

Current Perspective on Corporate Board Gender Diversity: Evidence from the Czech Republic

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Abstract

Purpose: This article’s primary purpose is to present and analyze the current state of board gender diversity and elaborate on the relatively sparse literature in this field in the Czech Republic, a post-transition Eastern European economy. The described study sought to identify and comment on the theoretical views concerning previous research in other, mainly Western European countries, by highlighting new perspectives on board gender diversity.

Design/methodology/approach: The study’s empirical analysis was based on 235 companies domiciled in the Czech Republic with 500 or more employees. We followed a selection protocol consisting of several filters in arriving at our final sample. We initially analyzed the data in relation to (a) the number of employees, (b) organization turnover, and (c) industrial classification. We calculated the mean (μ), standard deviation, (σ), and coefficient of variation (CV) of the data/variances, then tested our hypotheses through χ^2 , determining the significance through the p-value. Finally, we calculated the board diversity index (DI) for female/male board members.

Findings: Our findings showed that the representation of women on corporate boards of Czech Republic companies is well below the European directive target figure of 40%. There is a greater representation of women on supervisory than on statutory boards. Moreover, the research revealed that female directors are more likely to serve on boards of companies in health care, social, wholesale, retail, and administration sectors compared to the construction, manufacturing, transportation, and storage sectors. Furthermore, company turnover also plays a part in board gender diversity.

Practical implications: We believe this article will be valuable to senior managers in industry and wider regulatory, corporate governance, and ethical environments, fostering diversity and equality on corporate boards. This article forms a sound foundation for future studies on board gender diversity in the Czech Republic and contributes to the ongoing discussion on any adoption of possible future quota.

Originality/value: This research presents a rare insight into the current board gender diversity structure in the Czech Republic, especially because the country is relatively under-researched in the corporate governance and gender diversity literature. Thus, the research adds to the theoretical views concerning earlier research undertaken in other, mainly Western European countries, highlighting new perspectives on board gender diversity.

Keywords: management, corporate governance, gender diversity, corporate boards, Czech Republic.

JEL: J16, J20, J70, M14

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Introduction

The literature on board gender diversity is wide-ranging, with many reasons given for female directors' inclusion on male-dominated boards. The conclusions of such research are also varied but, on balance, favorable to board gender diversity. "Gender is arguably the most debated diversity issue, not only in terms of board diversity but also in politics and other general societal situations" (Kang *et al.*, 2007, p. 195). Torchia *et al.* (2011) argue that male directors still dominate most corporate boards. Others express concern that the process of achieving gender diversity on corporate boards is likely to be slow (Křečková, 2013; Srinidhi *et al.*, 2020).

There are many external pressures on boards to increase female director numbers (Van der Walt *et al.*, 2006; McDonald and Westphal, 2013; Knippen *et al.*, 2019). There is pressure from the various stakeholders through increased scrutiny, corporate governance, institutional investors, and asset managers demanding improvement in board gender diversity (Katz *et al.*, 2017). Several countries issued guidelines or enacted laws to increase women's presence on corporate boards (Reguera-Alvarado *et al.*, 2017; Mans-Kemp and Viviers, 2019). However, many European countries do not conform to the rules they established regarding gender-diverse (GD) boards and the greater inclusion of women (Reguera-Alvarado *et al.*, 2017). Some countries recognize the potential benefits of GD boards and take steps to promote female board representation (Seierstad, 2016). Some European countries (e.g. Italy, France, the Netherlands, Norway, Spain, and Sweden) took the initiative and introduced voluntary or mandatory quotas for female directors (Rose, 2007; Rao and Tilt, 2016; Reguera-Alvarado *et al.*, 2017). Some women resist the notion of regulatory increases of women on boards, as they do not wish for women to be seen as a special case (Seierstad, 2016). However, there is a view that "mandating gender quotas in the boardroom could harm well-governed firms in which additional monitoring is counterproductive" (Adams and Ferreira, 2009, p. 293). The debate on gender quotas continues (Ferreira, 2015) with no conclusive business case for or against them. Thus, the thematic field proves to be a fertile ground for future academic study.

Nevertheless, support appears to increase for the business case of gender diversity in larger companies (Azmat and Boring, 2020). In arriving at a recent definition of the "business case" for diversity, Oberfield (2014, p. 779) states, "the business case for diversity management suggests that when firms avoid the problems associated with personnel diversity and capitalize on the opportunities it presents, they will perform better," while Azmat and Boring (2020, p. 760) state that "diverse teams and leadership make businesses grow and become more competitive."

Evidence shows (Knippen *et al.*, 2019) that the firms that increase the number of female directors do so by increasing their boards' size without replacing male directors. This token gesture is also associated with female directors less likely to serve on major board committees.

Greater gender diversity in boardrooms can increase conflict, slow decision-making, and create differences in opinions regarding handling risk. While board gender diversity can increase conflict (Hogg *et al.*, 2012), this conflict can have a positive or negative outcome. Lefley (2018) argues that conflict can be both positive and negative, while "controlled" conflict can reduce groupthink. Some women appear to undermine their female colleagues rather than support them, thus creating conflict (Ryan, 2017), while others support each other (Konrad *et al.*, 2008). Women can be forceful but not aggressive (Křečková *et al.*, 2016). Thus, board gender diversity offers both challenges and opportunities for board practice and research (Adams *et al.*, 2015).

Boardroom change does happen, but it frequently creates frustration among some female directors that the change is, in many cases, too slow (Azmat and Boring, 2020). This does not refer to just equality and fairness but also to the level of contribution and performance (Tsappis and Russell, 2021). While some companies now accept the need for GD boards, they do so at a symbolic level (Hillman, 2015). For example, Tsappis and Russell (2021, p. 35) quote from the 2018 BEIS research surveying FTSE 350 chairs and CEOs: "I don't think women fit comfortably into the board environment" and "We have one woman already on the board, so we are done; it is someone else's turn," which highlights the prejudice among some male boards, which appear to support tokenism.

Much of the earlier European research on board gender diversity has centered on such countries as Belgium, France, Germany, Iceland, the Netherlands, Norway, Spain, and the UK, with little if no reference to the Czech Republic (cf. Grosvold *et al.*, 2007; Böhren and Ström, 2010; Ahern and Dittmar, 2012; Azmat and Boring, 2020; Joecks *et al.*, 2013; Reguera-Alvarado *et al.*, 2017). A study on board gender diversity by Terjesen *et al.* (2016) included 47 countries, unfortunately again excluding the Czech Republic. However, a study by Křečková *et al.* (2016, p. 369) concluded that, given the current situation regarding upholding the female principle of management, the position in the Czech Republic has become more complicated than in Western European countries. These so-called complications relate to several issues, e.g. a career advancement system favoring a male-dominated management style and the lack of opportunities for Czech women to express female managerial characteristics, styles, and methods. For fifty years, the Czech Republic's business and general culture were also influenced by communism. Therefore, the Czech Republic was until recently a post-transition Eastern

European economy. The Czech Republic is also different from some other European countries in that it adopted a dualistic corporate board structure. Lešetický *et al.* (2016, p. 204) state that, are of the opinion that the increase in the number of women on corporate boards in the Czech Republic is moving at a slower pace when compared with countries in Western Europe. These are some of the reasons why the Czech Republic provides fertile ground for the study of board gender diversity.

The Czech Republic has one of the lowest “gender equality index” (GEI) in Europe, currently at 56.2, with the economic power index at 27.4 (European Institute for Gender Equality, 2020). The index shows that female board members of the largest companies stand at 19% compared with 81% of male members.

The GEI is compiled each year by the European Institute for Gender Equality (EIGE) arriving at scores for EU Member States and the EU as a whole to see how far they are from reaching gender equality. The Index uses a scale of 1 to 100, in which 1 stands for total inequality and 100 for total equality. The scores are based on the gaps between women and men and levels of achievement in six core domains: work, money, knowledge, time, power, and health, along with their sub-domains. Our article references the GEI to highlight the relatively low level of gender equality in the Czech Republic: of the twenty-eight states, the Czech Republic ranks twenty-third. While the GEI is based on a broad set of criteria, the importance of our research in investigating the level of gender diversity on corporate boards focuses on “power” and “economic decision-making,” the two areas that the EIGE identifies gender inequalities are the most pronounced and provide the most room for improvement.

On January 1, 2017, the EU directive 2014/95/EU (European Commission, 2014) came into force, which requires all large businesses (with over 500 employees and other specific criteria), including those in the Czech Republic, to include in their annual report’s additional non-financial information on diversity on company boards, sustainability, and social responsibility: “The EU Directive 2014/95 has significantly raised and spread awareness of Corporate Social responsibility issues in the European Community” (Caputo *et al.*, 2020). The Czech Republic transposed the EU Directive 2014/95/EU (with some amendments, e.g. the definition of a large organization, public interest entity, and disclosure format) into Act 563/1991 on Accounting (Part Eight) 2017. Under the Czech regulations, qualifying organizations are defined as having over 500 employees, a net turnover (income) of EUR 40m, and a balance sheet of EUR 20m.

In the Czech Republic, the Business Corporation Act of January 25, 2012, categorizes joint-stock companies (PLCs) as either “monistic” – with a statutory board (administra-

tive board) – or “dualistic,” meaning those with a statutory board and a supervisory board. The purpose of the supervisory board is to control the decision-making of managers and directors of the statutory board. One cannot be a member of both boards. There are also limited liability companies (LLC) whose executives act as statutory boards.

There are no quotas for women serving on boards in the Czech Republic; in fact, the Czech government initially opposed regulatory quotas (Lešetický *et al.*, 2016). However, discussions on boardroom gender equality gained some momentum in the Czech market in recent years. After lukewarm support from the government in response to the EU Commission’s 2015 gender quota proposal, gender equality became a priority of the Czech Presidency of the Committee of Ministers of the Council of Europe in 2017. As a result, the draft Council of Europe Gender Strategy (2018–2023) was adopted in Prague in 2017, defining the actions focused on achieving a balanced participation of women and men in political and public decision-making positions, including corporate boardrooms. The Strategy for Equality of Women and Men in the Czech Republic for 2014–2020 defines action areas. One goal is to increase women’s representation in decision-making roles to 40% by 2020, including board roles at private and public companies. We investigate to see if this has been achieved with respect to corporate boards.

We will present and analyze the current state of board gender diversity and elaborate on the relatively sparse literature in this field in the Czech Republic as a post-transition Eastern European economy. Moreover, the study sought to identify and comment on theoretical views concerning earlier research undertaken in other, mainly Western European countries, so as to highlight new perspectives on board gender diversity.

Next, we will focus on the literature review, theoretical background presentation, and research hypotheses development. This will be followed by an outlining of the research approach, data sample, and methodology, leading to our results and analysis, then a discussion. Next, we will present conclusions and research limitations, ending with our suggestions for future research.

Initial Considerations

Literature Review

Research on board gender diversity in the Czech Republic is sparse (Peters *et al.*, 2019), especially in the mainstream literature. However, some studies in the Czech Republic discussed board gender diversity from a focused perspective. For example, Činčalová and Hedija (2020) scrutinized firm characteristics and corporate social responsibility

(CSR) in the Czech transportation and storage industry. They found that only 17% of their sample companies had a female director and that board gender diversity did not affect the application of CSR. However, the authors conclude that the small sample size precludes generalization and suggests more elaborate future research.

Křečková *et al.* (2016) undertook a relevant study in 2013, focusing on public and private institutions and reporting on women's added value in management. Focusing on both female and male managers within the Czech Republic, the research presents the results in the context of status development and career presumptions of female managers (p. 355). Comments from their research applicable to the current study are reported in other parts of this article.

An earlier short article by Křečková (2013) concluded that the Czech Republic would be unable to reach a target of 40% women on corporate boards through organic growth by 2020. In fact, Křečková estimated that this figure would not be achieved until the year 2045. The matter is the focus of this study.

In turn, Lešetický *et al.* (2016) compared the gender diversity in Czech hospitals between 2006 and 2012 by focusing on three hypotheses: "The proportion of women as CEO increased over the years. ... The proportion of women in executive board increased over the years. ... The proportion of women in supervisory board increased over the years" (p. 205). In all three cases, the authors showed an increase in the number of female directors during this period. Even so, the proportion of women on executive boards in 2012 was just under 25%, and slightly higher for supervisory boards – at just under 30%. Lešetický *et al.*'s 2016 study limitation was its focus on hospital/health care, an industry in which women are prevalent.

Hedija and Němec (2021) focus on gender diversity in leadership and firm performance in the Czech Republic from 2008 to 2015, concluding that the gender composition of the board is not a significant factor affecting either firm performance or the financial health of organizations in the Czech travel industry (agencies and operators). While they observed the number of women on boards is low, they noted a greater representation of female executives in the Czech travel industry than in some other industries, indicating that industry type is a factor in determining female representation on boards.

Board gender diversity is an important attribute of changes in worldwide corporate governance (Yarram and Adapa, 2021). Gender integration among leadership ranks is to improve organizational functioning (Cook and Glass, 2018). Adams and Ferreira (2009, pp. 307–308) conclude that: gender diversity on boards of directors is a central theme

of corporate governance reform efforts worldwide; female directors behave differently; gender composition of the board is positively related to measures of board effectiveness, and female directors have a substantial and value-relevant impact on board structure. However, they also state (p. 308) that “[t]he true relation between gender diversity and firm performance appears to be more complex.” Filling the gender quota by adding women to the board may not in itself boost firm performance (Liu *et al.*, 2020). In that context, Groening (2019, p. 61) highlights that “[t]here is a lack of consensus regarding the effect of mandated gender diversity on firm value.”

Gender-diverse boards bring to the table a more varied set of perspectives. As a result, they can consider more options, and their solutions are to be better (Hillman, 2015). Moreover, GD Boards are to reflect a better understanding of the business environment (Triana *et al.*, 2014). Khan and Subhan (2019) conclude that female board members contribute to enhancing firm performance. Furthermore, Salloum *et al.* (2019) research showed a positive relationship between GD boards and business performance. However, evidence on the link between board gender diversity and firm performance remains difficult to interpret (Adams and Ferreira, 2009).

Theoretical Background

There is a wide range of theories that consider corporate board gender diversity (cf. Amin *et al.*, 2021; Kirsch, 2018; Nguyen *et al.*, 2020), both economic-based theories and society-based theories. The former include agency, organizational, and risk theories, while the latter comprise diversity – including resource dependency – psychological, social role, stereotypical, and ethical theories. There also is a token theory, critical mass theory, and critical contingency theory.

The literature on women in the boardroom is extensive and leads to varying conclusions (cf. Bilimoria and Wheeler, 2000; Ingley and Van der Walt, 2005; Adams and Ferreira, 2009; Nielsen and Huse, 2010; Joecks *et al.*, 2013; Adams *et al.*, 2015; Hillman, 2015; Post and Byron, 2015; Terjesen *et al.*, 2016; Hassan and Marimuthu, 2018; Liu *et al.*, 2020;). Moreover, there is an abundance of theories across many academic fields that explain the gender diversity relationship with firm performance (for an overview, see Henry *et al.*, 2015).

Gender stereotype theory implies that women have feminine characteristics, which are less prevalent in men. The following literature supports this in the field of gender diversity. Some argue that various women’s traits differ from men’s. Many of these differences are to be based on gender socialization theory, especially concerning

ethical issues. Liu (2018) produced empirical evidence supporting gender differences in ethical considerations and decision-making in a corporate environment. Kyaw *et al.* (2016), Rao *et al.* (2012), and Zhang (2012) found that the inclusion of female directors improved companies' environmental and social performance. On the other hand, Deschênes *et al.* (2015, p. 790) found that women on boards may not improve environmental practices. Prior research suggests that women are helpful, sympathetic, kind, nurturing, gentle, and genuinely concerned with others' welfare (Eagly *et al.*, 2003). Women are to demonstrate a greater level of sensitivity toward others (Bilimoria and Wheeler, 2000) and be cooperative, intuitive, and considerate (Křečková *et al.*, 2016). Moreover, Křečková *et al.* (2016, p. 369) argue that women, or a female managerial approach, can deal sensitively and connect more with a broader range of stakeholders. They can also seek long-term relationships and mutually beneficial consensus on corporate sustainability issues. Resilience theory addresses the issue of how women adapt to the pressure associated with male board domination (Goyal *et al.*, 2021).

Women deliberate more over decision-making and, as a result, can foresee negative consequences (Hillman, 2015). They are more likely to ask questions (Bilimoria and Wheeler, 2000), can improve the quality of decisions (Carter *et al.*, 2010), are prepared to debate issues (Ingleby and Van der Walt, 2005), and bring new ideas, different skills, and novel views to the boardroom (Reguera-Alvarado *et al.*, 2017). Francoeur *et al.* (2008, p. 84) conclude that women can help correct informational biases in strategic formulation and problem-solving decisions by bringing a fresh perspective to these complex issues.

Adams and Funk (2012) suggest that female directors are more risk-takers than their male counterparts. However, a contrary view is presented by Charness and Gneezy (2012), Sapienza *et al.* (2009), Croson and Gneezy (2009), and Niederle and Vesterlund (2007), who conclude that women are more averse to risk. Thiruvadi and Huang (2011) also suggest that female directors are possibly more risk-averse and tend to call meetings to discuss risk issues so as to reduce that risk. Zenger and Folkman (2020) found no significant difference concerning risk-taking between women and men; on balance, they conclude that women are more likely to be risk-averse than risk-takers.

Recent research (Zenger and Folkman, 2020) shows that women are better leaders in a crisis. Highlighting female leadership before and during the Covid-19 pandemic, they found that women's leadership effectiveness ratings were 53.1 pre-pandemic and 57.2 during the pandemic. This compared with their male counterparts' ratings of 49.8 and 51.5, respectively. They found that women had higher ratings (statistically

significant compared with their male counterparts) in taking initiative, learning agility, being able to inspire, motivate, and develop others, building relationships, displaying high integrity and honesty, communicating powerfully and prolifically, being able to collaborate as part of a team, championing change, decision-making, driving for results, and valuing diversity.

Even in today's society, women usually belong to informal networks, which are closed to men. These networks will help a firm better connect, understand, and respond to its broader community environment (Bear *et al.*, 2010). Business networking can be gender-specific, with women adopting "female perspectives rather than the conventional norms governing networking practices" (Hug *et al.*, 2020, p. 274). The literature also argues (Ujunwa, 2012) that as women do not belong to the old boy's network, they are more independent in their views and actions.

The differences between the sexes, previously seen as relating to nurturing, may now be more related to nature, resulting in some respect through hormones that influence men and women to think and behave differently in ethical decision-making situations (Ryan, 2017). Pioneering work in neuroscience highlights differences between the sexes that could profoundly impact business organizations and, especially, corporate decision-making (Ryan, 2017). Earlier research in this field led to the development of neuroeconomics. The neuroeconomic theory applies neuroscientific methods to analyze and understand economically appropriate behavior (Camerer *et al.*, 2005). Although still in its early stages, neuroeconomics has made some exciting contributions to economic theory, especially in decision-making in relation to fairness, trust, learning, and knowledge (Kenning and Plassmann, 2005).

Studies into the relationship between board gender diversity and firm performance remain inconclusive, with some research showing a positive relationship, others – negative, and some being inconclusive (Ujunwa, 2012; Assenga *et al.*, 2018; Carter *et al.*, 2003; Dwyer *et al.*, 2003; Erhardt *et al.*, 2003; Harrison and Klein, 2007; Miller and Triana, 2009; Nadeem *et al.*, 2017; Triana *et al.*, 2014; Campbell and Minguez-Vera, 2008; Francoeur *et al.*, 2008; Farrell and Hersch, 2005; De Andres *et al.*, 2005; Darmadi 2013; Terjesen *et al.*, 2016; Martinez-Jimenez *et al.*, 2020). Lückcrath-Rovers (2013, p. 506) argue that a single-factor research approach is problematic due to causality and cross-linkage between diversity and other performance-influencing factors. Others argue that there is no clear-cut relationship between board gender diversity and firm performance (Chatjuthamard *et al.*, 2021; Mazzotta and Ferrarom, 2020). Lešetický *et al.* (2016) argue that the relationship between board gender diversity and organizational performance is complex, inferring it is challenging to measure. Francoeur *et al.* (2008, p. 85)

argue that the increase in the proportion of women in business is a good policy, even though research may show no significant relationship between gender diversity and financial performance.

Diversity theory predicts that diverse groups improve decision-making quality by considering a greater range of perspectives (Kang *et al.*, 2007). Token theory and critical mass theory advocate that female directors (those in leadership positions) are ineffective in the absence of a critical mass of women in an organization. The critical mass theory postulates that a certain number of women in a group are required to make a difference (Dahlerup, 2006); this number is generally regarded as three, or 30% of the group (board) composition (Kramer *et al.*, 2006). This implies that the smaller the representation of women directors on the board, the less effective they are (Arena *et al.*, 2015).

From research undertaken by Konrad *et al.* (2008), it appears that women have a more significant impact on the boards of directors with three or more women present. Their findings show that only one woman on a board may have some impact, but there is a greater risk of tokenism. Women may be treated as tokens in the absence of critical mass (Schwartz-Ziv, 2017). Evidence of tokenism is generally regarded as a board with only one female director. The situation improves with two women on the board, but tokenism can still appear.

In comparison, three or more women present a critical mass in which gender is no longer a barrier to acceptance and communication. However, there is a notable impact on boardroom dynamics with increased teamwork and inclusiveness at this level. According to Joecks *et al.* (2013, p. 68), “three” seems to be the magic number, “when there are three or more women on the board, firm innovativeness is higher than when there are less than three women on the board.” This supports the earlier view of Torchia *et al.* (2011). Recent research in the field of board gender diversity (Atif *et al.*, 2020) also supports the critical mass theory. Atif *et al.* (2020) observed a positive link between board gender diversity and renewable energy consumption, but only when the number of female directors exceeded one. Gyapong *et al.* (2021, p. 603) argue that the decision on dividend payments is influenced more by women when there are three or more female directors on the board. Amin *et al.* (2021, p. 164) found that boards with three or more female directors have a more substantial impact on reducing agency costs than boards with fewer female directors. Which they argue is consistent with the critical mass theory.

Cook and Glass (2018, p. 916) challenge the theory by suggesting that a lone woman may only be necessary to overcome the barriers of isolation, marginalization, and lack of influence associated with tokenism in specific contexts. Dobija *et al.* (2021) support

this view by arguing that a sole woman director may have a “voice” and “influence” when placed in a powerful role such as the board’s chairperson. Zaichkowsky (2014) argues that female directors can create a positive difference even if there is only one. However, evidence shows that female directors usually hold less powerful positions than their male counterparts (Peterson and Philpot, 2007) and are less likely to hold the position of the chairperson (Miller and Triana, 2009).

However, research into token or solo status theory shows that women have low expectations about their future performance and are adversely affected by greater attention and how other group members perceive them (Sekaquaptewa and Thompson, 2002). According to Sekaquaptewa and Thompson (2002), women also express a greater desire to change their group’s gender composition. Token status theory suggests that as female directors’ number increases toward parity with men, the adverse issues will decrease, and women will be accepted as the norm. Female directors should not be treated as “tokens;” they are different from their male counterparts and have other priorities (Adams and Funk, 2012; Al-Shaer and Zaman, 2016).

Adams and Ferreira (2009, p. 301) conclude that women may increase board monitoring intensity, attend more meetings than men, and are likely to be appointed to monitoring-related committees. This view is supported by Post and Byron (2015) and Oradi and Izadi (2019), who show that female representation is positively related to monitoring responsibility. Ullah *et al.* (2020, p. 61) argue that managerial opportunism is limited by the monitoring role played by female CEOs. However, Zalata *et al.* (2021) argue that female directors with a financial background can act more effectively in a monitoring role than those without such financial experience. Zalata *et al.* (2021, p. 101) find that female board members with appropriate financial backgrounds and fewer outside directorships are capable of mitigating earning management and suggest that overcommitting expert female directors with more outside directorships may weaken their monitoring capability.

Female directors tend to propose less aggressive strategies and sustainable investments (Apesteguia *et al.*, 2012). There is some evidence (Dalton and Dalton, 2010) that female directors hold less powerful positions than their male counterparts. Depending on the level of firm performance, board diversity can act either negatively or positively on strategic change (Triana *et al.*, 2014). The literature shows a positive relationship between board gender diversity and innovation (Miller and Triana, 2009).

Critical contingency theory suggests that women have more influence when they have more power (Triana *et al.*, 2014, p. 625). One way women can secure more power is to

hold multiple directorships, but the literature suggests that women are less likely to hold more than one corporate board seat (McDonald and Westphal, 2013).

Intergroup bias plays a critical role in recruiting women directors to male-dominated corporate boards (McDonald and Westphal, 2013). Gender stereotyping can result in disproportionately less influence of outgroups (Maass and Clark, 1984). Knippen *et al.* (2019, p. 1129) conclude that new female directors are more likely to be viewed by existing male directors as ‘outgroup’ members. This appears to become more predominant when such female directors are selected as a response to board gender diversity pressures. Intergroup bias is reflected in how new female directors are recruited to the board. If male board members perceive the incoming female director as an ingroup member (one of us), they are more likely to substitute a fellow male director, thus maintaining the same board size. However, if the new female director is viewed as an outgroup member, the board size may be increased to accommodate the new addition.

Research Hypotheses Development

Our study focuses on the Czech Republic, a country with non-mandatory gender quotas. Reguera-Alvarado (2017) indicates that such countries have very low female representation on corporate boards, so it is important to ascertain the present level of female directors. Křečková *et al.* (2016) argue that traditional family roles and values still influence the Czech Republic, but this may be changing with a more significant number of females going to university. Prior research suggests that many European countries, including the Czech Republic (Křečková 2013), will not meet the target of 40% of female directors on corporate boards by 2020. Therefore, we formulate the following hypothesis:

H1. The Czech Republic has not achieved the increase of women on boards recommended by the European Directive.

The literature argues that women have stronger moral orientations and are more empathetic and caring than men (Hyun *et al.*, 2016). Women are to be helpful, sympathetic, kind, nurturing, gentle, and genuinely concerned with others’ welfare (Eagly *et al.*, 2003). Moreover, women are to demonstrate a greater level of sensitivity toward others (Bilimoria and Wheeler, 2000). In some instances, female directors tend to put the interests of employees before their own (Francoeur *et al.*, 2008). As a result, female directors are more suited to “soft” matters such as human resources, personnel management, health, and safety (Galbreath, 2011). We suggest that organizations with a large labor force

would have a greater need for such soft issues and are better positioned to administer them in-house. Therefore, we hypothesize the following:

H2. Larger companies (by number of employees) are more likely to employ female directors.

Moreover, previous studies indicate that female directors are more likely to serve on boards of larger companies (Bernardi *et al.*, 2006), so we hypothesize that:

H3. Larger companies (in terms of turnover) are more likely to employ female directors.

Furthermore, previous research indicates that women are less likely to have degrees and backgrounds in engineering and science (Singh *et al.*, 2008), and they are less likely to be employed at the senior level in the manufacturing, construction, and engineering industries (Hillman *et al.*, 2002). Galbreath (2011) found that industries with the lowest mean number of female directors included materials, transportation, capital goods, and energy. Those industries with the largest mean percentage of female directors included telecommunications, insurance, and media. Joecks *et al.* (2013, p. 66) found that female directors were more prevalent in financials, telecommunications, pharma, health care, and consumer goods sectors, while less prevalent in industrials and basic materials. Therefore, we formulate the following research hypotheses:

H4. Female directors are less likely to be represented on construction, manufacturing, and engineering industrial boards.

H5. Female directors are more likely to serve on non-traditional industrial boards.

The literature suggests that women have specific attributes that better suit monitoring activities (Gull *et al.*, 2018; Lefley *et al.*, 2021). Benkraiem *et al.* (2017) argue that increasing board gender diversity reduces agency costs and improves top management monitoring. The literature further indicates that women are more likely to be assigned to monitoring-related committees than men (Adams and Ferreira, 2009); a notion supported by Post and Byron (2015) and Oradi and Izadi (2019), who confirm that female board representation is positively related to monitoring responsibility. There is a two-tier board system in the Czech Republic and some other European countries (e.g. Poland), which consists of statutory and supervisory boards. The primary function

of the supervisory board is to monitor the decision-making activities of the statutory board and senior managers. Thus, we hypothesize the following:

H6. Women are more likely to serve on supervisory boards than on statutory boards.

Research Approach, Methodology, and Dataset

Our study was based on a sample of 235 Czech Republic companies taken from the Albertina CZ Gold Edition database of Bisnode Česká Republika on February 28, 2021. At the time, these companies were domiciled in the Czech Republic with 500 or more employees. We followed a selection protocol consisting of several filters to arrive at our final sample. First, we excluded all companies with less than 500 employees. Second, we filtered out companies controlled by foreign entities to ensure that all companies in our sample were subject to Czech Republic regulatory requirements and had no direct foreign influence.

We measured company size from two perspectives: (i) the number of employees and (ii) turnover. Then, we categorize each company into one of seven industrial classifications: “manufacturing,” “construction,” “wholesale and retail,” “transportation and storage,” “administration and ICT,” “health and social work,” and finally, “other.” The “other” category included “accommodation and food services” (3), “real estate” (1), “professional, scientific and technical” (2), “arts, entertainment, and recreation” (3), “finance” (1), “mining and quarrying” (4), “electricity and gas supply” (1), “water supply and waste management” (1), which gave a total of sixteen companies (specific numbers in brackets beside each category). Our data source allowed us to distinguish between monistic and dualistic companies. Of the 235 companies, 82 were LLCs, 18 were monistic PLCs, and 135 were dualistic PLCs.

Initially, we analyzed the data in relation to (a) the number of employees, (b) organization turnover, and (c) industrial classification. With respect to (a) and (b), we used the “bands” adopted by our data source. Due to the low number of monistic PLCs, in some of our calculations/analyses, we grouped monistic and dualistic PLCs together. Then, we calculated the mean (μ), standard deviation (σ), and coefficient of variation (CV) of the data/variances to then test our hypotheses through χ^2 , determining the significance through the p-value. Finally, we calculated the board diversity index (DI) as female/male board members.

Results and Analysis

Our study data and statistical results are shown in Tables 1–4. Table 1 shows the group analysis of board gender diversity, including the diversity index, standard deviation, mean, and coefficient of variation. Table 2 shows the breakdown of board gender diversity based on the number of companies with at least one female director. We analyzed the data following various types of organizations (LLC, monistic PLC, and dualistic PLC), identifying the number of companies with one, two, three, or more female directors. Table 3 focuses on the analysis of female directors on statutory and supervisory boards – for which we included LLC and monistic PLC boards with “statutory” boards – showing the standard deviation, mean, and coefficient of variation. Table 4 presents an analysis of the total number of directors (male and female), presenting a diversity index for each category.

With respect to our sample of 235 companies, there were 1113 directors, of whom 202 are female and 911 were male, thus showing a diversity index (DI) of 0.22 (Table 1). The mean board size was three, considering that dualistic PLC has two boards: statutory and supervisory (Table 1: no. of directors – 1113; no. of boards – 370). The mean board size was larger for supervisory boards at 3.15 (Table 3: no. of supervisory boards – 425; Table 4: no. of directors on supervisory boards – 135). There were 82 LLCs, of which 23 had at least one female director, giving the percentage of female directors of 28% (Table 2). For monistic PLC, the respective figures were 18 companies, six female directors, and the percentage of 33.3%. Dualistic PLC, of which there were 135, showed 38 companies with at least one female director on their statutory board, giving the percentage of 28.1%. In contrast, the numbers for dualistic PLC supervisory boards were 81 female directors, giving the percentage of 60%. While 40% of all boards (both statutory and supervisory) had at least one female director, the overall diversity index highlighted above was only 0.22. Therefore, H1 was supported ($0.22 < 0.4$).

Our data showed (Table 2) that the number of LLCs and PLCs (both monistic and dualistic) with respect to the number of employees provided no significant difference between the two types of organizations ($\chi^2 = 0.8078$ $p = 0.8476$). However, with respect to turnover and industry classification, there was a significant difference of ($\chi^2 = 29.1243$ $p = 0.00$) and ($\chi^2 = 50.4530$ $p = 0.00$) respectively. Regarding turnover: PLCs appeared at the higher end of the turnover scale. For industry classification: PLCs were more focused on manufacturing and construction, while LLCs were more focused on wholesale, retail, administration, and ICT. We noted that monistic PLCs ($n = 18$) represented only a small number of our total sample of 235 companies, hence our treatment of PLCs in this case as one group.

Table 1. Group analysis of board gender diversity

Group	No. of Companies	Board Member Analysis			Number of Directors			Diversity Index
		No. of Boards	No. of Boards with Female Directors	% of Boards with Female Directors	Female Directors	Male Directors	Total Directors	
No. Employees								
2000 +	16	24	10	41.7	12	70	82	0.17
1500–1999	23	36	15	41.7	22	82	104	0.27
1000–1499	41	65	24	36.9	29	168	197	0.17
500–999	155	245	99	40.4	139	591	730	0.24
σ 0.044 Mean μ 0.21 Coefficient of Variation 23.8 < 30								
Turnover (GZK mil)								
1500 +	130	220	86	39.1	118	630	748	0.19
1000–1499	33	50	15	30.0	22	103	125	0.21
500–999	32	50	28	56.0	41	102	143	0.40
100–499	31	40	18	45.0	20	61	81	0.32
1–99	9	10	1	10.0	1	15	16	0.07
σ 0.113 Mean μ 0.24 Coefficient of Variation 47.6 > 30								

Industry classification	90	152	58	38.2	82	401	483	0.20
Manufacturing	90	152	58	38.2	82	401	483	0.20
Construction	11	21	7	33.3	10	78	88	0.13
Wholesale & Retail	40	60	25	41.7	33	131	164	0.25
Transportation & Storage	11	18	6	33.3	7	40	47	0.18
Administration & ICT	51	62	21	34.4	25	116	141	0.22
Health & Social Work	16	30	19	63.3	31	68	99	0.46
Other	16	27	12	44.4	14	77	91	0.18
							σ	0.099
							Mean μ	0.23
							Coefficient of Variation	43.0 > 30
Total	235	370	148	40.0	202	911	1113	0.22

Notes:

- (a) There is no significant difference concerning female directors in relation to an organization's number of employees [diversity index (DI), σ 0.004, μ 0.21 with a coefficient of variation 23.8 < 30; (i) based on the number of boards $\chi^2 = 0.1490$ p = 0.9854 and (ii) based on the number of companies $\chi^2 = 1.0354$ p = 0.7927].
- (b) There is a difference with respect to 'turnover' (DI, σ 0.113, μ 0.24 with a coefficient of variation 47.6 > 30), although this is not significant (i) based on the number of boards ($\chi^2 = 5.2634$ p = 0.2613). However, it is significant when based on (ii) the number of companies ($\chi^2 = 10.2291$ p = 0.0367).
- (c) There is a moderate difference with respect to industry classification (DI, σ 0.099, μ 0.23 with a coefficient of variation 43.0 > 30; although (i) based on the number of boards $\chi^2 = 3.4750$ p = 0.7473. (ii) there is a significant difference at p < 0.05 based on the number of companies $\chi^2 = 13.3794$ p = 0.0374.

Source: own elaboration/Albertina database.

Table 2. Analysis of board gender diversity: female board members

Group	No. of companies				Boards with female directors																			
					Ltd						PLC													
	Ltd		PLC		Monistic			Dualistic Boards			Statutory			Supervisory										
	a	b	c	Total	a	b	c	Total	%	a	b	c	Total	%	a	b	c	Total	%					
Based on number of employees:																								
2000 +	6	2	8	16	1	1	0	2	33.3	1	0	0	1	50.0	1	1	0	2	25.0	5	0	0	5	62.5
1500–1999	9	1	13	23	2	0	0	2	22.2	0	0	0	0	0	2	1	0	3	23.1	6	2	2	10	76.9
1000–1499	16	1	24	41	3	0	0	3	18.8	0	0	0	0	0	6	1	0	7	29.2	10	4	0	14	58.3
500–999	51	14	90	155	13	3	0	16	31.4	3	1	1	5	35.8	20	6	0	26	28.9	33	13	6	52	57.8
Based on turnover (CZK mil)																								
1500 +	31	9	90	130	8	3	0	11	35.5	2	1	0	3	33.3	15	6	0	21	23.3	35	11	5	51	56.7
1000–1499	11	5	17	33	1	0	0	1	9.1	0	0	1	1	20.0	4	0	0	4	23.5	5	3	1	9	52.9
500–999	12	2	18	32	2	0	0	2	16.7	1	0	0	1	50.0	9	2	0	11	61.1	7	5	2	14	77.8
100–499	21	1	9	31	7	1	0	8	38.1	1	0	0	1	100.0	1	1	0	2	22.2	7	0	0	7	77.8
1–99	7	1	1	9	1	0	0	1	14.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Based on industry classification:																								
Manufacturing	17	11	62	90	3	1	0	4	23.5	1	1	1	3	27.3	12	5	0	17	27.4	23	8	3	34	54.8
Construction	1	0	10	11	1	0	0	1	100.0	0	0	0	0	0	2	0	0	2	20.0	2	1	1	4	40.0

Wholesale & Retail	17	3	20	40	3	1	0	4	23.5	1	0	0	1	33.3	3	2	0	5	25.0	11	3	1	15	75.0
Transportation & Storage	4	0	7	11	1	0	0	1	25.0	0	0	0	0	0	2	0	0	2	28.6	2	1	0	3	42.9
Administration & ICT	37	3	11	51	9	1	0	10	27.0	1	0	0	1	33.3	2	1	0	3	27.3	6	0	1	7	63.6
Health & Social Work	2	0	14	16	0	0	0	0	0	0	0	0	0	0	5	1	0	6	42.9	6	5	2	13	92.9
Other	4	1	11	16	2	1	0	3	75.0	1	0	0	1	100.0	3	0	0	3	27.3	4	1	0	5	45.5
Total	82	18	135	235	19	4	0	23	28.0	4	1	1	6	33.3	29	9	0	38	28.1	54	19	8	81	60.0

Notes:

- (i) a = one female director, b = two female directors, c = three or more female directors.
- (ii) With respect to Ltd companies and PLC companies (both monistic and dualistic) there is no significant difference between the two types of organizations with respect to the number of employees ($\chi^2 = 0.8078$ p = 0.8476).
- (iii) With respect to turnover and industry classification, there is a significant difference between the two types of organizations of ($\chi^2 = 29.1243$ p = 0.00) and ($\chi^2 = 50.4530$ p = 0.00) respectively.

Source: own elaboration/Albertina database.

Table 3. Analysis of female board members

Group	Statutory Boards					Supervisory Boards						
	Number of companies		Analysis of female directors			Number of companies		Analysis of female directors				
	a	b	c	Total	%	a	b	c	Total	%		
Based on number of employees:												
2000 +	16	3	2	0	5	31.3	8	5	0	0	5	62.5
1500–1999	23	4	1	0	5	21.7	13	6	2	2	10	76.9
1000–1499	41	9	1	0	10	24.4	24	10	4	0	14	58.3
500–999	155	36	10	1	47	30.3	90	33	13	6	52	57.8
					σ	4.006					σ	7.738
					Mean μ	26.9					Mean μ	63.9
					Coefficient of Variation	14.88					Coefficient of Variation	12.11
Based on turnover (CZK mil)												
1500 +	130	25	10	1	36	27.7	90	35	11	5	51	56.7
1000–1499	33	5	0	0	5	15.2	17	5	3	1	9	52.9
500–999	32	12	2	0	14	43.8	18	7	5	2	14	77.8
100–499	31	9	2	0	11	35.5	9	7	0	0	7	77.8
1–99	9	1	0	0	1	11.1	1	0	0	0	0	0
					σ	12.218					σ	11.578
					Mean μ	26.7					Mean μ	66.3
					Coefficient of Variation	45.83					Coefficient of Variation	17.46

Based on industry classification:													
Manufacturing	90	16	7	1	24	26.7	62	23	8	3	34	54.8	
Construction	11	3	0	0	3	27.3	10	2	1	1	4	40.0	
Wholesale & Retail	40	7	3	0	10	25.0	20	11	3	1	15	75.0	
Transportation & Storage	11	3	0	0	3	27.3	7	2	1	0	3	42.9	
Administration & ICT	51	12	2	0	14	27.5	11	6	0	1	7	63.6	
Health & Social Work	16	5	1	0	6	37.5	14	6	5	2	13	92.9	
Other	16	6	1	0	7	43.7	11	4	1	0	5	45.5	
					σ	6.515					σ	17.913	
					Mean μ	30.7					Mean μ	59.2	
					Coefficient of Variation	21.21					Coefficient of Variation	30.24	
Total	235	52	14	1	67	28.5	135	54	19	8	81	60.0	

Notes:

- (i) a = one female director. b = two female directors. c = three or more female directors.
- (ii) With respect to statutory boards, we also include Ltd and monistic boards.
- (iii) There is a significant difference between the number of women on statutory boards and supervisory boards [28.5 < 60.0].

Source: own elaboration/Albertina database.

Table 4. Analysis of board gender diversity

Group	Number of directors														
	Ltd							PLC							
	Monistic				Dualistic Boards			Statutory				Supervisory			
	Female	Male	Average board size	DI	Female	Male	DI	Female	Male	DI	Average board size	Female	Male	Average board size	DI
Based on number of employees:															
2000 +	3	10	2.2	.30	1	3	2.0	.33	3	29	4.0	5	28	4.1	.18
1500–1999	2	14	1.8	.14	0	1	1.0	0	4	45	3.8	16	22	2.9	.73
1000–1499	3	24	1.7	.13	0	1	1.0	0	8	78	3.6	18	65	3.5	.28
500–999	19	82	2.0	.23	8	33	2.9	.24	32	285	3.5	80	191	3.0	.42
Based on turnover (CZK mil)															
1500 +	14	67	2.6	.21	4	24	3.1	.17	27	314	3.8	73	225	3.3	.32
1000–1499	1	15	1.5	.07	3	9	2.4	.33	4	50	3.2	14	29	2.5	.48
500–999	2	20	1.8	.10	1	4	2.5	.25	13	45	3.2	25	33	3.2	.76
100–499	9	20	1.4	.45	1	0	1.0	1.0	3	25	3.1	7	16	2.6	.44
1–99	1	8	1.3	.13	0	1	1.1	0	0	3	3.0	0	3	3.0	0
Based on industry classification:															
Manufacturing	5	32	2.2	.16	6	27	3.0	.22	22	204	3.6	49	138	3.0	.36
Construction	1	2	3.0	.50	0	0	0	0	2	42	4.4	7	34	4.1	.21

Wholesale & Retail	5	29	2.0	.17	1	6	2.3	.17	7	61	3.4	.11	20	35	2.8	.57
Transportation & Storage	1	11	3.0	.09	0	0	0	0	2	19	3.0	.11	4	10	2.0	.40
Administration & ICT	11	46	1.5	.24	1	3	1.3	.33	4	32	3.3	.13	9	35	4.0	.26
Health & Social Work	0	3	1.5	0	0	0	0	0	7	42	3.5	.17	24	23	3.4	1.04
Other	4	7	2.8	.57	1	2	3.0	.5	3	37	3.6	.08	6	31	3.4	.19
Total for each group	27	130	1.9	.21	9	38	2.6	.24	47	437	3.6	.11	119	306	3.1	.39

Note: (i) Diversity index (DI) = female/male.
 Source: own elaboration/Albertina database.

With respect to the 135 dualistic PLCs, 56 companies had all-men statutory boards, with at least one woman on their supervisory boards; sixteen of the female directors held the position of chairperson. Ninety-seven companies had an all-male statutory board. Thirty-eight companies had at least one female director on the statutory board, of which three had no male directors on their supervisory board.

Our analysis showed (Table 1) that (a) there is no significant difference concerning female directors in relation to an organization's number of employees (diversity index or DI, σ 0.004, μ 0.21 with a coefficient of variation $23.8 < 30$; (i) based on the number of boards $\chi^2 = 0.1490$ $p = 0.9854$ and (ii) based on the number of companies and number of female directors $\chi^2 = 1.0354$ $p = 0.7927$). Therefore, we rejected hypothesis H2.

Moreover, the analysis revealed that (b) there was a difference with respect to "turnover" (DI, σ 0.113, μ 0.24 with a coefficient of variation $47.6 > 30$), although this was not significant (i) based on the number of boards ($\chi^2 = 5.2634$ $p = 0.2613$). However, it was significant when based on (ii) the number of companies and the number of female directors ($\chi^2 = 10.2291$ $p = 0.0367$), indicating that lower turnover levels (in the range of 100–999 CZK mln) may have favored the appointment of female directors. One explanation appeared to relate to traditional industries (manufacturing and construction), in our data associated with larger turnover and lower female board representation.

Although there was a statistically significant difference concerning turnover and the number of boards with female directors, this was not what we expected, and so, our hypothesis H3 found no support.

Furthermore, the analysis showed that (c) there is a moderate difference with respect to industry classification (DI, σ 0.099, μ 0.23 with a coefficient of variation $43.0 > 30$); although (i) the number of boards $\chi^2 = 3.4750$ $p = 0.7473$ suggested non-acceptance of our hypotheses. When considering (ii) the number of companies and the number of female directors $\chi^2 = 13.3794$ $p = 0.0374$, the situation was different, with a significant difference at $p < 0.05$. This showed that females were, to some extent, more likely to be employed in the health care, social work, wholesale, retail, and administration sectors rather than the construction, manufacturing, transportation, and storage sectors.

Therefore, we accepted (we were unable to reject) our hypothesis H4. Although Singh *et al.*, (2008) indicate that females are less likely to take science and engineering degrees, this situation is changing, with more females enrolling in such courses.

There is a significant difference in female membership on statutory boards (number of boards with at least one female director = 28.1%) and supervisory boards (with at least one female director = 60.0%), with a greater representation of female members serving on supervisory boards (Table 2). This is confirmed in Table 3 when we look at the total number of statutory boards (LLC, monistic and dualistic PLCs) and arrive at 28.5%. Our findings were further supported by the DI for each board type (Table 4), which showed for dualistic boards a DI of 0.11 for statutory boards and 0.39 for supervisory boards. Therefore, our hypothesis H6 was supported.

An interesting observation (Table 4) was that, for supervisory boards in health care and social work sectors, there were more female directors than men (DI 1.04).

There was very little evidence of boards with three or more female directors, with only one monistic PLC having such a board structure. In dualistic boards, there were no statutory boards with three or more female directors, and with respect to supervisory boards, only eight boards had three or more female directors. This may have been influenced by the small board sizes of Czech Republic companies compared to some other European countries, like the UK. However, it was interesting to note that supervisory boards were the exception, although in a limited manner. Because scholars (Dobija *et al.*, 2021) argue that a sole female director may have a “voice” and a greater influence when holding an important senior board position, we investigated the number of female directors who held the position of chairperson on either a statutory or supervisory board. The results showed that 16 women had such a position on supervisory boards and eight on statutory boards. With the relatively small average board size (Table 4), female directors appeared to have a greater voice on the boards on which they served in a senior position.

Discussion

The literature reports the slow growth of women on corporate boards in many European countries despite a European directive to increase board representation to 40%. Our findings showed that the representation of women compared to their male counterparts on the corporate boards of Czech Republic companies was only 22%. However, 28% of companies had at least one female director. These findings were slightly more positive than the European Institute for Gender Equality (2020) reports, but they fell far short of the target figure of 40% set by the Strategy for Equality of Women and Men in the Czech Republic for 2014–2020. One of the reasons for this low figure may be due to the “complicated situation” of the Czech Republic regarding female senior

managers and the “transitional” state of the country, which is not reflected in Western European countries. Concerning dualistic PLCs, we found that more women served on “supervisory” boards than “statutory” boards, confirming the findings of previous studies.

Industry sectors also play a part in board gender diversity, with fewer women serving on boards of traditional industries (construction, manufacturing, transportation, and storage) and a more significant number serving on boards related to health care, social work, wholesale, retail, and administration sectors, confirming the findings of previous studies (Hillman *et al.*, 2002; Galbreath, 2011; Joecks *et al.*, 2013; Hedija and Němec, 2021). We believe that with the increasing number of women taking science and engineering degrees, gender diversity industry bias may be corrected in the future.

Company size (in relation to the number of employees and turnover) indicates that the number of employees does not influence board gender diversity. In contrast, turnover has a moderate influence in that the greater number of women served on the boards of companies with relatively lower turnovers. This contrasts with the earlier findings of Bernardi *et al.*, (2006), who found that female directors are more likely to serve on boards of larger companies.

Researchers argue that women have specific attributes that lend themselves suitable for monitoring activities (Gull *et al.*, 2018; Oradi and Izadi, 2019; Li and Li, 2020; Lefley *et al.*, 2021; Post and Byron, 2015; Ullah *et al.*, 2020), which suggests that they are more suited to serve on supervisory boards. Our research confirms this, which shows that women are more likely to act on supervisory boards than on statutory boards.

There is no mandatory quota system in the Czech Republic regarding female directors as in some other European countries, although legislators continue to consider the idea. Nevertheless, stakeholders may pressure the company to implement GD boards, especially as some large organizations now must report on non-financial issues such as board diversity. It may be too early to say whether the disclosure requirement, which came into force in 2017, has resulted in female directors’ appointment to larger companies (those represented by our sample), so this is an area for future research. In the UK, for example, all the companies listed in the FTSE 350 have at least one female director (Moynihan, 2021), and board sizes are larger than in the Czech Republic. We believe that sustainable board GD may not be achieved through mandatory quotas alone. It may only be achieved if boards can see the benefits of gender diversity in decision-making through improved board performance, which the literature in many cases suggests. Moreover, transparency is key in bringing diversity issues to the broader

business community. Some women argue against mandatory quotas, as they do not wish to be seen as special cases (Seierstad, 2016), while others argue that this would allow them to prove themselves.

Conclusions and Limitations

Our exploratory study elaborated on the relatively sparse literature on board gender diversity and corporate governance in the Czech Republic, a country often neglected in this field of research. In the article, we have highlighted many reasons why the Czech Republic is a fertile ground for the study of board gender diversity: a career advancement system favoring a male-dominated management style; the lack of opportunities for Czech women to express female managerial characteristics, styles, and methods; the past influence of communism; the country's post-transition economy; the effect of traditional family roles and values. Focusing on a sample of 235 companies domiciled in the Czech Republic with a labor force of 500 or more employees, we explored several hypotheses concerning the current situation of board gender diversity in the Czech Republic. The results of our work are the following:

H1. The Czech Republic has not achieved the increase of women on boards recommended by the European Directive. [Supported]

H2. Larger companies (in terms of the number of employees) are more likely to employ female directors. [Reject]

H3. Larger companies (in terms of turnover) are more likely to employ female directors. [Reject]

H4. Female directors are less likely to be represented on construction, manufacturing, and engineering industrial boards. [Supported]

H5. Female directors are more likely to serve on non-traditional industrial boards. [Supported]

H6. Women are more likely to serve on supervisory boards than on statutory boards. [Supported]

The limitation of this research lies in the fact that it is based in the Czech Republic, a small country in Eastern Europe, which should nevertheless not preclude its general

application and influence on the improved understanding of board gender diversity. Our research showed that the Czech Republic provides fertile ground for the study of board gender diversity.

This article will interest readers in regulatory, governance, and ethical environment fostering diversity and equality. This exploratory study presented the current position regarding board gender diversity in the Czech Republic and established a sound foundation for the future debate on gender diversity. We believe that this article has filled an important gap in the literature by forming a sound foundation for future studies on gender diversity in the Czech Republic and contributing to the ongoing discussion on quota adoption.

Future Research Directions

Our research findings (H1 supported; $0.22 < 0.4$) show that the Czech Republic has not achieved gender equality. Moreover, the country presents a disparity concerning gender between industry type and turnover levels. This has led us to focus our suggestions for future research on three main areas: gender quotas, the contribution of women in respect of company performance and corporate sustainability, and the question of the meaning of “equality.” Thus, we suggest for future research:

- Comparing female board representation pre-2017 to post-2017 would highlight the influence of gender quotas on the number of women serving on corporate boards. However, there is little evidence of studies being undertaken to assess the situation in the CZ. Much of the earlier European research on board gender diversity has centered on such countries as Belgium, France, Germany, Iceland, the Netherlands, Norway, Spain, and the UK, with little if no reference to the Czech Republic (cf. Ahern and Dittmar, 2012; Azmat and Boring, 2020; Böhren and Ström, 2010; Grosvold *et al.*, 2007; Joecks *et al.*, 2013; Reguera-Alvarado *et al.*, 2017). A study by Terjesen *et al.*, (2016) of board gender diversity, based on 47 countries, also excluded the Czech Republic.
- The advantages and disadvantages of mandatory gender quotas: Are quotas the solution to gender diversity? The debate on gender quotas continues (Ferreira, 2015), with no conclusive business case for or against them. Some advantages of quotas cited in the literature include: (1) quotas give women the opportunity to prove themselves (Seierstad, 2016), (2) women on boards may have prevented the financial crisis/recession (Velkova, 2015; Chandler, 2016), (3) quotas allow women to break through the glass ceiling (Dang and Nguyen, 2014); while

some of the disadvantages include: (1) women may be treated as “tokens” and are likely to be ignored (Leszczyńska, 2018), (2) quotas are undemocratic, and business should be free to appoint directors on merit (Chandler, 2016), (3) women could be seen as “decorative additions” and not taken seriously (Fitzsimmons, 2012). The academic evidence on mandatory quotas, their advantages, and disadvantages, remains fragmented, covers diverse literature, and thus presents fertile ground for more detailed and focused study.

- A more detailed analysis of the contribution of female directors to company performance and corporate sustainability. This is a problematic area of research as there are many influences on company performance and corporate sustainability. For example, the specific contribution of women on boards is difficult to determine, if not impossible. Rose (2007) argues that new women board members may have “fitted in” with the existing board culture, thus suppressing their actual diversity influence on the decision-making process. Lešetický *et al.* (2016) argue that the relationship between board gender diversity and organizational performance is complex, inferring it is challenging to measure.
- What does “equality” mean with respect to gender? At the basic level, “equality” means “equal, of the same value.” The EIGE adopts this meaning in determining the GEI, reflecting society in general. In contrast, the gender quota literature assumes an acceptable equality figure of 40% female representation on corporate boards, possibly reflecting a realistic corporate figure. On the other hand, some industries like engineering and construction have a predominantly male labor force, so should gender equality reflect this? Yet again, other industries like retail, health care, and social work have a predominantly female labor force, so should gender equality reflect this? All these factors must be considered in any attempt to estimate the future expected level of female corporate directors. However, past trends may not form an appropriate starting point. While it is possible to estimate future economic performance, this may not be easy, considering the composition of corporate board gender structures, which thus remains an area for academic debate.

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