman and its Relation with the Effectiveness of the Board Control. *Problems and Perspectives in Management*. 17(4): 239-251.

Heidrick, Struggles (2009).Boards in Turbulent Times: Corporate Governance Report. Heidrick & Struggles International Inc.

Hewa-Wellalage N, Locke S (2011). Does CEO Duality is Really Matter? Evidence from an Emerging Market. *Corporate Ownership and Control*. 8(4): 112-122.

Hillman A, Cannella A, Harris, I (2002). Women and Racial Minorities in the Boardroom: How Do Directors Differ? *Journal of Management*. 28: 747-763.

Irean Yap LK, Chan SG, Rozaimah Z (2017). Gender Diversity and Firms' Financial Performance in Malaysia. *Asian Academy of Management Journal of Accounting and Finance*. 13(1): 41–62.

Jensen M (1983). Organization Theory and Methodology. The Accounting Review. LVIII (2): 319-339.

Joana M, Janneke P, Chantal R (2010). Gender Diversity and Firm Performance: Evidence from Dutch and Danish Boardrooms. *International Journal of Human Resource Management*. Discussion Paper Series 10-03.

Klein A (1998). Firm Performance and Board Committee Structure. *Journal of Law and Economics*. 41(1): 275-303.

La Porta R, Lopez-de-Silanes F, Shleifer A, Vishny, R (2000). Investor Protection and Corporate Governance. *Journal of Financial Economics*. 58: 3-27.

Lehobo L (2011). The Relationship between Gender Diversity and Corporate Profitability: The Top 100 Companies on the JSE Ltd. Minor Dissertation. University of Johannesburg.

Luckerath-Rovers M (2013). Women on Boards and Firm Performance. *Journal of Management and Governance*. 17(2): 491-509.

Econ Res Guard 168 2021

Mahadeo J, Soobaroyen T, Hanuman V (2012). Board composition and financial performance: Uncovering the effects of diversity in an emerging economy. *Journal of Business Ethics*. 105(3): 375–388.

Pfeffer J (1972). Size and Composition of Corporate Boards of Directors: The Organization and its Environment. *Administrative Science Quarterly*. 17(2): 218-228.

Rechner P, Dalton D (1991).CEO Duality and Organizational Performance: A Longitudinal Analysis. *Strategic Management Journal*. 12(2): 155-160.

Ruchika J (2017). Does Gender Diversity Improve Firm Performance: Evidence from India. https://www.justjobsnetwork.org/gender-diversity-firm-performance-evidence-india/ (accessed on 20 August, 2019).

Sarkar J, Selarka E (2021). Women on Board and Performance of Family Firms: Evidence from India. *Emerging Markets Review*. 46(2021): 1-42.

Shrader C, Blackburn V, Iles P (1997). Women in Management and Firm Financial Performance: An Exploratory Study. *Journal of Managerial Issues*. 9(3): 355-372.

Stoeberl P, Shernoy B (1985). *Board Efficiency and Effectiveness*. In Mattar M, Ball M (Ed.) Handbook for Corporate Directors, pp.12.1-12.10, McGraw Hill (1985).

Tarek Y (2007). Corporate Governance: An Overview around the Globe. *Principal Partner Grant Thornton* – *Egypt.* https://docplayer.net/7396002-Corporate-governance-an-overview-around-the-globe-1-prepared-by-m-tarek-youssef-principal-partner-grant-thornton-egypt.html. (Accessed on 21 August, 2019).

Thuy Anh V, Nha Khanh B (2017). Impact of Board Gender Diversity on Firm Value: International Evidence. *Journal of Economics and Development.* 19(1): 65-76.

Tricker B (2015). Corporate Governance: Principles, Policies, and Practices. Oxford University Press.

Wegge J, Roth C, Neubach B, Schmidt, K (2008). Age and Gender Diversity as Determinants of Performance and Health in a Public Organization: The Role of Task Complexity and Group Size. *Journal of Applied Psychology.* 93(6): 1301 -1313.

Yaseer Q (2012). Effects of Female Directors on Firms Performnce in Pakistan. Modern Economy. 3(7): 817-825.

Yasir K, Saba I, Hina Y (2014). Impact of Boards Gender Diversity on Firms Profitability: Evidence from Banking Sector of Pakistan.

Yermack, D (1996). Higher Market Valuation of Companies with a Small Board of Directors. *Journal of Financial Economics*. 40(2): 185-211.