

Gender quotas for corporate boards: do they lead to more women in senior executive management?

Gender quotas
for corporate
boards

Sigtona Halrynjo and Mari Teigen

Institute for Social Research / Institutt for Samfunnsforskning, Oslo, Norway

Received 22 March 2023
Revised 8 August 2023
5 December 2023
6 February 2024
Accepted 22 February 2024

Abstract

Purpose – The European Union (EU) has recently adopted gender quotas for corporate boards (CBQ), anticipating ripple effects on women's careers in the companies concerned, as well as throughout the economy. The purpose of this paper is to investigate whether CBQ has spurred ripple effects and discuss mechanisms hindering or facilitating women's occupancy of top executive positions.

Design/methodology/approach – Norway was the first country in the world to introduce CBQ in 2003, with full effect from 2008. The policy requires company boards to be composed of 40% of each gender. Drawing on original data mapping boards and executive committees in Norway's 200 largest companies, the authors analyze the association between CBQ and the gender composition of executive management almost 15 years after the full implementation. The data include both companies covered by the CBQ and large companies not covered.

Findings – The investigation does not find a positive association between CBQ and more women in executive positions. Thus, the ripple effect hypothesis of CBQ is not supported. CBQ may have contributed to an increased awareness of gender imbalances, yet these findings indicate that to achieve more gender balance in executive positions, scholars and practitioners may need to focus more on gendered conditions and processes in organizations and society throughout executive careers than on the gender composition of boards.

Originality/value – This paper provides empirical analyses of original data 15 years after the implementation of CBQ. The authors further contribute to scholarly debate by identifying and discussing possible mechanisms that explain how requiring more women on corporate boards may – or may not – have ripple effects on executive management.

Keywords Careers, Women directors, Gender discrimination, Women executives, Corporate policy, Gender quota, Corporate boards, Executive management, Gender diversity, Role models, Gender bias, Gender-sorting processes

Paper type Research paper

© Sigtona Halrynjo and Mari Teigen. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <http://creativecommons.org/licenses/by/4.0/legalcode>

The authors extend their appreciation to the editor and the anonymous reviewers for their constructive critiques and insightful recommendations. Our thanks also go to Sebastian T. Nygård for his invaluable research assistance in facilitating additional data analysis during this article's revision. The authors are grateful to Ingrid Skinlo, for the research assistance of gathering data and to their colleagues at the Institute for Social Research for insightful comments on an earlier version. Lastly, authors acknowledge the Ministry of Culture and Equality for their funding support through CORE – Centre for research on gender equality, enabling this research.

Funding: This research is funded by the Norwegian Ministry of Culture and Equality through CORE – Centre for research on gender equality.



Introduction

In November 2022, the European Parliament and the European Council adopted gender quotas for the boards of listed companies in the member states of the European Union (EU). Gender quotas are considered a means of changing the structural properties of power and its distribution among groups and are intended to break down structures that maintain inequality (Kogut *et al.*, 2013). An important reason for the relative popularity of quota arrangements is not only their promise to improve gender balance within their scope, but also of the prospect of ripple effects *beyond the scope of the quota arrangement* (Franceschet *et al.*, 2012).

The recent adoption of gender quotas for corporate boards (CBQ) in the EU is broadly modeled on a regulation adopted by the Norwegian Parliament in 2003, when Norway became the first country in the world to implement such a policy (Teigen, 2021). The Norwegian CBQ came fully into effect in 2008 and covered public limited, intermunicipal and state-owned companies, expanding to include cooperative companies [1] and municipal companies in 2008 and 2009, respectively (Teigen, 2022) [2]. Consecutively, CBQ was adopted in Spain, Iceland, France, Belgium, Italy, Germany, Portugal and Austria (Lépinard and Marin, 2018; Teigen, 2021). The CBQ issue was placed high on the EU policy agenda, and in 2012, the European Commission proposed a directive to regulate gender balance on corporate boards. The directive was pending for 10 years until its recent adoption in November 2022.

Ripple – or spillover – effects of CBQ are clearly anticipated, as formulated in the directive text: “Enhancing women’s participation in economic decision-making, on boards in particular, is expected to have positive spillover effects on women’s employment in the companies concerned and throughout the whole economy” (10, L 315/45). Furthermore, the text states:

Increasing the representation of women on boards not only affects the women appointed to boards, but also contributes to attracting female talent to the company and ensuring a greater presence of women at all levels of management and in the workforce. Therefore, a higher share of women on boards is likely to have a positive impact on closing both the gender employment gap and the gender pay gap (17, L 315/47) [3].

However, existing research on the ripple effects of CBQ is inconsistent and points in different directions. In their early study of Norwegian listed companies between 2001 and 2010, Wang and Kelan (2013) found a small increase in female chief executive officer (CEO) appointments in the first years after the reform was introduced but no significant impact after the full enforcement of board quotas. Despite these results, Wang and Kelan (2013) argued that CBQ might have long-term effects in bringing forth more female leaders as the experience women gain from serving on corporate boards may qualify them for executive jobs and for positions as mentors and role models for other women in the future. Examining change among listed companies from 2003 to 2014, Bertrand *et al.* (2019) found neither positive nor negative effects of women joining boards on the recruitment of women to executive management. Six years after the CBQ came into full effect, the study concluded that the CBQ had had little discernible impact on women in business beyond the direct effect on the women who made it into boardrooms. However, the authors further noted that more time may be needed for ripple effects to be identified.

In this article, we investigate ripple effects of CBQ based on data from Norway after the CBQ had been in place for almost 15 years. This time span should provide sufficient time to make evident ripple effects.

This study makes two main contributions to the increasing – but still incomplete – knowledge of CBQ and their impact. First, drawing on a unique, comprehensive data set mapping all boards and executive committees in the 200 largest Norwegian companies, we analyze the association between CBQ and the gender composition of executive management in these organizations. In addition to listed companies, we study state- and municipality-owned limited companies and large cooperatives (all covered by the CBQ), as well as privately owned limited companies and cooperatives not covered by the CBQ. Our data are from 2022, almost 15 years after the full implementation of the CBQ, allowing substantial time for potential ripple effects to manifest. A main finding reveals that listed and cooperative companies (with CBQ) are not associated with more women in *executive management positions*, compared with non-CBQ companies. This indicates that after relevant controls, no ripple effect from CBQ boards is found in executive management.

Second, we contribute to the theoretical discussion on the anticipated mechanism behind the ripple effect thesis, departing from theories that hypothesize a positive relationship between CBQ and gender balance in top executive positions. As the anticipated mechanisms leading to ripple effects often tend to be blurred, a core aim of our article is to identify and elaborate on possible mechanisms expressing how increased gender balance in one context (corporate boards) may – or may not – have ripple effects in other contexts (executive management).

Gender quotas and the anticipated mechanisms behind ripple effects

Drawing on the literature on gender in management, we identify three potential ripple effect mechanisms predicting more women in executive positions, as well as an alternative approach explaining the lack of ripple effects. We have named the first three mechanisms as follows: *women promoting women*, *gender diversity reduces gender bias*, and *women role models*. Furthermore, we identify a fourth “mechanism” – *gendered child penalties in executive careers* – which offers an alternative approach to explaining why ripple effects from CBQ do not necessarily occur.

Women promoting women

The first mechanism emphasizes the explicit role of women board members as agents for change, suggesting that they will initiate the promotion of women candidates to senior management. In Norway, corporate boards are responsible for appointing company CEOs (Bertrand *et al.*, 2019) and may have some influence on the selection of the executive committee (Flaa, 2016), as well as its impact on the company’s human resources (HR) policies. Thus, if more women on corporate boards actively promote women candidates or demand that recruiters, election committees for the recruitment of CEOs, and others actively search for women candidates, it could contribute to more women on the executive side [4].

However, it cannot be assumed that women either desire or feel obligated to promote women. According to Terjesen *et al.* (2009), women on corporate boards are reluctant to be “diversity supporters” as they see their role as identically professional to that of male board members. Thus, they may avoid taking the role of representatives for a feminist change agenda (Singh, 2008). Furthermore, as frequently newcomers to corporate boards, women may have less influence over decision-making processes than seniors (Jeydel and Taylor, 2003; Beckwith, 2007). In line with this critique, recent research indicate that the mere presence of women directors is insufficient to bring about the desired spillover effect (Bozhinov *et al.*, 2021).

Gender diversity reduces gender bias

The second mechanism suggests that an increased presence of women will inherently mitigate tendencies of gender bias and gender discrimination (see [Goyal et al., 2021](#)) and possibly enhance the impact women may have on board decisions ([Kwon et al., 2023](#)). A much-debated claim in the gender and management literature argues that an increased share of women in a predominately male-dominated setting has the potential to counter tendencies of homosocial reproduction and implicit gender discrimination. This is attributed to the idea that as the representation of women increases, women's presence surpasses the token status, bringing about change in how women as a group are perceived (cf. [Kanter, 1977](#)). According to social identity theory, people consciously or unconsciously categorize demographically dissimilar individuals as out-of-group members and demographically similar individuals as in-group members ([Chatman and Spataro, 2005](#)). Moreover, decision-makers tend to prefer more attractive positions, including leadership positions, for in-group members ([Turner et al., 1979](#)), contributing to homosocial reproduction; hence, a board comprised mainly of men will have an unconscious preference for a male candidate to be the successor CEO. Thus, increased gender diversity on a company board will reduce homosocial reproduction and in-group preferences, increasing the probability of the firm appointing a female CEO, which, in turn, may lead to the appointment of more female members to the executive committee ([Matsa and Miller, 2011](#); [Wang and Kelan, 2013](#); [Cook and Glass, 2014](#); [Bertrand et al., 2019](#)).

In contrast to the assumptions above, it is worth noting that while experimental studies conducted in several countries, including the USA, Spain and Germany, continue to display gender bias in which men are favored over women, several recent experiments conducted in the Nordic countries do not show such bias (e.g. [Bygren et al., 2017](#); [Carlsson and Eriksson, 2019](#)). Thus, gendered in-group preferences may be less important in a Nordic context.

Women role models

The third mechanism predicting ripple effects highlights the potential importance of women board directors as role models ([Gilardi, 2015](#); [Morgenroth et al., 2015](#)). [Sealy and Singh \(2010\)](#) have argued that the absence of female role models in senior management positions hinders women's career advancement. Women directors are believed to play a significant role in the development of others' work identities; therefore, the increased presence of women on corporate boards can have a motivational and inspiring impact on other women ([Sealy and Singh, 2010](#)). CBQ are expected to facilitate organizational changes and have long-term encouraging effects on young women in business as women on boards may serve as role models to women in the pipeline, demonstrating that women can fulfill their highest ambitions and inspiring other women to strive for top management positions ([Joy, 2008](#); [Wang and Kelan, 2013](#); [Flaa, 2016](#); [Bertrand et al., 2019](#)).

The *internal role model effect* describes the expected motivational effect within companies when more women enter the corporate board and become more visible. In contrast to this expectation, [Bertrand et al. \(2019\)](#) found no evidence of improvements (no sign of an internal role model effect) for women working in the firms most affected by the CBQ six years after the full implementation. However, they argue that CBQ may foster a positive mindset among young women in business that ultimately motivates them to remain on a fast-track career [5], implying that CBQ could have a potential impact in the future.

The *external role model effect* predicts that the increased presence of women on corporate boards can serve as a strong signal of openness toward women, fostering greater career motivation and effort among women in the wider business community. Conducting experimental tests on signaling theory, Schäpers *et al.* (2023) found that a company with a gender-diverse board was perceived as more attractive by potential applicants than an all-male board and that CBQ did not significantly reduce a company's employer attractiveness. However, the presence of a gender quota somewhat diminished the positive signaling effect as applicants tended to assume that the gender-diverse board did not reflect an entirely genuine commitment within the company (Schäpers *et al.*, 2023).

Related to the external role model effect, scholars have also worried that women may face role incongruity dilemmas as leadership positions or ambitions are interpreted as masculine and thus conflicting with femininity (Eagly, 2003). A study from Sweden has shown that female directors are even less security-oriented and more risk-loving than male directors (Adams and Funk, 2012). This finding indicates a break with gender stereotypes at top level. However, the study also finds a gap between the preferences and values among women at the top and the preferences and values among women in the general population. Female directors may thus appear to be less attractive role models to women in general.

Gendered child penalties in executive careers

The predictions for CBQ having ripple effects build on the assumption that the gender composition of corporate boards represents a significant obstacle to women's careers in the business sector. An alternative explanation may be found in the scholarship of traditional upward mobility career path and its family-unfriendly career demands, which require visibility, availability and flexibility outside normal working hours (e.g. Goldin, 2021). These demands, necessitating a partner willing to be the *primary carer* at home in families with dependents, can limit women's chances of remaining on the career fast-track, which consequently reduces the pool of eligible female candidates. Scholarship points in the direction that this is also the case in the Nordics (Hardoy *et al.*, 2017; Magnusson and Nermo, 2017; Bygren *et al.*, 2020).

The traditional upward mobility career path within the business sector typically requires strong line experience, preferably as a business unit head, to advance into top leadership and, specifically, CEO positions (Joy, 2008). Research indicates that having recent experience in high-level executive roles is a key factor in predicting the attainment of board positions (Smith and Parrotta, 2018). A fast-track career in the business sector offers advancement opportunities to top-level positions based on a series of developmental experiences provided by an organization. These experiences typically imply a rapid succession of operational line jobs involving profit-and-loss responsibility. Line jobs with such responsibility often offer the potential for large wage increases and bonuses, but these jobs also demand significant investment in time availability and travel days (Halrynjo, 2015; Halrynjo *et al.*, 2022) and the sacrifice of family-friendly flexibility (Bütikofer *et al.*, 2018; Goldin, 2021).

The more family-friendly solution is typically to work in staff and support functions, which require less visibility, availability and flexibility outside normal working hours. Research shows how the careers of men typically follow the preferred pathway to the top, with swift annual evaluations, uninterrupted progression and continually increasing requirements and work pressure. For women, however, a career often represents a labyrinth with a series of barriers, dead ends and unusual pathways, as they try to balance family life and job responsibilities (Lupu, 2012). Swedish research show that gender differences in

time-consuming work among mothers and fathers clearly contribute to the gender wage gap in high-prestige professions (Magnusson and Neramo, 2017).

At the top of the business sector, women typically end up in more family-friendly support positions instead of the more career-rewarding line positions (Halrynjo and Blair-Loy, 2021). As a result, a larger number of women may end up lacking the profit-and-loss and operational line experience required to continue a fast-track career toward the top. A large study from the Norwegian business sector showed no difference in careers or wages among men and women without children but strong differences between mothers and fathers, regardless of their gender-equal career preferences (Halrynjo *et al.*, 2022).

This article contributes to the research field by examining and discussing the potential ripple effects – or lack thereof – of CBQ on *executive* management. The first three mechanisms discussed – namely, *women promoting women*, *gender diversity reduces gender bias* and *women role models* – all propose positive ripple effects resulting from the introduction of CBQ to an increased representation of women in executive top positions. With CBQ ensuring that women comprise at least 40% of company boards, it is anticipated that more women will occupy top executive positions due to active promotion by women, diminished gender bias or the presence of female role models. In contrast, the fourth mechanism suggests that *gendered family-unfriendly conditions in executive careers* play a significant role in access to top executive positions. In other words, the promotion of gender diversity is less reliant on the gender composition of boards and more influenced by the conditions and challenges encountered throughout *the executive career trajectory*. Based on this mechanism, it is unlikely that CBQ will generate ripple effects from boards to top executive positions.

Data and method

To examine the potential ripple effects of CBQ, we study the relationship between CBQ and the gender composition of executive management in the 200 largest Norwegian companies, using original hand-collected data from 2022. We selected the 200 largest companies from the ranking of companies by revenue according to *Kapital* [6]. Our selection of companies is based on the following criteria: the board and headquarters must be registered in Norway; the executive committee must consist of three or more people; and information about the composition of the company's executive management must be available. Executive management includes the CEO and those who report directly to the CEO. Among the 200 companies, 95 are covered by CBQ and 105 are not. The CBQ companies include publicly listed companies as well as state- and municipality-owned companies and large cooperatives. The companies not covered by CBQ are mainly privately owned limited companies, as well as a few cooperative companies which are not covered by the quota rules. Information on gender (based on names), board members and CEOs was collected from the public business register. The information on gender (names) and titles in the executive committees was collected from companies' websites, annual reports and, in some cases, direct contact with the companies during the spring of 2022.

First, we present the descriptive patterns of gender composition on boards and in executive management, differentiating between CBQ and non-CBQ companies, as well as between the various types of companies covered by the CBQ. We then move on to present multivariate analyses that allow us to control for other characteristics of the companies. The first dependent variable is the *percentage of women on the executive committee*, including both line and staff/support positions. For the second dependent variable, *percentage of women in line positions*, we limit the scope to exclusively include the line-positions on the executive committee. Following Bilimoria (2006), line positions are defined as those with an

operational function title (for instance, director of systems operations), a general management title (for example, president or chief operating officer) or a product or area title (for instance, business unit head). In contrast, directors of, for example, HR, communications, corporate social responsibility, safety, health and environment are coded as support and staff positions. Each member of the executive committee was reclassified as holding a line position or not, and the percentage of women line officers was then calculated for each company. The third dependent variable is *female CEO* (coded as 1), with male CEO as the reference category (0). Our main independent variables are *type of CBQ company*, with non-CBQ companies as the reference category and *percentage of women on the board* (excluding chair and deputy board members), which we include in models A2, B2 and C2. We control for *female board chair* (coded as 1, with male chair as reference, coded 0). We control for size in three ways. The first is by categories of *revenue*, comprising 3–4.999m NOK, 5–9.999m NOK and more than 10m NOK, with less than 3m as the reference category. Second, we control for variation in the *number of people on the board* (including the chair and excluding deputy members) and third, the *number of people on the executive committee*, including line as well as staff positions.

Results

Based on unique and detailed information about the gender division within the top management in the 200 largest Norwegian companies by revenue collected in 2022, this article analyzes whether 15 years of CBQ have spurred ripple effects from the boards into executive management and, hence, led to more women holding top executive positions.

Descriptive analyses

Table 1 shows the percentage of women on corporate boards, on executive committees and in line positions. The numbers demonstrate that the composition of boards is more gender balanced in CBQ companies than in non-CBQ companies. Hence, the CBQ has been effective in accomplishing their primary aim of balancing the gender composition of corporate boards. However, the higher percentage of women on CBQ company boards is not reflected in executive management. Furthermore, the percentage of women in executive management is particularly similar in listed CBQ and non-CBQ companies.

The group of organizations covered by the CBQ consists of three types of companies: listed companies (63), state- and municipality-owned companies (15) and cooperative companies (17).

The average percentage of female board members in CBQ companies is 48.6%, compared with 22.7% in the non-CBQ companies. This finding confirms that companies covered by CBQ follow the statutory quota regulation. The proportion of women on executive committees, however, does not follow the same pattern. We find that the listed companies with CBQ and the privately owned companies without CBQ have the same percentage of women in top executive positions (25.6 vs 25.9). The state- and municipality-owned companies stand out by having the highest percentage of women on executive committees, with 40.1%. The representation of women is clearly weakest in line positions. Women hold only 17.5 of the line positions in the executive committees in listed companies and 16.9 in cooperatives with CBQ. Again, the state- and municipality-owned companies stand out by having 37% women in line positions.

On average, the company board consists of seven board members. There are small differences among the companies in terms of the number of board members. Private limited companies (non-CBQ) have the lowest average number (six board members), followed by listed companies (eight members). Cooperatives and state- and municipality-owned

Table 1.
Characteristics of the
companies in the
sample

Company type	Non-CBQ			CBQ Listed	CBQ Coop	CBQ State/Muni	All CBQ	Total
	Private limited							
N	105	63	17	15	95	200		
% women on the board (ex. Dep. & Chair) (st.d.)	22.70 (19.05)	48.60 (9.08)	49.04 (12.76)	48.25 (12.41)	48.63 (10.25)	35.01 (20.19)		
% women on EC (st.d.)	25.90 (18.22)	25.53 (15.64)	29.56 (17.68)	40.60 (10.53)	28.62 (16.14)	27.20 (17.27)		
% women in line positions (st.d.)	18.39 (20.05)	17.51 (17.14)	16.88 (18.03)	36.97 (17.66)	20.47 (18.63)	19.38 (19.36)		
% of companies with female chair	9.52	9.52	35.29	26.67	16.84	13.00		
% of companies with female CEO	12.38	14.29	17.65	40.00	18.95	15.50		
Mean revenue in 1,000 NOK (st.d.)	83,54.96 (10,467.09)	27,563.00 (59,839.48)	8,762.24 (6,696.71)	14,165.93 (19,551.63)	22,143.01 (49,892.18)	1,4904.28 (35,787.17)		
Mean board size (st.d.)	6.13 (2.22)	7.95 (1.99)	8.76 (2.17)	8.60 (1.76)	8.20 (2.00)	7.12 (2.35)		
Mean EC size (st.d.)	8.20 (3.01)	8.30 (2.15)	7.82 (2.27)	8.27 (1.49)	8.21 (2.07)	8.21 (2.60)		

Notes: CBQ = corporate board quotas for gender representation; Listed = publicly listed on the stock exchange; Coop = cooperative company; State/Muni = state- or municipality-owned company; Non-CBQ = companies without board quotas; EC = executive committee; st.d. = standard deviations

Source: Authors' own work

companies have most board members (nine members). The numbers on executive committees average eight members, irrespective of the company type.

The clearest difference between the company categories is found for the highest positions: board chairs and CEOs. These positions are not covered by the CBQ. Our data show that female board chairs are equally rare in private limited and publicly listed companies, in which less than 10% have a female board chair. In contrast, a considerably higher proportion of cooperative and state- and municipality-owned companies have female board chairs (35% and 27%, respectively). Women CEOs are rare in any type of company (15.5%), but they are particularly scarce in private limited (non-CBQ) and listed companies (CBQ). Once again, the state- and municipality-owned companies stand out with the highest percentage of women CEOs.

Summing up, the bivariate analysis does not find more women in executive positions in companies covered by CBQ, except for state- and municipality-owned companies.

Multivariate analyses

To further examine the potential ripple effects of CBQ on executive positions in various type of companies, we use multivariate analyses to examine the relationship between the percentage of women in executive positions and CBQ, controlled for other factors.

Table 2 shows the results of the multivariate analyses including ordinary least square (OLS) regression (Models A and B) and logistic regression (Model C). Model A examines the percentage of women on executive positions (both line and staff/support positions) as the dependent variable. As line positions are generally more male dominated than staff positions in the executive committees, we include an analysis of women in line management as a critical test (Model B). Furthermore, Model C investigates whether being a CBQ company increases the possibility of having a female CEO (logistic regression, showing marginal effects). Models A1, B1 and C1 show the results without control for the percentage of women on the board. Models A2, B2 and C2 include the percentage of women on board. For all models, we include controls for female chair, revenue, the number of people on the boards (without deputy members) and the number of people on the executive committees [7].

In contrast to expectations of ripple effects, the analyses indicate that compared with non-CBQ companies, we find no positive association between being a listed or cooperative CBQ company and the percentage of women on the executive committees (model A1). The association is, however, positive for state- and municipality-owned companies (but not statistically significant). Controlling for the percentage of women on the board (A2), does not change the main pattern.

The critical test of women in line positions (Model B) confirms the pattern from Model A with lack of ripple effects among listed and cooperative companies. The association with more women in line positions among state- and municipality-owned companies is positive and now statistically significant (without control for the percentage of women on the board, see model B1). Model B2 demonstrates a statistically significant association between the share of women on the board and women in line positions. However, the model also reveals that being a listed or cooperative CBQ company is clearly associated with fewer women in top line positions compared with non-CBQ companies when we control for the percentage of women on the board. Model C reveals that the probability of having a female CEO does not increase for listed or cooperative CBQ companies compared with the non-CBQ companies. State- and municipality-owned companies stand out with a higher (but not statistically significant) probability of having a female CEO compared with non-CBQ companies. While the percentage of women on the board is positively associated with more women in

Table 2. Percentage of women in executive committees and in line management, OLS analysis (models A and B), probability of female CEO and logistic regression (model C)

Company type	% of women in executive committees						% of women in line management						Female CEO				
	Model A1		Model A2		Model B1		Model B2		Model C1		Model C2		Marginal effects Model C1	Marginal effects Model C2			
	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE					
Non-CBQ companies (ref)																	
CBQ Listed	-3.80	2.76	6.09	3.31	-3.28	3.09	-8.42*	3.66	-1.00	5.93	-9.97	6.71					
CBQ Cooperatives	-5.14	4.51	-7.29	4.82	-10.40*	5.05	-15.22**	5.32	-4.85	7.50	-12.71	7.59					
CBQ State- or Municipality-owned	9.07	4.63	6.99	4.91	13.05*	5.18	8.39	5.42	15.50	12.10	3.79	10.95					
Female Chair	11.76**	3.56	11.64**	3.56	17.17***	3.99	16.91**	3.93	21.09*	10.08	19.48*	9.06					
Share Women Board (Ex. Dep and Chair)	-	-	0.09	0.07	-	-	0.21*	0.08	-	-	-	0.47***	0.18				
Revenue																	
Less than 3m NOK (ref)																	
3-4.999m NOK	-9.15*	4.33	-9.20*	4.32	-6.89	4.84	-6.99	4.78	0.96	10.16	-0.02	10.02					
5-9.999m NOK	-3.62	4.38	-3.71	4.37	-5.23	4.90	-5.44	4.83	2.33	10.41	1.74	10.26					
10m NOK or more	-5.93	4.67	-5.43	4.68	-4.51	5.22	-3.39	5.17	-1.07	10.43	0.51	10.47					
Number board (Ex. Dep.)	1.85**	0.61	1.72**	0.61	1.34*	0.68	1.04	0.68	2.03	1.33	1.98	1.36					
Number executive committee	0.02	0.47	0.00	0.47	-0.74	0.52	-0.79	0.52	-0.36	1.08	-0.32	1.01					
Constant	19.18***	5.33	18.00**	5.41	19.80**	5.96	17.16**	5.97	200	200	200	200					
N	200		200		200		200		200		200		200				
Adj. R^2 /Pseudo R^2	0.156		0.158		0.160		0.183		0.097		0.142		0.142				

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; OLS analysis = ordinary least square analysis; CBQ = corporate board quotas for gender representation; Listed = publicly listed on the stock exchange; Coop = cooperative company; State/Muni = state- or municipality-owned company; non-CBQ = companies without board quotas

Source: Authors' own work

executive positions across all three models (A2, B2 and C2), the results for listed and cooperative CBQ companies are still negative.

Female chair is strongly associated with more women in executive positions on all the dependent variables, across models. However, the gender of the chair is not covered by the CBQ rules.

The three variables that we include to control for various dimensions of company size do not have a systematic impact on any of the dependent variables. We do not see a consistent pattern due to companies' revenue. Companies with more members on their boards are associated with more women in executive positions. However, the size of the executive committee does not seem to matter.

As an additional test, we used the same analyses to a sample of the 200 largest companies in 2018. The main results are similar for all the models, suggesting stable findings. Likewise, the descriptive analysis shows a similar share of women on the board as in the 2022 data, with more than twice the proportion of women in CBQ companies as in non-CBQ companies. Nevertheless, we found a 4–6 percentage points increase of women in the top executive positions from 2018 to 2022. Still, this increase is found across companies, regardless of CBQ and the percentage of women on the board [8].

Discussion

In summary, we do not find more women in executive positions in CBQ companies, almost 15 years after the introduction of corporate board quotas. Thus, the ripple effect hypothesis of CBQ is generally not supported. For the listed companies and cooperatives with CBQ the relationship is negative across all three models, indicating fewer women in executive committees, in line positions and as CEOs compared with non-CBQ companies. For state- and municipality-owned companies, however, the association is positive across models. The higher percentage of women in executive top positions in these companies, could indicate a stronger commitment and political motivation to achieve gender balance both on the board side and on the executive side within these companies.

Given these findings, it is intriguing that we do find a positive association between a higher number of women on boards in non-CBQ companies and more women in executive positions. This finding aligns with earlier studies of non-CBQ companies (Matsa and Miller, 2011; Cook and Glass, 2014). Nevertheless, in contrast to these earlier studies, which are based on US data and argue that CBQ could work as a “quick fix” to gender balance advancement in the corporate world, our findings of a negative or no association between CBQ and more women in top executive positions in companies that are not owned by the state or municipalities, do not support this argument. The association may instead represent a reversed causality in which more women in executive positions lead to more women on boards, meaning that the few companies tending to hire women in executive positions may also tend to recruit women on their boards.

Interestingly, having a female board chair is strongly associated with more women in executive positions on all the dependent variables, across models. As the CBQ-regulations do not involve the gender of the chair, this variable cannot contribute to the main research question. Still, it could be argued that the female chair-association suggests signs of ripple effects from a powerful board position into executive positions. Before we conclude on potential signs of ripple effects, there are two key conditions that need to be addressed: first, state- and municipality-owned companies and cooperatives are strongly overrepresented among companies with female chair. There may be specific characteristics and logics at play within these companies that do not apply to listed and privately owned companies. Second, while the idea behind the hypothesis of ripple effects of CBQ is that the direction goes from

the board to executive positions, additional inquiries into the background of the few female board chairs point in the opposite direction. High-level executive experience (like CEO or business head) is found to operate as a requirement for board chair positions (Smith and Parrotta, 2018). This background appears to be true also for the female board chairs in our sample, who almost without exception have such experience.

In this article, we have addressed the ripple effect hypothesis of CBQ – that CBQ would increase the share of women in executive positions – by pointing at three possible mechanisms leading to ripple effects. First, the *women promoting women*-mechanism, anticipating that women board members support the careers of women in the executive branches of the companies where they serve on the boards. The positive association between companies with a female chair, and a higher percentage of women on the board and more women in executive positions may point toward the women promoting women-mechanism. However, despite 15 years of statutory presence of more women on the boards of CBQ companies, the listed and cooperative companies do not have more women in their *top executive* positions compared with the non-CBQ companies.

The lack of support for the women promoting women-mechanism can be explained in several ways: Terjesen *et al.* (2009) emphasize that women on corporate boards are reluctant to support diversity. Others have argued that women often avoid being crusaders for a feminist change agenda (see Bradshaw and Wicks, 2000; Singh, 2008). Furthermore, even if women in such positions would like to increase the diversity in executive branches, as newcomers they may have less influence over decision-making than senior members (Jeydel and Taylor, 2003; Beckwith, 2007) and, thus, be less able to push for the recruitment of more women. The “newcomer challenge” may be relevant in relation to the Norwegian CBQ: compared with male board members, the women recruited after the CBQ was introduced frequently have more higher education qualifications but less experience as top executives or board directors (Wang and Kelan, 2013; Storvik and Gulbrandsen, 2016; Bertrand *et al.*, 2019). Female board members without previous experience from senior *executive* management roles in commercial companies have been found to have a weak impact on board decisions (Nielsen and Huse, 2010). Therefore, the mechanism of female board members actively driving change may not be applicable.

The second ripple effect mechanism (*reduced gender bias*) anticipates that CBQ will result in more gender diversity on boards and thus reduced gender bias and discrimination, in-group preferences, and homosocial reproduction (cf. Kanter, 1977; Turner *et al.*, 1979; Cook and Glass, 2014). This mechanism assumes that the role of the board in recruitment and the explicit/implicit bias among board members are vital for top executive recruitment. However, our analysis does not support this assumption. The lack of ripple effects in our data may indicate that the role of the board in the development of recruitment strategies and in the actual recruitment of executive management is less than expected in theory. This finding is in line with earlier studies arguing that in-group favoritism is an incomplete explanation based on findings of in-group favoritism in US companies but not in Norwegian companies with gender-balanced boards due to quotas (Halrynjo and Blair-Loy, 2021). Further, although field experiments from North America and Europe show that employers tend to be biased against women in general, and mothers in particular, (Quadlin, 2018; González *et al.*, 2019; Hipp, 2020), field experiments from the Nordic countries do not find implicit bias against women/mothers (e.g. Bygren *et al.*, 2017; Carlsson and Eriksson, 2019). Thus, gender bias may not necessarily be crucial for explaining the prevalence of male dominance in the Nordic context.

Third, more women on corporate boards could have a *role model effect* in terms of motivating and, hence, inspiring other women to pursue corporate careers (Sealy and Singh, 2010;

Morgenroth *et al.*, 2015). Accordingly, more women on the corporate boards of several of the largest Norwegian companies could lead to increased gender balance in companies both covered and not covered by CBQ. The modest increase of women in executive companies from 2018 to 2022 both in CBQ and non-CBQ companies could be interpreted as an indication of a role model effect over time. Nevertheless, despite one and a half decade of gender balance on the board of CBQ companies, the percentage of women in top executive positions is still equally low in CBQ and non-CBQ companies and the lack of association between CBQ and more women in executive position do not indicate strong support for the role model expectation.

The lack of a clear role model effect may result from incongruity dilemmas as leadership positions or ambitions are interpreted as masculine and thus in conflict with femininity (Eagly, 2003), or it may represent a gap between preference and values among women at the top and women in the general population (Adams and Funk, 2012). Both reasons may lead to female directors appearing as less attractive role models. However, top executive managers are not selected from the general population but from men and women with relevant executive education and experience. In contrast to the incongruity explanations, in a study of business students in Norway conducted in 2013, Bertrand *et al.* (2019) found that 70% of the women believed that the CBQ reform would make it more likely that they would eventually hold top executive business positions. Thus, role incongruity and a lack of role models may not be the most likely explanation of the lack of ripple effects from CBQ.

Finally, we presented an alternative assumption, predicting scant reason to expect strong ripple effects from CBQ because *gendered child penalties in executive careers* may be more important. As long as the relatively few women on executive committees are concentrated in staff rather than line positions, they will be less likely to advance to CEO positions (Axelsdottir and Halrynjo, 2018). To reduce the sorting of women into the more “predictable and family-friendly” staff and support positions and, thus, over time, to increase gender balance at the top of the executive ladder, more gender-equal divisions of childcare and parental leave, in combination with active and systematic recruitment policies from the middle-management level, may be needed. These are, in fact, also the measures emphasized as highly important by top managers themselves (Axelsdottir and Halrynjo, 2018).

Conclusion

Norway was the first country in the world to introduce CBQ in 2003, with full implementation from 2008. The policy requires company boards to be composed of 40% of each gender. The prevailing expectation was that the introduction of CBQ would have *ripple effects*, fostering greater gender balance not only within the boards but also across the *executive management* of the companies covered by CBQ.

Based on our study of the 200 largest Norwegian companies, we do not find such ripple effects in listed and cooperative companies with CBQ.

The limitations of our analysis are inherent in the reliance on cross-sectional data, due to the absence of pre-quota gender distribution information for executive committees. The scope is further narrowed by data solely from the 200 largest companies. However, the lack of a systematic revenue effect suggests the potential for our findings to be extrapolated to smaller companies. Taking these limitations into account, our main finding, based on data collected 15 years after the full implementation of the quota, underscores the persistent underrepresentation of women in executive committees across major corporations, regardless of CBQ applicability.

CBQ may still hold important significance in highlighting the gender imbalance in senior management: In line with the prediction of “heightened awareness contribution”, our

additional analyses revealed a slight increase in female executives in both CBQ and non-CBQ companies from 2018 to 2022. Nevertheless, based on our primary finding of negligible ripple effects of more women on the board in CBQ companies, we argue in favor of curbing the expectations of CBQ – outside their primary scope. Instead of advocating that gender balance on corporate boards will change male dominance also beyond the board, we contend that other efforts are needed to address the gender disparity in *executive management*.

Based on our analyses, we claim that the lack of women – both on corporate boards and in top executive management – could be interpreted as a symptom of the gendered career structure in the business sector. We call for more emphasis on the governance practices of companies, especially within the pipeline of executive management, to improve gender balance in the business sector. Further research is needed on the mechanisms for recruitment to top executive management positions and how they are linked to gendered career tracks and conditions experienced by women and men in various life phases and stages of the executive career track.

To understand the hindrances to – and possibilities for – more gender balance in top executive positions, we suggest new avenues of research that examine gender-sorting processes along the executive pipeline and within and between companies and industries. Further research should include the degree to which gender (un)equal work–family conditions shape opportunities to invest in fast-track careers and operational line positions. A quick fix may not exist with regard to advancing gender balance in the corporate world.

Notes

1. CBQ apply to cooperative companies with more than 1,000 members.
2. The company legislation applies identical sanctions for breaching all its rules, with forced dissolution as the final step. The requirements vary with board size and employee representation. Boards with more than eight members must meet the 40% rule among nonemployee representatives. Smaller boards have less strict regulations to comply with.
3. Directive (EU) 2022/2381 Publications Office (europa.eu).
4. The Norwegian Code of Practice for Corporate Governance, see <https://nues.no/eierstyring-ogselskapsledelse-engelsk/>
5. A fast-track career is a traditional upwardly mobile career path, also known as a linear career (<http://career.iresearchnet.com/career-development/fast-track-career/>).
6. *Kapital* (Norwegian financial paper) provides a yearly review of the 500 largest Norwegian companies by revenue.
7. We have tested the models for multicollinearity. The variation inflation factor lies between 1 and 3.5 for all the independent variables.
8. Analyses available upon request.

References

- Adams, R.B. and Funk, P. (2012), “Beyond the glass ceiling: does gender matter?”, *Management Science*, Vol. 58 No. 2, pp. 219-235, doi: [10.1287/mnsc.1110.1452](https://doi.org/10.1287/mnsc.1110.1452).
- Axelsdóttir, L. and Halrynjo, S. (2018), “Gender balance in executive management: top-managers’ understanding of barriers and solutions from the demand-supply perspective”, *Social Politics: International Studies in Gender, State and Society*, Vol. 25 No. 2, pp. 287-314, doi: [10.1093/sp/jxy012](https://doi.org/10.1093/sp/jxy012).

- Beckwith, K. (2007), "Numbers and newness: the descriptive and substantive representation of women", *Canadian Journal of Political Science*, Vol. 40 No. 1, pp. 27-49, doi: [10.1017/S0008423907070059](https://doi.org/10.1017/S0008423907070059).
- Bertrand, M., Black, S.E., Jensen, S. and Lleras-Muney, A. (2019), "Breaking the glass ceiling? The effect of board quotas on female labor market outcomes in Norway", *The Review of Economic Studies*, Vol. 86 No. 1, pp. 191-239, doi: [10.1093/restud/rdy032](https://doi.org/10.1093/restud/rdy032).
- Bilimoria, D. (2006), "The relationship between women corporate directors and women corporate officers", *Journal of Managerial Issues*, Vol. 18 No. 1, pp. 47-61.
- Bozhinov, V., Joecks, J. and Scharfenkamp, K. (2021), "Gender spillovers from supervisory boards to management boards", *Managerial and Decision Economics*, Vol. 42 No. 5, pp. 1317-1331, doi: [10.1002/mde.3311](https://doi.org/10.1002/mde.3311).
- Bradshaw, P. and Wicks, D. (2000), "The experiences of white women on corporate boards in Canada", in Burke, R.J. and Mattis, M.C. (Eds), *Women on Corporate Boards of Directors*, Springer, Dordrecht, pp. 197-208, doi: [10.1007/978-90-481-3401-4_14](https://doi.org/10.1007/978-90-481-3401-4_14).
- Bütikofer, A., Jensen, S. and Salvanes, K.G. (2018), "The role of parenthood on the gender gap among top earners", *European Economic Review*, Vol. 109, pp. 103-123, doi: [10.1016/j.euroecorev.2018.05.008](https://doi.org/10.1016/j.euroecorev.2018.05.008).
- Bygren, M., Erlandsson, A. and Gähler, M. (2017), "Do employers prefer fathers? Evidence from a field experiment testing the gender by parenthood interaction effect on callbacks to job applications", *European Sociological Review*, Vol. 33 No. 3, pp. 337-348, doi: [10.1093/esr/jcx051](https://doi.org/10.1093/esr/jcx051).
- Bygren, M., Gähler, M. and Magnusson, C. (2020), "The constant gap. Parenthood premiums in Sweden 1968–2010", *Social Forces*, Vol. 100 No. 1, pp. 137-168.
- Carlsson, M. and Eriksson, S. (2019), "Age discrimination in hiring decisions: evidence from a field experiment in the labor market", *Labour Economics*, Vol. 59, pp. 173-183, doi: [10.1016/j.labeco.2019.03.002](https://doi.org/10.1016/j.labeco.2019.03.002).
- Chatman, J.A. and Spataro, S.E. (2005), "Using self-categorization theory to understand relational demography-based variations in people's responsiveness to organizational culture", *Academy of Management Journal*, Vol. 48 No. 2, pp. 321-331.
- Cook, A. and Glass, C. (2014), "Women and top leadership positions: towards an institutional analysis", *Gender, Work and Organization*, Vol. 21 No. 1, pp. 91-103, doi: [10.1111/gwao.12018](https://doi.org/10.1111/gwao.12018).
- Eagly, A. (2003), "Few women at the top: how role incongruity produces prejudice and the glass ceiling", in Knippenberg, D. and Hogg, M.A. (Eds), *Leadership and Power: Identity Processes in Groups and Organizations*, SAGE Publications, London, pp. 79-93, doi: [10.4135/9781446216170](https://doi.org/10.4135/9781446216170).
- Flaa, I. (2016), "The boardroom quota: spillover effects on the corporate executive committee. An event study of Norway's boardroom quota and its spillover effects on the gender wage gap and female representation in the corporate executive committee", unpublished manuscript, MS thesis in Financial Economics, Norwegian School of Economics.
- Franceschet, S., Krook, M.-L. and Piscopo, J. (2012), *The Impact of Gender Quotas*, Oxford University Press, Oxford.
- Gilardi, F. (2015), "The temporary importance of role models for women's political representation", *American Journal of Political Science*, Vol. 59 No. 4, pp. 957-970, doi: [10.1111/ajps.12155](https://doi.org/10.1111/ajps.12155).
- Goldin, C. (2021), *Career and Family: Women's Century-Long Journey toward Equity*, Princeton University Press, Princeton, NJ.
- González, M.J., Cortina, C. and Rodríguez, J. (2019), "The role of gender stereotypes in hiring: a field experiment", *European Sociological Review*, Vol. 35 No. 2, pp. 187-204, doi: [10.1093/esr/jcy055](https://doi.org/10.1093/esr/jcy055).
- Goyal, R., Kakabadse, N., Kakabadse, A. and Talbot, D. (2021), "Female board directors' resilience against gender discrimination", *Gender, Work and Organization*, Vol. 30 No. 1, pp. 197-222, doi: [10.1111/gwao.12669](https://doi.org/10.1111/gwao.12669).
- Halrynjo, S. (2015), "'Kjønn, topplederkarriere og familie' ['Gender, top management career, and family life']", in Teigen, M. (Ed.), *Virkninger av Kjønnkvotering i Norsk Næringsliv [Influences of Gender Quotas in Norwegian Business Life]*, Gyldendal Akademisk, Oslo, pp. 97-116.

-
- Halrynjo, S. and Blair-Loy, M. (2021), "Women's underrepresentation in corporate power in Norway and US: beyond ingroup favoritism", *Nordic Journal of Working Life Studies*, Vol. 11 No. S7, pp. 79-102, doi: [10.18291/njwls.128592](https://doi.org/10.18291/njwls.128592).
- Halrynjo, S., Kitterød, R.H., Mangset, M. and Skorge, Ø.S. (2022), "CORE næringslivsstudie – kjønnsbalanse på toppen i næringslivet: hindringer og muligheter [CORE corporate study – gender balance at the top of the business sector: constraints and possibilities]", Rapport 4, Institutt for Samfunnsforskning, Oslo.
- Hardoy, I., Schöne, P. and Østbakken, K.M. (2017), "Children and the gender gap in management", *Labour Economics*, Vol. 47, pp. 124-137, doi: [10.1016/j.labeco.2017.05.009](https://doi.org/10.1016/j.labeco.2017.05.009).
- Hipp, L. (2020), "Do hiring practices penalize women and benefit men for having children? Experimental evidence from Germany", *European Sociological Review*, Vol. 36 No. 2, pp. 250-264, doi: [10.1093/esr/jcz056](https://doi.org/10.1093/esr/jcz056).
- Jeydel, A. and Taylor, A. (2003), "Are women legislators less effective? Evidence from the U.S. House in the 103rd–105th congress", *Political Research Quarterly*, Vol. 56 No. 1, pp. 19-27.
- Joy, L. (2008), *Advancing Women Leaders: The Connection between Women Board Directors and Women Corporate Officers*, Catalyst, New York, NY.
- Kanter, R.M. (1977), *Men and Women of the Corporation*, Basic Books, New York, NY.
- Kogut, B., Colomer, J. and Belinky, M. (2013), "Structural equality at the top of the corporation: mandated quotas for women directors", *Strategic Management Journal*, Vol. 35 No. 6, pp. 891-902, doi: [10.1002/smj.2123](https://doi.org/10.1002/smj.2123).
- Kwon, H., Moon, C. and Kim, J. (2023), "The impact of female board directors on effective investment management: evidence from Korean firms", *Gender in Management: An International Journal*, Vol. 38 No. 6, pp. 705-729, doi: [10.1108/GM-04-2022-0131](https://doi.org/10.1108/GM-04-2022-0131).
- Lépinard, E. and Marin, R.R. (Eds) (2018), *Transforming Gender Citizenship: The Irresistible Rise of Gender Quotas in Europe*, Cambridge University Press, Cambridge.
- Lupu, I. (2012), "Approved routes and alternative paths: the construction of women's careers in large accounting firms: evidence from the French big four", *Critical Perspectives on Accounting*, Vol. 23 Nos 4/5, pp. 351-369, doi: [10.1016/j.cpa.2012.01.003](https://doi.org/10.1016/j.cpa.2012.01.003).
- Magnusson, C. and Neramo, M. (2017), "Gender, parenthood and wage differences: the importance of time-consuming job characteristics", *Social Indicators Research*, Vol. 131 No. 2, pp. 797-816, doi: [10.1007/s11205-016-1271-z](https://doi.org/10.1007/s11205-016-1271-z).
- Matsa, D.A. and Miller, A.R. (2011), "Chipping away at the glass ceiling: gender spillovers in corporate leadership", *American Economic Review*, Vol. 101 No. 3, pp. 635-639, doi: [10.1257/aer.101.3.635](https://doi.org/10.1257/aer.101.3.635).
- Morgenroth, T., Ryan, M.K. and Peters, K. (2015), "The motivational theory of role modeling: how role models influence role aspirants' goals", *Review of General Psychology*, Vol. 19 No. 4, pp. 465-483, doi: [10.1037/gpr0000059](https://doi.org/10.1037/gpr0000059).
- Nielsen, S. and Huse, M. (2010), "Women directors' contribution to board decision-making and strategic involvement: the role of equality perception", *European Management Review*, Vol. 7 No. 1, pp. 16-29, doi: [10.1057/emr.2009.27](https://doi.org/10.1057/emr.2009.27).
- Quadlin, N. (2018), "The mark of a woman's record: gender and academic performance in hiring", *American Sociological Review*, Vol. 83 No. 2, pp. 331-360, doi: [10.1177/0003122418762291](https://doi.org/10.1177/0003122418762291).
- Schäpers, P., Stolte, T. and Heinemann, H. (2023), "On the influence of gender quotas on the employer attractiveness of companies – do the means harm the ends", *Gender in Management: An International Journal*, Vol. 38 No. 3, pp. 357-372, doi: [10.1108/GM-05-2022-0181](https://doi.org/10.1108/GM-05-2022-0181).
- Sealy, R.H.V. and Singh, V. (2010), "The importance of role models and demographic context for senior women's work identity development", *International Journal of Management Reviews*, Vol. 12 No. 3, pp. 284-300, doi: [10.1111/j.1468-2370.2009.00262.x](https://doi.org/10.1111/j.1468-2370.2009.00262.x).
- Singh, V. (2008), "Transforming boardroom cultures", Report for UK Resource Centre for Women in Science, Engineering and Technology, Bradford.

- Smith, N. and Parrotta, P. (2018), "Why so few women on boards of directors? Empirical evidence from Danish companies in 1998–2010", *Journal of Business Ethics*, Vol. 147 No. 2, pp. 445-467, doi: [10.1007/s10551-015-2974-9](https://doi.org/10.1007/s10551-015-2974-9).
- Storvik, A. and Gulbrandsen, T. (2016), "Included, but still not equal? Gender segregation at quota regulated boards", *Corporate Board Role Duties and Composition*, Vol. 12 No. 2, pp. 33-44, doi: [10.22495/cbv12i2art5](https://doi.org/10.22495/cbv12i2art5).
- Teigen, M. (2021), "The making and circulation of corporate quotas", in Byrkjeflot, H., Mjøset, L., Mordhorst, M. and Petersen K. (Eds), *The Making and Circulation of Nordic Models, Idea and Images*, Routledge, New York, NY, pp. 192-208, doi: [10.4324/9781003156925-12](https://doi.org/10.4324/9781003156925-12).
- Teigen, M. (2022), "From shockwave to ripple? The nuanced impact of corporate quotas in Norway", in Engeli, I. and Mazur, A.G. (Eds), *Gender Equality and Policy Implementation in the Corporate World. Making Democracy Work in Business*, Oxford University Press, Oxford, pp. 197-217.
- Terjesen, S., Sealy, R. and Singh, V. (2009), "Women directors on corporate boards: a review and research agenda", *Corporate Governance: An International Review*, Vol. 17 No. 3, pp. 320-337, doi: [10.1111/j.1467-8683.2009.00742.x](https://doi.org/10.1111/j.1467-8683.2009.00742.x).
- Turner, J.C., Brown, R.J. and Tajfel, H. (1979), "Social comparison and group interest in ingroup favouritism", *European Journal of Social Psychology*, Vol. 9 No. 2, pp. 187-204, doi: [10.1002/ejsp.2420090207](https://doi.org/10.1002/ejsp.2420090207).
- Wang, M. and Kelan, E. (2013), "The gender quota and female leadership: effects of the Norwegian gender quota on board chairs and CEOs", *Journal of Business Ethics*, Vol. 117 No. 3, pp. 449-466, doi: [10.1007/s10551-012-1546-5](https://doi.org/10.1007/s10551-012-1546-5).

Corresponding author

Sigtona Halrynjo can be contacted at: sigtona.halrynjo@samfunnsforskning.no

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com