

## Article

# Gender Inclusiveness and Female Representation on the Board of Directors of the Benefit Company Model: Evidence from Italy

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**Abstract:** This study aims to analyse whether firms adopting the institutional and organizational model of a benefit company (BC) increase the appointment of women to their board of directors (BoD) by applying the theoretical models of reputation management and resource dependence theory. A sample of 354 Italian firms adopting the BC model and a control group of 600 firms over the period of 2009–2018 were analysed. A fractional regression probit model was used to analyse the effect of the institutional form of the BC on the presence of women on BoDs. The findings, generally robust regarding different econometric specifications dealing with potential endogeneity, confirmed that a firm's adoption of the BC model positively affects the likelihood of the firm increasing the presence of women on its BoD. This evidence justifies the actions of those stakeholders in firms that are actively involved in corporate social responsibility (CSR) processes, seeking increased reputation and legitimacy by increasing the number of female directors in the firm. The study contributes new insights into the relationship between CSR and the appointment of women on BoDs in the new and emerging business context of hybrid organizational models. Additionally, the study advances our knowledge about the heterogeneous and reversed associations between the institutional model of the BC and the choice of specific corporate governance mechanisms in the form of the appointment of women on BoDs to increase the reputation and legitimacy of firms.

**Keywords:** benefit company model; hybrid-purpose business organizational model; female directors; reputation management; resource dependence theory



**Citation:** Boffa, D.; Prencipe, A.; D'Amico, L.; Corsi, C. Gender Inclusiveness and Female Representation on the Board of Directors of the Benefit Company Model: Evidence from Italy. *Sustainability* **2023**, *15*, 5852. <https://doi.org/10.3390/su15075852>

Academic Editor: Sooksan Kantabutra

Received: 16 February 2023

Revised: 10 March 2023

Accepted: 15 March 2023

Published: 28 March 2023



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## 1. Introduction

Due to increasing concerns about sustainability in the operations of firms, there is a greater interest in the literature regarding the management of those organizations that manage sustainable development through their economic activities, and for models and approaches, in integrating sustainability within their everyday operations, focusing on various aspects, which include sustainability performance measurements and sustainability reporting practices. These are particularly pressing concerns for those organizations that pursue social and environmental aims in addition to economic ones [1–3].

The benefit company (BC) model constitutes a growing managerial model of hybrid-purpose business organization [4–8] permitting a for-profit firm to enlarge its mission to public welfare aims, leading a non-profit organization to categorize itself as a for-profit firm, while preserving its mission of social awareness in accordance with corporate social responsibility (CSR) [9–13]. These companies take the form of an organizational limbo between profit-oriented and non-profit-oriented companies, combining the aim of increasing economic returns with transparency and responsibility towards an enlarged cluster of stakeholders, made up of partners, staff, individuals, the biological ecosystem, and the socioeconomic context [6,14,15].

Therefore, with the BC model, firms attain their goals by generating and preserving biunivocal relationships with stakeholders, operating sustainably and improving their reputation [12,16].

Nevertheless, the existing literature on the BC model is quite incomplete, notwithstanding its importance as a new model and the impulse emerging chiefly from the EU for their extensive implementation [17,18].

To be CSR-responsive and to embrace a beyond-the-profit approach, BCs are required to consider all stakeholders and are expected to consider norms, moral ideals, and ethics [19–21].

Female representation on a board of directors (BoD) has a relevant effect on a BoD's orientation towards CSR [22,23]. Indeed, the increasing representation of women on a firm's BoD positively affects the CSR performance. This is confirmed by previous studies, such as that of Setó-Pamies [24], who empirically analysed a sample of companies from a selection of countries and sectors to define whether those companies with a greater presence of women on the BoD were more socially responsible. The findings support the hypothesis that female representation has a positive effect on CSR (see also [25,26]). Women's appointment on BoDs is considered a relevant strategic management of stakeholders' expectations and a central approach through which a firm can meet its stakeholders' expectations [27,28].

Women's appointment on BoDs has been a topic of growing prominence in recent years, evidenced both by the increasing amount of scientific research [25,29,30] and from a political point of view, with the implementation of mandatory female BoD quotas or comply-or-explain norms [31,32].

The present study is undertaken within the interesting issue of female representation in corporate governance, namely, the analysis of the association between CSR and female BoD representation in BCs.

Although an extensive segment of the literature has analysed the internal social responsibility impact of female representation on BoDs [33–35], the positive and inverted effects of CSR on female representation on BoDs is lacking in the current literature.

Indeed, a great part of the literature, leveraging from the so-called "instrumental theories" [36], is focused on the impact of CSR on a firm's performance and other related results, such as productivity [37] and financial performance [38], or on its relationship with firm innovation [39]. Additionally, previous studies recognised the role of corporate governance mechanisms in determining CSR performance and its related dynamics [40,41]. Nevertheless, this stream of the literature has been completely silent on gender diversity on BoDs as a possible outcome of CSR (inverted relation), and there is only a limited number of studies addressing gender diversity as an outcome of CSR [42–44]. However, not one of these previous studies has focused on the gender diversity of BoDs as a corporate governance mechanism. Only the study of Godfrey et al. [45] analysed the two-way connection between gender diversity on BoDs and corporate social irresponsibility (CSI), which of course is only partially aligned with the aim of addressing the effect of CSR on gender diversity on BoDs. Hence, there is a critical gap in the existing literature addressing CSR, gender diversity, and corporate governance.

Considering the reputation management arguments, BCs may seek to improve their reputation status by following the governance and managerial models of some of the most high-reputation firms [46,47]. In this regard, a high representation of women on the BoD is considered a critical characteristic of high-reputation firms, since increased female representation on the BoD sends a signal to stakeholders about a corporation's care for women's rights [48,49]. Scholars claim that an increased number of women on boards improves companies' reputation [50,51], partly, apparently, in view of the greater pressure for diversified boards [52].

Jointly, following the resource dependence theory, women on BoDs may bring critical and distinctive resources, leadership capabilities, and skills, which in turn may improve the reputation status of the BC [34,53,54].

Nevertheless, the hypothesis analysing if the female representation on a BoD influences a firm's reputation is incompletely investigated in the existing literature, and this study proposes to partially address, indirectly, this emerging gap. Hence, considering the emerging literature gaps highlighted, the following research question could be advanced: does the adoption of the BC model improve the presence of women on BoDs?

In view of the above research question, the study aims to investigate whether firms taking the institutional and managerial model of the BC improve their inclusiveness in terms of the presence of women on their BoDs, using the theoretical models of reputation management [55,56] and resource dependence theory [57,58]. In greater detail, the research assumes that firms exposed and involved in processes related to CSR are expected to be more inclusive and to increase their female representation on BoDs for reputational purposes.

The research contributes to the integration of the evolving debates in the literature about the association between corporate social responsibilities and female representation by enlarging them into the novel and emerging entrepreneurial context of hybrid organizational models, of which the BC represents an interesting case. Furthermore, the logical use of the theoretical models of reputation management and resource dependence theory applied to socially responsible behaviours will advance the knowledge about the heterogeneous and reversed associations between the institutional model of the BC and the choice of specific corporate governance mechanisms, in the form of female representation on BoDs, to increase the reputation and legitimacy of firms.

The remainder of the paper is organized as follows. In Section 2, the Italian model of the BC is introduced and described. In Section 3, the theoretical background and proposed research hypotheses are systematically argued. In Section 4, the empirical methodology used is reported, describing the sample composition, the definitions of the variables used, and the analytical approach. In Section 5, the descriptive statistics and the findings from the defined models are presented. Lastly, Section 6 discusses the emerging findings and the related implications, highlighting the emerging limitations and advancing some avenues for future research on the subject.

## 2. The Italian Benefit Company

The BC (*Società Benefit*) was introduced into the Italian legal system with the Stability Law of 2016 (Law No. 208 of 28 December 2015). Thus, the Italian Parliament, introducing the benefit company model, made Italy the first country to include this legal status throughout its whole territory [59,60]. The first firms were incorporated in 2016, and more than 100 firms were incorporated by 2018.

A BC is “legally a for-profit, socially obligated business, with all of the traditional corporate characteristics but with explicitly stated societal responsibilities” [15]. Stated differently, it is a for-profit organization that has voluntarily and legally committed to following an overall or particular public benefit model through the generation of social and environmental results in addition to its accountability in generating economic return for the shareholders [61].

BCs are comparable to conventional commercial corporations in that they trade a product or service to make profits. Nevertheless, their difference from conventional commercial corporations is related to the mission that is rooted in the BC model—retaining significant relevance on the fundamental sustainability or community-driven principles or aims of the company [62].

The BC must specify its explicit benefit aim(s) and in what way they will be achieved. These shared benefits can promise a positive impact or the reduction in an adverse impact in stated areas. The law explicitly states that managers/directors must direct the firm in view of the interests of stakeholders affected by the firm’s activities. BCs also must identify the individual(s) responsible for functions and tasks aimed to achieve the statutory purpose(s). In greater detail, in order to verify the stated social purposes, the BC Act, Paragraph 380, recognized that it is mandatory for a BC to designate one or more individuals that are “responsible for the impact”—also referred to as benefit impact managers (BIM).

Failure to fulfil these commitments can constitute a failure to meet the obligations imposed on directors by the law and/or the company acts. In this regard, item 381 of the Stability Law states that failure to attain the goals can lead managers to be held responsible, which is different from a manager’s overall responsibilities in “conventional” firms.

The benefit corporation's legal framework permits the firm to align and defend its mission in medium- and long-term periods. To guarantee that the firm does not use the "benefit" framework inadequately, a compulsory annual report clarifying what beneficial actions have been performed, with an internal valuation concerning the impact of these actions, must be published along with the balance sheet [63].

Indeed, a BC has the responsibility to draft an annual report to evaluate and communicate its financial, social, and environmental results. To elaborate, the BC must disclose an annual report detailing its aims, the actions previously implemented to reach them and, if the cases arises, the motivations for not having done so. Furthermore, the firm must evaluate the social impact of its actions according to Attachment 4 of the law, as well as define the aims it expects to achieve in the subsequent fiscal year.

Attachment 4 specifies that the assessment shall be performed by an external and trustworthy entity and must contain a study of the firm's governance, comprising its responsibility and transparency towards social goals, labour, and environmental elements, as well as its impact on further stakeholders, providers, and society. Explicit indicators for this evaluation are not stated. It is expected that firms will use the previously acknowledged standards, such as the global reporting initiative (GRI) and the B Lab impact assessment (BIA) tool.

It could be interesting to understand if a BC's purposes, as declared in its statute/mission statement, could be defined as a genetic puzzle contributing to the description of a "therapeutic" business model, pondering both social and profit-making goals directing the company's strategies and actions.

In this regard, the previously mentioned Stability Law 2016 in Italy states that to become a BC, a firm must revise its articles of association contained in the object clause regarding the goals of shared benefit that it aims to follow. Hence, as previously observed, the firm will not only follow the goal of profit, but also the explicit goal(s) of shared benefit that it has disclosed in its articles of association.

In detail, Art. 2 of the Stability Law 2016 remarks:

- (a) "shared benefit": referring to the achievement, jointly, of the BC's economic activities, of one or more positive effects, or of the reduction in negative effects;
- (b) "other stakeholders": the entities or clusters of entities directly or indirectly involved in, or affected by the actions of the BC, such as employees, customers, providers, financiers, creditors, public administration, and community;
- (c) "third-party standard": procedures and measures needed to evaluate the impact produced by the BC concerning the shared benefit;
- (d) "evaluation areas": areas to be integrated in the evaluation of the actions of shared benefit.

At present, it could be suggested that BCs might embody a new business approach but, chiefly, they constitute an advance towards the social legitimization of the conventional business model defined by a non-loss, non-dividend firm or by a social business form [64].

### 3. Theoretical Background and Hypothesis Development

The literature shows an increasing demand from stakeholders for the strategic management of firms focused on CSR [65–68], and the introduction of the BC model in Italy provides a further contribution and a tool for firms to better align their profit goals with the emerging calls of stakeholders regarding their involvement with ethical causes and sustainable growth.

Along with ethical purposes, CSR can be considered as a strategic approach to increase reputation and, accordingly, profits [69–71]. First, considering reputation management, a firm involved in a CSR process, such as a BC, may pursue reputation management by emulating some of the features of well-regarded companies. Following the life-cycle theory [46,72–74], firms may pursue improvement of their reputation and legitimacy, according to societal beliefs, by focusing on specific matters; on the other hand, firms that fail to do so may witness a weakening of their reputation. The legitimacy context, the isomorphic phenomenon, and the reputational behaviour contribute to developing the

BC's ability to survive, in view of co-generation actions and stakeholder engagement in socioeconomic environments [12,75].

Female representation on BoDs is one of the main characteristics of high-reputation firms [76,77].

Additionally, a firm actively involved in CSR, such as a BC, may seek to increase female representation on the BoD as a signal to prospective personnel of its motivation to retain women and offer a positive work milieu [78–80].

Furthermore, two organization theories, resource dependence theory [58] and agency theory [81,82], offer extensive theoretical foundations for how female representation on a BoD impacts CSR and how, in turn, CSR impacts the reputation of the firm.

Considering the resource dependence theory, the provision of resources is a role of BoD capital, with the BoD acting as a source—among others—of legitimacy and relations to other companies [53]. This develops BoD capital and improves its monitoring role, which, in turn, should entail the aptitude to improve the CSR orientation of the firm and the probability of undertaking the institutional and managerial model of the BC. This cognitive–inductive approach is also reinforced by wide-ranging evidence: women on BoDs are more likely than men to possess skilled experience outside the firm, are much more likely to hold a Ph.D., [83], and enhance the diversity of living practices among BoD members [84]. Women on BoDs are also correlated with improved monitoring and strategic planning contribution [33].

The basic driver appears to be related to the fact that women directors possess distinctive social and attitudinal characteristics in comparison with male directors, and that these characteristics increase firms' willingness to adopt a CSR approach. In this regard, the study of Bernardi and Threadgill [85] shows a positive connection among the number of women on BoDs and corporate social conduct, for example, philanthropical actions, community attachment, and identification of employee aids. Additionally, the study of Harjoto, Laksmana, and Lee [86] shows that BoD diversity strengthened CSR performance.

Additionally, the risk management purposes of a BoD are enhanced through the diversification of its human capital. Furthermore, agency theory confirms the fundamental role of monitoring by the management of the BoD. In this regard, the literature has investigated the impact of BoD links, revealing that a BoD's monitoring ability is associated with directors' selections, which can retain strategic knowledge and outlook [87,88].

A further organization theory, signalling theory [89,90], provides a supplementary basis for the understating of the association between board gender composition and the reputation of the firm.

Indeed, signalling theory has been suggested to clarify the expected association between female representation on a BoD and reputation. To elaborate, signalling theory, considering asymmetric information, advocates that parties may send, purposely or not, significant, but not willingly visible information, through visible signals that are evocative to observers. Female representation on a BoD contributes to this process, increasing the reputation of the firm [77,91]. The presence of women on a board has been noted to increase the evaluation of corporate social concerns, as well as to exercise a positive effect on corporate reputation correlated with a growing percentage of women on the board.

Thus, it could be argued that female directors consider strong CSR incorporated in a BC as a reliable signal that the company is thoughtful about moral interests, especially regarding workplace equality, demonstrating a commitment to gender equality. Consequently, the BC model supports a firm's recruitment and retention of skilled women, with career goals, on its BoD.

Based on the above argument, it may be claimed that women on a BoD bring effectively distinctive leadership assets and abilities compared to men. In this regard, rising female representation on a BoD is expected to strengthen the perceived reputation and CSR level of BCs by integrating the positive qualities of female leadership, and through this, raising the level of risk aversion and pro-social skill, improving BoD monitoring and raising the standards of ethical decision-making [87].

These arguments might contribute to partially clarifying the link between female representation on BoDs and a firm's reputation [92], which, in turn, further contributes to explaining the probability of the firm undertaking the institutional and managerial model of the BC to increase the appointment of women on its BoD. Indeed, resource dependence theory, agency theory, and signalling theory all contribute to providing the concepts that clarify the relationship between female representation on a BoD, CSR, and a firm's reputation. Since CSR significantly affects a firm's reputation and BCs are firms aiming to implement—among other processes—CSR, it becomes clear that a firm adopting the BC model will be more inclined to increase the appointment of women to its BoD.

In view of the above arguments and emerging framework, the following research hypothesis is produced: firms adopting the benefit company model increases the appointment of women to their board of directors.

## 4. Materials and Methods

### 4.1. Sample

To validate the defined research hypothesis from an empirical perspective, we investigated a panel sample of 354 Italian firms assuming the institutional form of the BC model. The data regarding the panel sample was extracted from the Aida BvD database, linked to the ORBIS database, which comprises chronological economic and financial information, as well as biographical and other company characteristics, of about 700,000 active Italian companies. The economic and financial data were provided by Honyvem, which obtains and shares all operating balance sheets stored by the Italian Chambers of Commerce. The sample refers to the period of 2009–2018. Furthermore, a control group of 600 non-BC companies was considered, and the related data were collected from the Aida BvD database to cogently control the likelihood of a company undertaking the institutional form of the BC model based on definite elements and corporate governance features, summarized previously in Section 2. The final sample included 954 companies.

The sampling strategies and procedure can be described as follows. From the total 1497 Italian BCs available on the Aida BvD database—identified through the indication “Benefit Company” or “SB” in its company name—a sample of companies was obtained with the following characteristics:

- Only companies established before 2009 were selected in order to identify those companies that transformed their model from a non-BC model to a BC model. Therefore, companies that were originally established as BCs were excluded;
- The companies for which financial information was not available for a maximum of three years in the time interval (2009–2018) analysed were eliminated.

Hence, the final analysis sample consists of 354 BCs.

For the purposes of empirical analysis and the research hypothesis, the control sample was selected using the following approach:

- In the Aida BvD database, a search was carried out of Italian companies that were active and established until 2009;
- From this dataset of active Italian companies, with the exclusion of the already selected BCs, a dataset of companies was randomly sampled;
- The companies for which financial information was not available for a maximum of three years in the time interval considered were eliminated.

Thus, at the end of the steps indicated above, the final control sample consisted of 600 companies.

### 4.2. Variables

#### 4.2.1. Dependent Variable

The purpose of this research project is to investigate whether firms undertaking the institutional form of the BC model increase the appointment of women to their BoD.

Therefore, the dependent variable used was, according to Chen et al. [93], the ratio of female directors to the total amount of directors on the BoD (women board).

#### 4.2.2. Independent Variable

To examine the impact of the BC model, a dummy variable was used, assuming value “1” if the firm is a BC and “0” if otherwise. Adopting a dichotomous variable is generally accepted in the literature aimed to investigate the effect and determinants of the likelihood of an attribute or event [94], such as the effect generated by a firm taking the form of a BC (benefit company).

#### 4.2.3. Control Variables

To confirm the occurrence of further effects in the model, a group of control variables was included. First, the firm age was used, as determined by its years of activity (firm age). Firm age is relevant in determining the presence of women on the BoD. Indeed, well-established companies usually demonstrated well-developed gender inclusiveness culture/models and linked CSR practices, showing a tendency for an increased presence of women on their BoD [95]. On the other hand, young firms were more open to embracing gender representation, inclusiveness, and equality issues [96–98], in view of the emerging trend of CSR and sustainable entrepreneurship among startup firms [99]. Furthermore, an increasing number of new firms have adopted hybrid-purpose organization, such as benefit companies, with a concern for gender-equality-related issues and for the appointment of female board members [100].

Second, the natural logarithm of the value of the total assets was included as a variable determining the firm size (firm size). The literature suggests that a firm’s size significantly determines women’s appointment on the board, with twofold effects. Indeed, in larger companies, the hierarchical structures may lead to a more decentralized structure and wider allocation of power [101,102], which increases the likelihood of women’s appointment on its BoD but reduces the impact of the gender-diverse board. On the other hand, larger firms are usually subjected to superior inertia forces, which may also weaken their openness to gender equality, diversity, and inclusiveness issues (with a prevalence of masculine culture). Smaller companies tend to be less affected by bureaucratic inertia, show more flexible structures, and, hence, increase management discretion [103] and openness to gender issues, with a potential increase in women appointed to their BoD.

Third, following previous studies [104,105], return on sales index, as the ratio of operating profit to net sales, was used to measure firms’ profitability (ROS). Firm profitability is usually affected by women’s appointment to the BoD [106,107], although several studies claim potential inverted causality effects [96,108,109]. Hence, the partial effect of firm profitability on the appointment of female directors should not be excluded and considered. Additionally, a control for the presence of independent directors was applied by using the ratio of independent directors to the total number of directors on the BoD (independent directors). Board independence is one of main mechanisms of corporate governance, affecting other dimensions of board composition, such as the appointment of women on the BoD. On one hand, scholars suggest that there is a bias towards male directors in the appointment of independent directors, which decreases the percentage of female directors [110]; on the other hand, the literature shows that independent directors are essential for the progress of the decision-making process and to achieve the functions of monitoring and supervision, stimulating the role of female board members and increasing the possibilities of their appointment [111,112].

To control for the size of the BoD, a variable measuring the number of directors on the BoD was used (board size). Studies highlight that larger boards show a great presence of female directors, which is expected to facilitate the appointment of women on the BoD [113]. Additionally, the age of directors was used (director age). Indeed, scholars advocate that the younger the directors are, the less the influence of the ‘old boys network’

might be, increasing the likelihood of women being appointed on the BoD [114]. Finally, year dummies to control time effects have been included.

#### 4.3. Analytical Approach and Strategy

The research aims to analyse the effect of the institutional form of the BC on the appointment of women on a BoD. In this case, the problem that emerges, from an empirical point of view, is modelling panel data that includes fixed effects to control for observed time-invariant company features (the independent variable and part of the control variables) and unobserved ones that might be related to the variables in the model. Nevertheless, any effort to apply this research strategy is challenged by another concern that is related to the nature of the dependent variable, the share of female directors on the total number of directors of the BoD is a fractional variable whose value ranges from 0 to 100; several observations indicate that this tends to be lower because numerous companies do not have female directors on their BoD. In similar cases, Papke and Wooldridge [115] recommend the usage of a fractional logit/probit estimator.

If the number of companies in a population is determinate and each of them is represented in the dataset, an unconditional fixed-effects fractional logit/probit model can be used, which only comprises an indicator variable for each company [116,117]. Wagner [118], analysing the relation between firm size and exports, applied this modelling strategy using data on companies in three manufacturing industries in Germany. The author reveals that the positive association between firm size and exports that is typically detected in cross-section data disappears when unobserved company features are controlled for.

This unconditional fixed-effects approach can only be used if the case data for the companies are accessible for a fixed number of periods, and this is rarely the case. Papke and Wooldridge [119] launched a method to model proportional/fractional responses for panel data with a sizable cross-sectional dimension and limited time periods while allowing for time-constant unobserved effects that can be associated with dependent variables (see [120] also).

Hence, to empirically validate the research hypothesis outlined, a fractional regression probit model was used to analyse the effect of the institutional form of the BC on the appointment of women on a BoD. Fractional regression was used to model fractional data that move from one to zero, and it is appropriate when endpoints zero and one are included in the model [115]. Thus, a probit model for the conditional mean was used.

The common practice that considers that linear models explain the relation between explanatory variables and a given proportional/fractional response variable was not appropriate, as there was no certainty that the values assumed by the dependent variable comprised the unit interval [121].

Regarding the fractional regression probit model used in the study, the likelihood function for the firm  $i$  can be described as follows:

$$\text{Women board}_{it} = \beta_1 \text{Benefit Company}_{it} + \beta_2 \text{CONTROLS}_{it} + \varepsilon_{it} \quad (1)$$

where CONTROLS is the vector of control variables and  $\varepsilon_{it}$  is the firm's error term  $i$  at the time  $t$ .

## 5. Results

### 5.1. Descriptive Statistics

Table 1 shows descriptive statistics for dependent, independent, and control variables.

**Table 1.** Descriptive statistics.

Variable	N. of Obs.	Mean	S.D.	Min.	Max.
Women board	2700	0.2105	0.3261	0.0000	1.0000
Benefit company	9540	0.3711	0.4831	0.0000	1.0000
Firm age	9540	12.4120	12.0173	0.0000	1.0000
ROS	3893	3.6613	10.8309	−50.0000	29.9900
Firm size	4601	13.3316	1.9539	6.8416	21.3821
Independent directors	9540	0.3438	1.1444	0.0000	14.0000
Directors age	7780	53.19152	12.8576	21.0000	98.0000
Board size	9540	0.6572	1.4220	0.0000	14.0000

Of the 954 firms analysed, the proportion of female directors out of the total number of directors was an average of 0.21, with a moderate dispersion in the sample (S.D. = 0.33) revealing a quite low female representation on BoDs among the firms analysed. Regarding the nature of the firms, the sample shows that an average of 37% of firms undertook the institutional form of a BC; in this case, the evidence was moderately dispersed in the sample (S.D. = 0.48).

To provide more detailed information about the role of women on BoDs in the sample analysed, Table 2 shows the descriptive statistics computed for firms without women on the BoD and firms with women on the BoD.

**Table 2.** Descriptive statistics computed for firms without women on the BoD and firms with women on the BoD.

Variables	Women Board = 0			Women Board > 0		
	N. of Obs.	Mean	S.D.	N. of Obs.	Mean	S.D.
Benefit company	1670	0.3054	0.4607	7870	0.3850	0.4866
Firm age	1670	16.0539	14.7218	7870	11.6391	11.2108
ROS	951	3.7106	9.7379	2942	3.6453	11.1629
Firm size	1085	14.1496	2.0744	3516	13.0791	1.8436
Independent directors	1670	0.7545	1.2551	7870	0.2567	1.1000
Directors Age	1660	56.0060	12.7571	6120	52.4281	12.7793
Board size	1670	1.6587	1.2228	7870	0.4447	1.3697

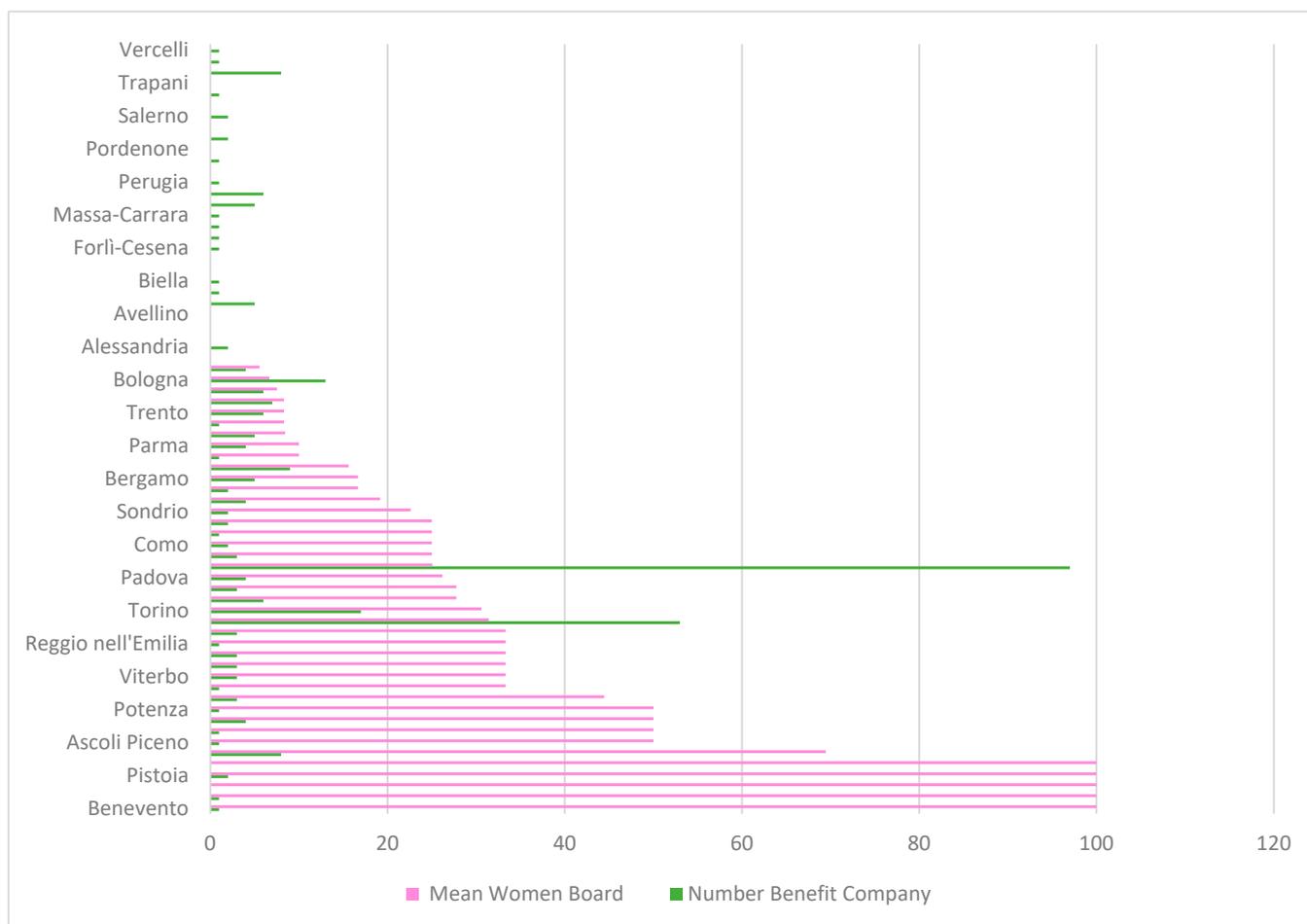
The results show that firms with female directors show a superior likelihood of undertaking the institutional form of a BC. Indeed, firms with female directors show a sample mean of 38.5% taking the form of a BC, while firms without female directors show an average of 30.5% taking the form of a BC.

Figure 1 shows a graphical representation of the sample mean of the women in the BoD variable and number of benefit companies by Italian province. In the figure, only the most relevant data for the sample analysed are reported.

Table 3 presents the findings of the mean difference tests between firms with and without female directors for the entire sample.

The results reveal overall and significant differences between the two groups for all the variables used in the empirical analysis. Furthermore, Table 4, showing the mean difference test between benefit companies and non-benefit companies (control group), reports significant differences.

With the aim of empirically analysing the hypothesized relationships, a preliminary multicollinearity analysis was performed by using the “Variance Inflation Factor” method, which determines the strength of the correlation among all the independent variables included in the model. Subsequently, a pairwise correlation analysis was conducted to further measure the multicollinearity within the set of independent variables considered.



**Figure 1.** Graphical representation reporting the sample mean of the women in the BoD variable and number of benefit companies by Italian province (most relevant data).

**Table 3.** Mean difference test.

Variables	Firm—Years without Women on BoD (Obs = 8510)	Firm—Years with at Least One Woman on BoD (Obs = 1030)	t-Test
Benefit company	0.3149	0.8350	−34.6144 ***
Firm age	12.5065	11.6311	2.2085 **
ROS	3.8557	2.0536	3.2245 **
Firm size	13.2973	13.0791	−3.3671 ***
Independent directors	0.1481	1.9612	−55.1496 ***
Directors age	53.0667	54.0097	−2.1931 **
Board size	0.3255	3.3981	−88.2825 ***

Note: This table presents the results of the mean difference tests between firms with and without women directors for the entire sample. \*\*  $p < 0.05$ . \*\*\*  $p < 0.001$ .

Table 5 shows VIF emerging values computed for the variables analysed.

The results shows that VIF coefficients for each variable—and the mean value—are lower than the commonly assumed cut-off values equal to 4 ( $VIF < 4$ ), and that the  $1/VIF$  values are higher than 0.2, traditionally considered as the limit value [122].

Table 6 reports the correlation matrix with Pearson’s correlation coefficients among all variables used in the study (omitting years dummies).

**Table 4.** Mean difference test between benefit companies and non-benefit companies (control group).

Variables	Non-Benefit Companies	Benefit Companies	t-Test
Women board	0.1278	0.2908	−13.4020 ***
Firm age	16.0550	6.2373	41.9524 ***
ROS	3.8725	2.7761	2.4927 **
Firm size	13.3933	13.1120	4.0471 ***
Independent directors	0.0900	0.7740	−29.4565 ***
Directors age	55.0654	50.2697	16.3235 ***
Board size	0.2217	1.3955	−42.4703 ***

Note: This table presents the results of the mean difference tests between benefit companies and non-benefit companies for the entire sample. \*\*  $p < 0.05$ . \*\*\*  $p < 0.001$ .

**Table 5.** Variance inflation factor.

Variable	VIF	1/VIF
Independent directors	3.8900	0.2569
Board size	3.8100	0.2624
Firm size	1.1400	0.8801
Firm age	1.1300	0.8878
Directors age	1.1000	0.9108
ROS	1.0100	0.9919
MEAN VIF	2.0100	

**Table 6.** Correlations.

	1	2	3	4	5	6	7	8
1 Women board	1.0000							
2 Benefit company	0.2498 *	1.0000						
3 Firm age	−0.0723 *	−0.3947 *	1.0000					
4 ROS	−0.0632 *	−0.0399 *	0.0144	1.0000				
5 Firm size	−0.1819 *	−0.0596 *	0.5059 *	0.0353 *	1.0000			
6 Independent directors	0.0861 *	0.2888 *	0.0183	−0.0614 *	0.2038 *	1.0000		
7 Directors age	−0.0948 *	−0.1820 *	0.3431 *	−0.0302	0.2798 *	0.1021 *	1.0000	
8 Board size	0.1444 *	0.3988 *	−0.0124	−0.0598 *	0.1941 *	0.8345 *	0.0724 *	1.0000

Note: \* The correlation is significant at 5%.

The combined results emerging from the variance inflation factor (VIF) analysis and the Pearson's correlation matrix show no high significant correlation values between the explanatory variables; hence, multicollinearity does not represent a criticism in this empirical analysis, and it is possible to proceed with the empirical estimation model.

### 5.2. Estimation of the Fractional Regression Probit Model

Table 7 shows the results of the fractional regression probit model estimated to determine the relationship among the assumption of a highly social, committed organizational model, such as that of benefit companies, and the presence of a higher female representation within the BoD.

The results clearly show that benefit companies demonstrate a higher presence of female directors (Column ii, 0.9065;  $p < 0.001$ ), confirming the hypothesized positive relation, determined by the fact that benefit companies, due to their social engagement and socially oriented mission, are more likely to be inclusive, favouring female representation, with a specific focus on female directors.

**Table 7.** Estimation of the defined fractional regression probit model.

	(i)	(ii)
Benefit company		0.9065 *** (0.1027)
Control variables		
Firm age	0.0095 ** (0.0028)	0.0107 *** (0.0028)
ROS	−0.0040 (0.0030)	−0.0044 (0.0030)
Firm size	−0.1602 *** (0.0210)	−0.1529 *** (0.0210)
Independent directors	−0.0170 (0.0277)	0.0896 ** (0.0303)
Directors age	−0.0078 ** (0.0028)	−0.0062 ** (0.0029)
Board size	0.1475 *** (0.0283)	−0.1377 ** (0.0406)
Years		
2010	−0.0095 (0.1756)	0.0084 (0.1764)
2011	0.0298 (0.1720)	0.0401 (0.1731)
2012	−0.0193 (0.1721)	−0.012 (0.1730)
2013	−0.0108 (0.1698)	−0.0069 (0.1711)
2014	0.0157 (0.1675)	0.0217 (0.1691)
2015	−0.0372 (0.1661)	−0.0388 (0.1684)
2016	−0.0315 (0.1616)	−0.0282 (0.1638)
2017	0.0035 (0.1594)	−0.0148 (0.1623)
2018	−0.0351 (0.1566)	−0.0624 (0.1588)
N. of obs.	1361	1361
Wald chi <sup>2</sup>	129.1500 ***	180.6300 ***
Pseudo R <sup>2</sup>	0.0585	0.0858
Log pseudolikelihood	−615.6870	−597.8401

Note: The robust standard errors are reported in parentheses. \*\*  $p < 0.05$ . \*\*\*  $p < 0.001$ .

Additionally, examining control variables, it is notable that there are no relevant disparities between the two estimated models (Columns i and ii), except for the variables independent directors and board size. Interestingly, while the presence of independent directors seems to be more relevant for benefit companies, and it demonstrates their slightly greater propensity to be gender inclusive (Column ii, 0.0896;  $p < 0.05$ ), examining the size of the BoD, a significant and relevant difference can be seen between the model computed solely for control variables (Column i) and the model estimated including the dependent variable. Indeed, including the variable of the BC model, the widely analysed evidence, which highlights a greater female inclusiveness for the largest BoDs, is lacking, and instead, a negative association between the number of directors on the BoD and the female representation within them can be observed. This assumption is supported by the reasonable premise by which larger BoDs are most likely to appoint women, but this logical assumption seems to no longer be valid if we include in the model the further variable that distinguishes BCs and “traditional” companies, which means that, in the case of BCs, the likelihood of larger BoDs having a greater proportion of women to the total

number of directors fails; instead, a negative and significant relationship with board size is demonstrated. Thus, it is possible to assume that in BCs, women are represented even in smaller BoDs.

### 5.3. Robustness Test: Endogeneity Problem

The potential impact assumed by being a BC on women on the board may be determined by firms' traits that influence its outcome. This conventional endogeneity effect defines the so-called reverse causalities or omitted variables. The typical methodology to approach the treatment of endogeneity consists of the application of the instrumental variables' regression method [123]. The basic idea is to select an instrumental variable that is concurrently related to the endogenous variable (benefit company) and uncorrelated to the ratio of women on the BoD (dependent variable).

Endogeneity biases were controlled for by using the generalized method of moments (GMM) estimation model [124]. This model offers reliable and effective coefficient estimators, and controls for both omitted variables and endogeneity concerns [125].

As instruments, three variables have been selected: the capital expenditures index (CAPEX), CEO duality (CEO duality), and sales growth (growth sales).

To address the consistency of the GMM estimator, the Sargan/Hansen test of over-identifying restrictions confirmed the overall validity of the instruments.

The results presented in Table 8 generally confirm the basic regression model, reinforcing the considerations previously advanced and the validation of the defined research hypothesis.

**Table 8.** GMM estimation to address potential endogeneity.

	(i)
Benefit company	0.8462 *** (0.1872)
Control variables	
Firm age	0.0026 ** (0.0008)
ROS	−0.0020 ** (0.0010)
Firm size	−0.0349 *** (0.0058)
Independent directors	0.0880 *** (0.0230)
Directors age	0.0002 (0.0009)
Board size	−0.2247 *** (0.0593)
Years	
2010	-
2011	0.0094 (0.0476)
2012	−0.0061 (0.0459)
2013	−0.0058 (0.0447)
2014	0.0106 (0.0450)
2015	−0.0110 (0.0448)
2016	−0.0126 (0.0435)
2017	0.0033 (0.0444)

Table 8. Cont.

	(i)
2018	−0.0232 (0.0439)
N. of obs.	1163
F	9.0500 ***
Centred R <sup>2</sup>	−0.0586
Uncentred R <sup>2</sup>	0.1940
Root MSE	0.3394
Hansen J statistic (chi-square, <i>p</i> -value)	1.2610 (0.5324)

Note: The robust standard errors are reported in parentheses. \*\*  $p < 0.05$ . \*\*\*  $p < 0.001$ .

## 6. Discussion

This study aimed to answer the research question that asks whether firms adopting the institutional and organizational model of the BC increase the appointment of women to their BoD, developing the framework on the theoretical models of reputation management and resource dependence theory.

The findings from a sample of 954 firms, generally robust to different econometric specifications to deal with potential endogeneity, positively reply to the advanced research question, confirming that the institutional and managerial model of the BC positively affects a firm's likelihood of improving female representation on its BoD. This evidence justifies the actions of those stakeholders in firms that are actively involved in corporate social responsibility (CSR) processes, seeking increased reputation and legitimacy by increasing the number of female directors in the firm. Indeed, the appointment of women on a BoD can effectively achieve this strategic objective, contributing to increasing the reputation of the firm, thanks to the general and growing acceptance of female representation on a BoD from stakeholders and the strategic managerial and leadership approach introduced by female directors.

When it comes to sustainability, one of the main related issues is intertwined with social and economic inclusivity, typically connected with the capability to efficiently respond to social demand for inclusiveness in the labour market of every population group. This critical issue generally involves women and their capability to reach the highest managerial positions within organizations.

Benefit companies' social engagement comprises attention both for social inclusion and female representation and for the capabilities of increasing social reputation that characterizes women's managerial competences, which contributes to developing the benefit companies' ability to survive, thanks to the improvement of stakeholder engagement within socioeconomic environments [12,75].

Female directors tend to have distinctive social and cultural attitudes compared to male directors, leading firms to favour sustainability-oriented and socially concerned managerial approaches. Thus, our results confirm the trends shown in the literature—that the more women act in BoDs, the more the firm shows socially responsible conduct, which results in, for example, philanthropical actions, community attachment, and outside identification of employee aids [85,86].

In conclusion, it may be argued that female directors bring fundamentally distinctive leadership abilities and skills to the boardroom compared to men and, thus, increasing the presence of women is expected to reinforce the reputational capital of benefit companies, enhancing the stakeholder expectations of sustainable and socially concerned governance by integrating characteristics and attitudes of female leadership, and through this, raising the level of risk aversion and pro-social skills, and consolidating and improving ethical management and decision-making processes [87].

### 6.1. Theoretical Implications

This study contributes to refining the literature that analyses the association between responsible and socially engaged firms and gender inclusivity, showing that a relevant commitment in sustainability and social issues, such as that of benefit companies, favours the involvement of female leaders and managers due to distinctive characteristics that reinforce stakeholder relationships.

Furthermore, the study answered the call for theorizing about and testing how adopting a CSR-oriented organizational/institutional model, such as that of a BC, may increase the presence of women on BoDs. Indeed, resource dependence theory and agency theory have been extended, suggesting that the desire and need for legitimacy and relationships to other firms from benefit companies [33,53,84] are partially enhanced with the introduction of female directors on their BoD, since female representation contributes to developing BoD capital and increases its monitoring function. Consequently, this will improve the CSR orientation of the BC, reinforcing its role and mission as a hybrid-purpose organization model.

Additionally, the study integrates the life-cycle theory and signalling theory of CSR [72,73,77,91] in order to theorize that having more female directors might significantly enhance the reputation of benefit companies, thereby justifying the increased female representation on the BoD.

Jointly, female directors may perceive strong CSR in a BC as a trustworthy signal regarding the commitment of the firm to workplace equality, with specific regard to gender equality. It follows that benefit companies contribute to attracting talented female directors to their board. In sum, benefit companies may improve women's appointment to their BoD through the signalling effect.

The analysis of this study contributes, although partially, to clarifying the relations between CSR-oriented and hybrid-purpose organization models, such as those of the BC, on the role of female directors, improving the female representation in the firm as a member of the BoD, promoting the monitoring function, reputation, legitimacy, and CSR-related subdimensions of the firm, and further revealing the "black box" of board processes [126]. However, this study calls for further research to continue the building of a theoretical framework elaborating on the embryonic propositions advanced here.

### 6.2. Practical and Social Implications

From a practical point of view, the research aims at integrating policy-makers' knowledge about how to promote female social inclusion and to manage female representation within organizations. The BC model and, generally speaking, other typologies of organization strictly interwoven with sustainability and sustainable development, increase the likelihood of including women as leaders and managers within organizations.

As stated by the life-cycle theory, arguing that companies may seek to advance their reputation and legitimacy through the fundamental guide of society's beliefs, the joined function of benefit companies and female representation may considerably increase the importance of policy-makers achieving the double goals of: (1) Advancing the extensive diffusion of the BC model and strengthening the CSR commitment of companies; and (2) Increasing female representation in managerial positions in organizations.

The European Commission has stated its support for a quota of 40% for women on BoDs. Other jurisdictions have already introduced such quotas (e.g., California, Iceland and Norway). Henceforth, the findings emerging from this study suggest to policy-makers worldwide that hybrid-purpose organizations—such as benefit companies—promote an increase in the appointment of female directors, which is expected to enhance the reputation of these firms and, in turn, preserve society from reputation damage, as well as potentially improve the level and spread of CSR into the socioeconomic context.

The findings arising from this study further advise policy-makers that adopting hybrid-purpose organization models, such as the BC model, increases the female representation on board, which in turn is likely to preserve companies and society from reputation damage by improving CSR.

This study provides investors an additional tool when evaluating potential investments. Indeed, the findings of this study advise investors in hybrid-purpose organizations that increasing the representation of women on the BoD will advance the firm's reputation, with a positive influence, in turn, on CSR activities. Board changes may provide critical signals to investors demonstrating the potential for the enhanced reputation of benefit companies.

For managers, the findings show that more women appointed to a BoD will provide them enhanced monitoring, which those executives with aligned incentives are expected to welcome. For a BoD, the emerging empirical evidence shows that enhanced female representation may add to forming board capital and, consequently, increasing the monitoring ability of directors. Benefit companies with more female directors may demonstrate improved critical board processes, such as analysis and decision-making. The presence of women on a BoD can enhance ratings for the CSR of benefit companies, which can, in turn, improve firm reputation.

Henceforth, it is recommended that directors increase female representation on the BoD until it reaches a suitable level.

### 6.3. Limitation and Future Direction of Research

Nevertheless, the study is not free of limitations, which might constitute insight for future research.

Firstly, the analysis focused exclusively on a sample of Italian benefit companies, which certainly limits the degree of generalizability of the findings and their explanatory scope since they are affected by institutional and socioeconomic factors. Thus, future studies could benefit from the scalability of the study to an international level, considering, for example, the benefit corporation model and its different emergent characteristics, producing cross-country studies in order to incorporate into the analysis contextual determinants as elements of relationships between sustainable management approaches and corporate governance dimensions, such as female representation. Secondly, the study considers benefit companies as firms with a declared socially and sustainability-oriented mission, analysing their propensity for gender inclusivity within the BoD, but future research projects could examine different firms that claim to be responsible and sustainably concerned and which present high social and environmental performance, even if not included in the benefit companies framework or in other hybrid-mission organizations in general.

**Author Contributions:** Conceptualization, D.B. and A.P.; methodology, A.P.; software, D.B.; validation, D.B., A.P.; formal analysis, D.B.; investigation, A.P.; resources, A.P.; data curation, D.B.; writing—original draft preparation, A.P.; writing—review and editing, D.B.; visualization, C.C.; supervision, L.D.; project administration, L.D.; funding acquisition, C.C. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was co-funded by the European Union—FSE REACT-EU, PON Ricerca e Innovazione 2014–2020.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Restrictions apply to the availability of these data. Data were obtained from Aida BvD and are available from the authors with the permission of Aida BvD.

**Conflicts of Interest:** The authors declare no conflict of interest.

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