

**Board Gender Diversity and Firm Performance: A Review of Recent Literature and Future Research Perspectives**

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**ABSTRACT**

Board gender diversity has gained a significant consideration with the introduction of mandatory requirements aimed at increasing the presence of women on the corporate boards. However, the exact nature of its impact on a firm's performance is still lack in solid and conclusive empirical evidence. Given this empirical gap, this study critically reviews the recent literature (*years 2010 – 2019*) on board gender diversity and firm performance, and provides a synopsis on such recent empirical evidence. The study also identifies different measures used in the literature in measuring the variables of concern and discusses its impact on the empirical results. Finally, the study also addresses the gap in the extant literature and proposes important insights to the interested academic community regarding potential future research perspectives.

**Keywords:** agency theory, board gender diversity, firm performance, resource dependence theory

## Introduction

The board of directors (BOD) can be identified as one of the key corporate governance mechanisms which directs an organization (Abdullah, 2004). According to Hillman & Dalziel (2003), the BOD performs two major roles as, monitoring the management and provision of resources, which are built based on agency theory and resource dependence theory. In recent years, board gender diversity has gained an increased attention from various parties including scholars and policymakers, with the introduction of rules and regulations aimed at encouraging the inclusion of women on the board of directors (Joecks, Pull, & Vetter, 2013; Seierstad, 2016). For instance, the impact of board gender diversity on various outcomes of the organizations such as, financial performance, quality of the financial reporting, corporate social responsibility, environmental performance, etc. has been widely addressed among the previous studies. One of the reasons for such growing attention on board gender diversity is the establishment of mandatory rules and guidelines by policy makers and governments to include women, which placed pressure on corporate entities to increase the presence of women in their board of directors (Reguera-Alvarado, de Fuentes, & Laffarga, 2017). However, despite these developments, the specific relationship between board gender diversity and the firm's economic performance is still lacking in conclusive evidence (Arena, et al., 2015). For instance, some researchers find a positive association between board gender diversity and firm performance (e.g. (Conyon & He, 2017; García-Meca, García-Sánchez, & Martínez-Ferrero, 2015), while some other researchers find evidence for a negative association (e.g. Adusei, Akomea, & Poku, 2017; Boubaker, Dang, & Nguyen, 2014). Similarly, there are even studies which argue for no significant relationship between board gender diversity and firm performance (e.g. Horváth & Spirollari, 2012).

Therefore, this study aims at summarizing the recent literature on the relationship between board gender diversity and firm's economic performance. In doing so, this study contributes to the literature as follows. First, this study contributes by reviewing the recent empirical evidence (during year 2010 – 2019) and by updating the current knowledge on board gender diversity and firm performance. Second, as recommended by Hillman & Dalziel (2003), rather than focusing on a single theoretical perspective, i.e. as done by majority of the previous studies, this study takes a holistic view by integrating both agency theory and resource dependence theory, and examines the role of BOD as an organizational resource in influencing firm's financial performance. Third, this

study is driven by the lack of conclusive empirical evidence on the exact nature of the relationship between board gender diversity and firm performance. Thus, this study contributes to the literature by critically reviewing and providing a synopsis on such inconclusive empirical evidence which can provide an important insight to the interested academic community. Fourth, this study extends its impact by proposing future research perspectives to address the existing gap in the extant literature as well.

The remainder of this paper will provide an overview of the theoretical perspective, extant evidence on the relationship between board gender diversity and firm performance, followed by future research perspectives and concluding remarks.

### **Board of Directors as an Organizational Resource**

The board of directors (BOD) can be identified as a key corporate governance mechanism which leads and directs any organization (Abdullah, 2004). It plays two important roles as, monitoring the activities of the corporate management and providing necessary resources (Hillman & Dalziel, 2003). The monitoring role of the BOD is developed drawing on the agency theory and it emphasizes on the role of board of directors in monitoring the actions of the corporate managers with the aim of protecting the best interest of the shareholders. According to Hillman & Dalziel (2003), performance of such monitoring role is important to avoid or reduce agency costs which may arise in the event of managers pursuing their own interests. Thus, by performing the monitoring role, BOD can ensure that the organization's and shareholders' best interests are not compromised and hence improve the firm's performance.

On the other hand, the resource provision role of the BOD, which is derived from resource dependence theory emphasizes on the ability of the members of a BOD to bring critical and distinctive resources to the organization (Hillman & Dalziel, 2003). For instance, they state that when a director is appointed to the board of directors, he or she provides various resources such as, expertise, advice, capital, relationship network, etc. which can be a positive influence to the firm's performance.

According to the above two theories, it is thus clear that members in a board of directors can act as an organizational resource given their ability to contribute positively by providing essential organizational resources and reducing agency costs. Therefore, in this study, drawing upon the agency theory and resource dependence theory, board of directors are considered as an organizational resource.

### **Measures of Board Gender Diversity and Firm Performance**

The extant literature has used a number of different proxies to measure both board gender diversity and firm's financial performance. Among the proxies of board gender diversity, three dominant measures can be identified as, the percentage of female directors on the BOD (e.g. Conyon & He, 2017; García-Meca, García-Sánchez, & Martínez-Ferrero, 2015), total number of female members on BOD (e.g. Carter, D'Souza, Simkins, & Simpson, 2010; Wiley & Monllor-Tormos, 2018), and a dummy variable to indicate the presence of at least a single female director on BOD (e.g. Shehata, Salhin, & El-Helaly, 2017; Kilic, 2015). In addition, most of the studies have also used indices such as, Blau Index (e.g. Kılıç & Kuzey, 2016; Wellalage & Locke, 2013) and Shannon Index (e.g. Reguera-Alvarado, de Fuentes, & Laffarga, 2017; Shehata, Salhin, & El-Helaly, 2017) to measure the representation of female directors.

Among the proxies to measure financial performance of the firm, studies have used two types of measures which are namely, accounting based measures and market based performance measures. As accounting based measures, studies have used return on assets (ROA), return on equity (ROE), return on capital employed (ROCE), etc. (e.g. Kılıç & Kuzey, 2016; Ahmadi, Nakaa, & Bouri, 2018). Studies which employed market based measures have used Tobin's Q as their proxy for firm's performance (e.g. Nguyen, Locke, & Reddy, 2015); Wiley & Monllor-Tormos, 2018).

According to the reviewed literature, it is also evident that the results obtained are varied depending on the use of different proxies (e.g. Boubaker, Dang, & Nguyen, 2014; Moreno-Gómez, Lafuente, & Vaillant, 2018).

## Relationship between Board Gender Diversity and Firm Performance

- *Case for a Positive relationship between board gender diversity and firm performance*

As observed by Kılıç & Kuzey (2016), agency theory is the most dominantly used theory by scholars in building their case for a positive relationship between board gender diversity and firm performance. Based on the agency theory, it can be expected that effective corporate governance structures, including a healthier diversity in terms of the gender, can reduce potential agency costs, ensure that the best interests of stakeholders are met and thereby improve firm's performance (Reguera-Alvarado, de Fuentes, & Laffarga, 2017). On the other hand, resource dependence theory supports this claim by proposing that board gender diversity increases the access to financial capital (Reguera-Alvarado, de Fuentes, & Laffarga, 2017), enhance firm's human and relational capital (Shaukat, Qiu, & Trojanowski, 2016), and improves firm's legitimacy and positive image (Kılıç & Kuzey, 2016). Furthermore, Nielsen & Huse (2010) also argue that increased presence of women on the BOD can result in better making of decisions concerning the organization's strategic direction.

Consistent with the above theoretical arguments, a number of studies find a positive relationship between board gender diversity and firm performance. Among the recent literature, Reguera-Alvarado, de Fuentes, & Laffarga (2017) studied a sample of 125 non-financial firms in Spain and find evidence to support a positive relationship between board gender diversity and firm's financial performance. Similarly, Nguyen, Locke, & Reddy (2015) also posit that board gender diversity exerts a positive effect on firm's financial performance measured as Tobin's Q. The study of Kılıç & Kuzey (2016) also supports the claim that inclusion of female directors on the BOD enhances firm's financial performance which is measured using return on assets (ROA), return on sales (ROS) and return on equity (ROE). A study of Low, Roberts, & Whiting (2015) also provides evidence for a significant positive effect of increased female directors on firm performance, however, they find this effect is weak in countries where a strong women empowerment is evident. Using data of publicly listed companies in the United States, Conyon & He (2017) also posit a positive effect of female directors on the firm's performance. They also find that this effect is relatively larger among the firms with a higher performance. García-Meca, García-Sánchez, & Martínez-Ferrero (2015) find that gender diversity in BOD increases the performance of banks and this effect is also influenced by various institutional factors. Among the related recent literature,

Terjesen, Couto, & Francisco (2016) and Ahmadi, Nakaa, & Bouri (2018) also posit that firms where BOD has a higher female presence tend to have a higher performance. In their effort to support for a significant positive effect of board gender diversity on firm performance, Moreno-Gómez, Lafuente, & Vaillant (2018) find that such positive effect of the presence of females on BOD is evident only when the firm performance is measured using return on equity (ROE). Using panel data of listed Chinese firms, Li & Chen (2018) also show that the board gender diversity exerts a positive influence on firm performance. However, they find this effect to be influenced by the firm size. Similarly, Sanan (2016a) also shows that the evidence to support a positive relationship between board gender diversity and firm performance is not robust and get contradictory results when a more sophisticated statistical technique is used.

Based on these evidence, it can be hypothesized that board gender diversity exerts a positive influence on the firm performance. However, it is worthy to note that most of the evidence are inconclusive and subjected to the use of different proxies and conditions.

- ***Case for a Negative relationship between board gender diversity and firm performance***

Among the recent literature, there are strong evidence to support the claims of the opponents of board gender diversity. According to Arena, et al. (2015) diversity on the BOD can create conflicts and lack of cohesion among the members which can ultimately result in deficiencies in the firm's decision making process. As observed by Pucheta-Martínez, Bel-Oms, & Olcina-Sempere (2018), most of the organizations today are focused on increasing the presence of female in their organizations with the sole purpose of complying to the rules, regulations and gender quotas enforced by policy makers. Thus, in such an event, the quality of the added female directors in terms of their ability, skills, expertise, etc. might be limited, which in result affect negatively on their potential to contribute to the firm's performance. They also explain that by focusing on organizational aspects such as, corporate social responsibility, female directors may fail to focus their attention to the firm's economic performance. Such instances may hinder the potential benefits of a board with increased female presence and thereby influence the firm's performance negatively.

In the recent literature, using a sample of French listed firms Boubaker, Dang, & Nguyen (2014) demonstrate that adding female directors to the BOD can lead to lower financial performance of the firm. Some studies also find that the effect of board gender diversity on firm performance varies depending on the use of different proxies to measure female presence on BOD and firm's financial performance. For instance, when a dummy variable is used to measure female presence on BOD, Boubaker, Dang, & Nguyen (2014) find their previously significant positive effect of board gender diversity on firm performance to be insignificant. The studies of Wellalage & Locke (2013), Shehata, Salhin, & El-Helaly (2017) and Adusei, Akomea, & Poku (2017), find significant evidence to support a negative relationship between board gender diversity and firm performance. Similarly, using a sample of Nigerian firms Akpan & Amran (2014) shows that the presence of women on BOD is too small to exert a meaningful positive effect on firm's performance, which thus exert a negative impact on firm's performance. Kilic (2015) also find evidence to support a significant negative association between board gender diversity and financial performance of Turkish banks. According to the study of Arena, et al. (2015) the performance of a firm is influenced negatively by the presence of female members in the BOD. They also provide evidence to claim the importance of reaching a critical mass of female presence to exert a positive effect on the firm's performance.

- ***Case for no relationship between board gender diversity and firm performance***

In contrast, some empirical studies have also found that there is no significant association between board gender diversity and firm performance. For instance, Carter, D'Souza, Simkins, & Simpson (2010) demonstrate that gender diversity on BOD does not affect a firm's performance and hence their study do not support the inclusion of women on the BOD. Similarly, Sanan (2016b) and Horváth & Spirollari (2012) also fail to establish a significant association between board gender diversity and firm performance. In an analysis of a subset of the sample, Martín-Ugedo & Minguez-Vera (2014) also find that gender diversity in family-owned businesses does not exert any influence on such firm's performance.

- ***Case for non-linear relationship between board gender diversity and firm performance***

Using a sample of firms in the industries of “Science, Technology, Engineering, Mathematics, and Finance (STEM&F)” Wiley & Monllor-Tormos (2018) in a recent study posit that board gender diversity exerts a significant non-linear effect on the firm performance. More specifically, they find this effect to be U-shaped, where the female presence on board exerts a negative influence on firm’s financial performance when the diversity is below a certain threshold, and exerts a positive influence as the diversity reaches above the given specific threshold. Further according to their analysis, Wiley & Monllor-Tormos (2018) identify this threshold which is also known as the critical mass to be 30%.

## **Conclusion**

Despite a growing interest on the impact of increasing board gender diversity, the extant literature is contradictory, lacking in conclusive empirical evidence and has failed to build a solid case to support the inclusion of female members on the BOD (Arena, et al., 2015). Given the importance of gender diversity, it still in debate whether inclusion of female directors on BOD is worthy. This study strives to fulfill the gap in the existing literature by providing a comprehensive review on the recent literature regarding the board gender diversity and firm performance. In doing so, this study has taken a holistic view by combining two dominant theories of interest, as, agency theory and resource dependence theory, and identifies that the majority of the literature has provided evidence for a positive association while some studies build the case for a negative relationship between gender diversity on BOD and firm performance. Also, it has addressed the studies which find no significant relationship among the two variables of concern.

This study also proposes recommendations for further research as follows. First, future studies can focus on identifying the existence of an optimal level of female presence on BOD rather than focusing only on the exact nature of the relationship. Furthermore, according to the reviewed literature, it is clear that there is still a gap in building a case of non-linear relationship between board gender diversity and firm performance. Given the evidence for both positive and negative association between the variables concerned, and the differences in the existing levels of female



representation on corporate boards, it is worthwhile to identify whether there exists a non-linear relationship between board gender diversity and firm's performance. Third, majority of the previous studies have limited their studies to samples of non-financial firms. Thus, future research can fulfill such a gap by incorporating a sample of firms from different industries. It may also provide the opportunity to assess whether there exists an industry specific effect.

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