Bringing Women on Board? Family Policies, Quotas and Gender Diversity in Top Jobs

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Abstract
An influential body of work has identified a ‘welfare-state paradox’: work–family policies that bring women into the workforce also undermine women’s access to the top jobs. Missing from this literature is a consideration of how welfare-state interventions impact on women’s representation at the board-level specifically, rather than managerial and lucrative positions more generally. This article contributes to addressing this ‘gap’. A fuzzy-set Qualitative Comparative Analysis of 22 industrialised countries reveals how welfare-state interventions combine with gender boardroom quotas and targets in (not) bringing a ‘critical mass’ of women onto private-sector corporate boards. Overall, the analysis finds limited evidence in support of a welfare-state paradox; in fact, countries are unlikely to achieve a critical mass of women on boards in the absence of adequate childcare services. The results further suggest that ‘hard’, mandatory gender boardroom quotas are not necessary for achieving more women on boards; ‘soft’, voluntary recommendations can also work under certain family policy constellations.

Keywords
family policies, quotas, welfare-state paradox, women on boards

Introduction
The expansion of ‘defamilialising’ policies designed to reduce the family’s care load and conflicts between employment and care has helped bring more women across advanced economies into the workforce. These trends have especially benefitted lower-income women who cannot afford market solutions to work–family conflicts and who typically find better working and pay conditions in the public sector (e.g. Esping-Andersen, 2009). However, an influential body of work has problematised such policies for triggering gendered ‘paradoxes’ or ‘trade-offs’ for high-earning women (Mandel...
According to these studies, generous work–family reconciliation policies and large welfare states strengthen the ‘glass ceiling’ that undermines women’s entry into managerial and lucrative positions by disrupting women’s careers, increasing employer discrimination against women and drawing women away from higher-paying private-sector positions (e.g. Cooke, 2011; Mandel and Semyonov, 2006; Pettit and Hook, 2005; Shalev, 2008). Consequently, while Nordic countries achieve high female labour force participation rates, women are underrepresented in managerial positions compared with other countries. Instead, the United States and other less generous welfare states have been leaders on this measure, with the Conservative, Mediterranean and Post-Socialist regimes sitting in between these two poles (Mandel and Semyonov, 2006).

Missing from this literature, however, is a consideration of the relationship between different work–family constellations and women’s representation in the very top leadership positions at the board level. This article contributes to addressing this ‘gap’. A fuzzy-set Qualitative Comparative Analysis of 22 industrialised countries illuminates the combination(s) of ‘women-friendly’ state interventions associated with a ‘critical mass’ of women in board positions across private-sector companies. ‘Board positions’ encompass the chairperson, executive directors (including the Chief Executive Officer), non-executive directors and any employee representatives on the board. Focusing on women’s share of these positions is important, not least because these jobs carry intrinsic (e.g. job satisfaction) and extrinsic (e.g. high pay and status) benefits; redistributing the gendered division of power at the top of the labour market can also have positive trickle-down benefits for other women at lower levels in terms of better employment outcomes (e.g. smaller gender wage gaps) and improved firm-level policies and cultures (e.g. measures to combat sexual harassment) (Kowalewska, 2020).

The state interventions examined are the main welfare interventions identified in prior studies – namely, leaves, childcare services and public-sector employment (e.g. Mandel and Semyonov, 2006) – and legislation governing the gender composition of private-sector corporate boards. While certain countries have consciously avoided such legislation (e.g. the United States), several others have adopted a voluntary or ‘soft’ approach that encourages but does not force companies to address a lack of gender diversity in the boardroom. Unconvinced of the effectiveness of self-regulation, other governments have resorted to a mandatory-based approach, implementing ‘hard’ gender boardroom quotas with penalties for noncompliance, often to the dismay of business leaders and representatives (Mensi-Klarbach et al., 2019).

Overall, the analysis reveals limited evidence in support of a welfare-state paradox. While certain countries with less favourable leave policies have achieved a critical mass of women on boards, so too have many countries with well-designed paid leaves. Similarly, neither low nor high public-sector employment levels are associated with the outcome. Further, a critical mass of women on boards is less likely in the absence of adequate childcare services. The analysis also reveals that only countries with some form of legislation governing the gender composition of corporate boards have achieved a critical mass of women on boards. Nevertheless, hard gender boardroom quotas are not required for this outcome; a softer, business-led approach can also work. However, the
institutional context affects the potential achievements of the soft approach, as it has been most successful under ‘women-friendly’ work–family policy constellations.

**Literature review**

*Family policies and the welfare-state paradox*

Women’s employment patterns remain highly heterogeneous across developed economies. Whereas full-time employment – or at least long part-time employment – is common for women in Nordic countries, short part-time employment is widespread among women in most Anglo-Saxon and Continental countries. Meanwhile, although many women across post-Soviet countries, Southern Europe and the United States work full time, male breadwinning is also prevalent (Kowalewska and Vitali, 2020; Lewis et al., 2008).

Studies from across political science and sociology widely use the welfare regime perspective to understand these patterns. Traditionally, this perspective focuses on how ‘decommodifying’ state services or transfers are – i.e. how far they reduce citizens’ dependence on market incomes (Esping-Andersen, 1990). However, feminist scholars have long argued that decommodification ignores and implicitly relies on the unpaid household and family care work (still) carried out mainly by women. Thus, feminists argue the welfare regime perspective should account for state policies related to reproduction and care, which enable women’s employment. Feminists highlight the value of becoming ‘commodified’ in the first place: (well-paid) employment strengthens women’s bargaining power within relationships and enables women to leave dangerous or undesirable ones; it can also secure women’s access to social rights that are tied to employment, such as pensions (e.g. Hobson, 1994; Orloff, 1993).

Building on these feminist insights, studies have identified distinct family policy regimes, which largely overlap with established welfare regime typologies. In this vein, the ‘individual earner-carer’ strategy of Nordic countries (and, to a lesser extent, France) is highly ‘defamilialising’ (e.g. Korpi et al., 2013). Conversely, most Conservative welfare states endorse a ‘one-and-a-half’ male-breadwinner strategy (Lewis, 2001): generous cash allowances for mothers with young children value and reward women’s caregiving, while the design of childcare services encourages part-time employment for women. By contrast, in Liberal countries, care services are primarily purchased through the market (e.g. Korpi et al., 2013). Mediterranean family policies are even more residual (e.g. Thévenon, 2011), while post-Soviet countries bifurcate into those that are supportive of women’s continuous employment (e.g. Slovenia) and those that are less supportive (e.g. Poland) (e.g. Javornik, 2014).

Consequently, the welfare-state literature often characterises Nordic countries as gender-equality leaders to which other countries should aspire (e.g. Esping-Andersen, 2002). However, certain scholars have questioned whether the Nordic regime is ‘the best of all possible thinkable worlds’ (Kangas and Palme, 2005: 2). Instead, Mandel and Semyonov (2006), among others, suggest a welfare-state ‘paradox’: while countries with larger public-sector workforces, longer maternity leaves and comprehensive public provision of childcare achieve higher labour market participation rates among women, they also
have lower representation of women in managerial and lucrative positions, especially in the private sector.

To begin with, large-scale public provision of services creates jobs in occupations and sectors – including high-skilled positions – that are traditionally dominated by women and involve tasks stereotypically associated with women (e.g. service, nurturance and social interaction) (e.g. Charles, 2003). Public-sector employment also tends to offer family-friendly working conditions and greater job protection than in the private sector. These factors underpin the overrepresentation of women in the public sector (e.g. Shalev, 2008). However, senior positions in the public sector typically pay less than equivalent positions in the private sector. While public-sector wages for low-earners generally exceed those in the private sector because of higher wage floors, the reverse holds for high-earners due to limits on deviations from uniform pay scales for public employees (Tepe et al., 2015).

Lengthy maternity leaves can also have negative effects on the share of women in high-level occupations. Studies indicate an inverted U-shaped relationship between leave duration and women’s employment prospects (Pettit and Hook, 2005). Very short leaves – or their absence altogether – may force women out of employment when they become mothers, therein reducing their job experience and making them less attractive to employers (Budig et al., 2016). However, long leaves can lead to a depreciation in job-relevant knowledge and skills and missed opportunities for training, promotions and experience. Longer leaves may also strengthen the incentives for employers to favour men for hiring, promotions and training in anticipating the greater statistical likelihood that women will be absent from the workplace for long spells (Mandel and Semyonov, 2006). Payment levels of leaves also potentially matter, insofar as higher levels provide stronger incentives for mothers to return to employment once the leave period has expired to avoid a sharp drop in income (e.g. Bonoli, 2013).

Meanwhile, some scholars suggest the provision of childcare services has limited impact on high-earning women’s employment position. Arguably, women who have made greater investments in their education and careers will seek to recoup those investments by remaining in paid employment, regardless of the wider institutional context. Besides, these women typically face better job prospects in terms of wages and benefits and tend to be more career-oriented anyway (e.g. Del Boca et al., 2009). Going further, some scholars contend that greater state intervention in childcare, as in Nordic countries, may fail to meet the needs of high-earning women (e.g. Shalev, 2008). Publicly provided childcare is usually compatible with national standard working hours; conversely, private providers of childcare are not always part of statutory frameworks, meaning they have greater flexibility over opening hours (Yerkes and Javornik, 2019). Hence, private services may be better-placed to cover evenings, weekends or other unconventional hours when, for example, important meetings or networking events happen. While private provision of childcare is less widespread in Nordic countries, a large, low-wage private service sector has filled the gap left by a lack of public investment in residual welfare states, arguably to the benefit of high-earning women (Shalev, 2008).

Accordingly, the ‘paradox’ is that while they achieve high employment rates for women, Nordic welfare states have historically had lower shares of women in managerial positions when compared with Anglo-Saxon countries, especially the United States.
(e.g. Mandel and Semyonov, 2006). Still, the relationship between work–family policies and women’s professional advancement is by no means well-established. Some recent studies suggest that women’s chances of reaching managerial and lucrative positions are no different in social-democratic countries than elsewhere (e.g. Brady et al., 2020; Korpi et al., 2013). Indeed, most scholars find neutral or positive impacts of public childcare on higher-earning women’s careers (e.g. Cipollone et al., 2014). Other studies find that generous leave policies do not always induce discrimination against women. Rather, by making it less likely that women will exit from the labour market, policies that enable women to take time off while keeping their jobs may actually encourage employers to hire more women (e.g. Mun and Jung, 2018).

**Gender and corporate boards**

Missing from the welfare state and family policy literatures is a consideration of how welfare states shape women’s access to corporate board positions specifically, rather than managerial and lucrative positions more widely. It may be countered that state interventions relating to motherhood and childcare are less relevant at the board level. After all, women in these positions are usually in their 40s, 50s or even 60s (e.g. Groysberg and Bell, 2012). Alternatively, they may not have children. However, evidence from the United States indicates that most women on boards are mothers, even if a lower percentage has children when compared with women in the general population (64% versus 86%) (Groysberg and Bell, 2012; Pew Research Centre, 2018). It is plausible, then, that work–family policies have had cumulative effects on mid-life women’s careers to the extent they are not on a level playing field when compared with mid-life men. These women may have accrued fewer years of (full-time) on-the-job experience and firm-specific knowledge due to motherhood and had access to fewer career-enhancing opportunities over their working lives because of employers’ systematic preferences for men (Thams et al., 2018). Mid-life women who are not mothers may also be disadvantaged if, as paradox theory predicts, generous family provisions increased their experiences of statistical discrimination when they were younger. Thus, we might expect lower shares of women on boards under generous welfare states.

However, as the literature on women on boards highlights, variations in the spread and reach of gender boardroom legislation also matter for understanding cross-national patterns in women’s share of board seats (e.g. Humbert et al., 2019). Some countries have avoided implementing any such legislation – namely, the United States (although California and some other states have introduced their own initiatives), Luxembourg and most Central and Eastern Europe countries. Alternatively, many advanced economies have introduced some form of gender boardroom legislation since the late-2000s. Certain countries have gone as far as introducing ‘hard’ quotas, which oblige companies to achieve a set percentage of women on their boards or face penalties. Penalties range in severity from declaring noncompliant board appointments as invalid (France and Germany) to dissolving noncompliant companies (Italy and Norway) (Senden and Kruisinga, 2018). Partly due to the unpopularity of hard quotas, other countries have opted for a ‘soft’ approach. Provisions in corporate governance codes advocate for ‘gender-balanced’ boards (Austria and Poland) or encourage companies to reach or set their
own targets for women’s share of board seats (Australia, Denmark, Finland, Ireland, Netherlands, Portugal, Spain, Sweden and the UK). Nevertheless, while companies may have to give a ‘compelling’ reason explaining why they have not complied, soft regulations are essentially avoidable since there are no real repercussions for noncompliance (Senden and Kruisinga, 2018).

A small but rapidly growing body of research on women on boards indicates that hard quota laws are most successful in increasing women’s board representation, while the possible effects of the softer approach are more disputed (e.g. Humbert et al., 2019; Klettner et al., 2016; Mensi-Klarbach and Seierstad, 2020). However, some studies suggest that wider institutional factors can support or undermine the success of gender boardroom regulations (Mensi-Klarbach and Seierstad, 2020). Moreover, few studies consider the role of welfare-state interventions specifically in magnifying or moderating the relationship between gender boardroom regulations and women’s share of board seats. Furthermore, those studies that do typically focus on a small number of countries (≤ 10) and neglect to disaggregate the unique contributions of individual policies (e.g. Grosvold et al., 2007; Mensi-Klarbach and Seierstad, 2020), which can have diverse and sometimes contradictory effects (Brady et al., 2020; Budig et al., 2016; Korpi et al., 2013).

Iannotta et al. (2016) contribute to filling this ‘gap’ in the literature on women on boards. They examine the configurations of leave policies, childcare services, gender boardroom regulations and other institutional features that lead to a high share of women on boards through a fuzzy-set Qualitative Comparative Analysis of 27 European countries. However, they do not distinguish between countries with a hard versus a soft approach to corporate board demography, which is a distinction that shows up as important in the results of this analysis, as elsewhere (e.g. Mensi-Klarbach and Seierstad, 2020). In addition, Iannotta et al. (2016) use a low threshold (20%) for defining a ‘high’ share of women on boards. Instead, the present study uses a threshold of 30% to reflect when women constitute a ‘critical mass’ (see ‘Sets’). This study further extends Iannotta et al.’s analysis by including more Anglo-Saxon countries and operationalising the welfare state’s role as employer to more fully test the applicability of paradox theory at the board level.

**Method: Fuzzy-set Qualitative Comparative Analysis**

To identify the combinations of welfare-state interventions and gender boardroom legislation that are associated with gender-diverse boards, a fuzzy-set Qualitative Comparative Analysis (fsQCA) was carried out. This qualitative method analyses cases as combinations of independent variables (or ‘conditions’), and then examines the outcomes associated with each combination. A core concept in fsQCA is ‘equifinality’: different combinations of conditions can be associated with the same outcome. By contrast, regression-based approaches typically aim to disaggregate cases into analytically separate variables and identify the single model that ‘fits’ the data best. Attempts to accommodate equifinality in quantitative research (e.g. Boolean logit and probit) are liable to problems when N is moderate due to the extreme data requirements of regression-based
Relatedly, in analysing cases as combinations of conditions, fsQCA can illuminate how the relationship between a given condition and the outcome of interest may vary depending on the specific combination of conditions to which the condition belongs—that is, its wider context.

FsQCA builds and tests hypotheses based on the presence/absence of conditions and the presence/absence of the outcome rather than relations of covariation (i.e. the more/less of X, the more/less of Y). This focus on relations of implication allows for differentiating ‘necessary’ from ‘sufficient’ conditions (Thiem et al., 2016). Necessary conditions (X) are present whenever the outcome (Y) is present: $X \leftarrow Y$. To illustrate: oxygen is a necessary condition for water; therefore, whenever water (Y) is present, oxygen (X) is also present. Still, the presence of a necessary condition does not guarantee the occurrence of the outcome if the condition is not by itself ‘enough’ to produce the outcome. Returning to the above example, the presence of oxygen does not automatically imply the outcome of water. This is because the presence of another condition—namely, hydrogen—is also required for this outcome.

Conversely, ‘sufficient’ conditions are those that are ‘enough’ for the outcome to occur. Whenever a sufficient condition is present, the outcome is always present: $X \rightarrow Y$. Nevertheless, the outcome can occur in the absence of a sufficient condition if another condition or combination of conditions are also associated with the outcome: for example, having the flu virus (X) is a sufficient condition for being ill (Y); yet Y can occur in the absence of X because one can be ill from other viruses.

Sets

In a fsQCA, each variable is represented by a ‘fuzzy set’. In this study, there are six fuzzy sets representing one outcome measure and five conditions. To determine whether each case is ‘in’ or ‘out’ of these fuzzy sets, the researcher uses theoretical and empirical knowledge of cases to establish three qualitative ‘breakpoints’, as detailed in the following subsections. Sensitivity analyses confirm the robustness of the results to the use of alternative breakpoints (Sensitivity Analyses 2–5, Table S5 in online supplementary material). The breakpoints are: 0 (lower breakpoint), which denotes a country as ‘fully out’ of the fuzzy set and as not displaying the variable of interest at all; 1 (upper breakpoint), which indicates a country is ‘fully in’ the fuzzy set and fully displays the variable of interest; and 0.5 (crossover point), which indicates a country is ‘neither in nor out’ of the fuzzy set. Countries receive a continuous score for each fuzzy set of between 0 and 1. Countries are ‘out’ of a fuzzy set when scoring < 0.5, and ‘in’ when scoring > 0.5 (Ragin, 2008).

To determine each country’s (non-)membership to the fuzzy sets, the researcher must first transform raw data into fuzzy-set values. In this study, raw data were collated from multiple, disparate sources (Table S1, online supplementary material). Data were available for 22 advanced economies from these sources. Then, using the Package ‘QCA’ for R, raw data were transformed into fuzzy-set values using the logistic transformation (S-function) (Duşa, 2019). Table S4 (online supplementary material) summarises the raw data and fuzzy-set values.
Outcome. The outcome measure ‘Women on Boards’ (WB) is the percentage of board positions held by women in 2018 on average across a sample of the largest publicly listed firms \((n = 1579)\) in each country. While not representative of the entire population of firms, the sample includes the most prominent, powerful and influential companies in each country (see also Mun and Jung, 2018).

Countries score 0 on the outcome measure when women comprise less than 15% of board members and are considered ‘tokens’ (Kanter, 1977b: Figure 1). ‘Token’ women may feel pressure to minimise their differences from ‘dominants’ (i.e. men) and reduce their visibility by not ‘speaking out’. In addition, dominants might feel threatened or intimidated by tokens and exclude them from networks. Gender stereotypes are also more prevalent when women are a token minority (Kanter, 1977a, 1977b). The crossover point (i.e. the point beyond which women are no longer a minority on boards and countries are more ‘in’ the set than ‘out’ of it) corresponds with the threshold at which women start to comprise a ‘critical mass’. Research suggests that when women comprise a ‘critical mass’ of 30% of board members, they can form coalitions and exert meaningful influence and power over decision-making (e.g. Torchia et al., 2011). Countries are fully in the fuzzy set when women hold \(\geq 50\%\) of board seats.

Conditions. The first condition, ‘Optimal Leave’ (L), is captured by two sub-indicators: (i) weeks of total maternity and parental paid leave available to mothers; and (ii) average payment level across total paid leave, expressed as a percentage of national average earnings. Unlike for most other conditions, raw data for sub-indicator (i) were transformed into fuzzy-set scores using the ‘Bell-Shape’ function (see Duşa, 2019). This allows for excluding extreme values of very short and very long leaves from the fuzzy set to reflect the inverted U-shaped relationship between leave duration and women’s employment outcomes. Using this function implies two sets of upper breakpoints, lower breakpoints and crossover points. The upper breakpoints are 30 weeks and 53 weeks, meaning countries offering leaves within this bracket are fully in the fuzzy set. Recent research finds that 30–53 weeks is ‘optimal’ for various employment outcomes (e.g. Akgunduz and Plantenga, 2013; Budig et al., 2016). The point when leaves are ‘too long’ is more contentious; yet, most research agrees that leaves exceeding three years are associated with the lowest returns to participation in paid employment and greatest wage penalties for mothers (Budig et al., 2016; Pettit and Hook, 2005). Accordingly, countries are scored 0 when leave exceeds 156 weeks or when no leave is available at all, which is also associated with severe career penalties (Budig et al., 2016). The crossover points are the respective midpoints of 15 weeks and 104.5 weeks. Thus, countries offering paid leaves in the range of 15 to 104.5 weeks score > 0.5, thereby indicating their membership to the fuzzy set; conversely, countries offering paid leaves that are shorter than 15 weeks or longer than 104.5 weeks score < 0.5, thereby signifying their non-membership to the fuzzy set.

Regarding sub-indicator (ii), countries score 0 when there is no paid leave and 1 when a woman’s previous wages are fully replaced. The crossover point is 60%. Prior studies use a similar threshold to indicate when payment levels are adequate to provide financial incentives to return to work once the leave period expires to avoid a steep drop in income (e.g. Bonoli, 2013).
A country’s overall score on ‘Optimal Leave’ follows the ‘minimum principle’ in fuzzy-set theory, whereby a country’s overall membership to a fuzzy set is equivalent to its lowest score across all the sub-indicators that capture the fuzzy set (Ragin, 2000). Ireland, for example, provides 26 weeks of paid leave, giving a fuzzy score on (i) of 0.99; yet, the replacement rate is only 26.7%, leading to a fuzzy score on (ii) of 0.16. According to the minimum principle, Ireland’s overall score on L is the lowest of these scores: 0.16. Logically, this makes sense, since Ireland can hardly be considered as belonging to the set ‘Optimal Leave’ given its low replacement rate. Conversely, taking the average of the scores across these two indicators would incorrectly place Ireland in the set by awarding it a score of \( > 0.50 \): \( (0.99 + 0.16)/2 = 0.575 \).

The second condition, ‘Widespread Childcare Services’ (CC), is also captured by two sub-indicators covering spending on childcare and childcare coverage, the latter of which is operationalised by enrolment rates in line with previous studies (e.g. Brady et al., 2020). Although these measures do not capture the full characteristics of a country’s childcare system, they are widely used due to the availability of cross-national data and their function as common ‘yardsticks’ between countries (Jensen, 2009). Sub-indicator (i) is state spending on formal childcare services per capita for 0–5 age groups. The Organisation for Economic Cooperation and Development (OECD) transforms country-specific values to US dollars using Purchasing Power Parity. Countries are scored 1 when they spend \( \geq \$9589 \), corresponding with the average annual cost of childcare for a pre-school child in the United States in 2015 (Schulte and Durana, 2016). The lower qualitative breakpoint is $0. The crossover point is the midpoint of $4794.50. Sub-indicator (ii) is the average of enrolment rates in formal care arrangements across two age groups: 0–2 years and 3–5 years. Countries are scored 1 when enrolment reaches 90%. Full enrolment would overlook that young babies are usually not in formal arrangements because a parent is on leave, rather than due to a lack of services. The crossover point corresponds to at least half of under-fives in childcare. Countries score 0 if no children are enrolled in childcare. Again, overall membership to CC is based on the minimum principle (i.e. the lowest of a country’s scores across (i) and (ii)).

The third condition, ‘Large Public-Sector Workforce’ (PS), captures the relative magnitude of the welfare state as an employer. It is measured by the share of people directly employed in ‘general government’ as a percentage of total employment. Countries are scored 1 when 30% of the workforce is in general government to reflect ‘high public-sector employment levels’ and are scored 0 when \( \leq 10\% \) of workers are in the public sector to signify when countries ‘rely less’ on such workers (OECD, 2015: 84). The crossover point is the midpoint of 20%.

The fourth and fifth conditions concern legislation governing the gender composition of private-sector corporate boards. Countries receive a binary score of 1 or 0 depending on the presence/absence of such measures. The fourth condition, ‘Hard Gender Boardroom Quota’ (HQ), relates to the presence/absence of compulsory quotas that require private-sector companies to fill at least 30% of board seats with women by January 2018. This deadline aligns with the outcome measure, for which data refer to 2018. Thus, countries with a hard-quota deadline beyond January 2018 (e.g. Portugal) are scored 0 on this condition to avoid producing misleading results. The fifth condition, ‘Soft Gender Boardroom Regulations’ (SR), is measured by the presence/absence of
‘soft’ recommendations with no deadlines or penalties. Membership to each of the ‘Hard Gender Boardroom Quota’ and ‘Soft Gender Boardroom Regulations’ sets is mutually exclusive.

Procedure and results

The next step in a fsQCA entails assessing which, if any, conditions are ‘necessary’ for the outcome to occur (Table 1). ‘Consistency’, which ranges from 0 to 1, captures the degree to which countries with a condition in common also display the outcome. To be necessary, consistency should be $\geq 0.90$. ‘Coverage’, which also ranges from 0 to 1, is a measure of the empirical relevance of a condition, with scores closer to 1 indicating greater relevance and scores closer to 0 indicating greater triviality (Ragin, 2006).

Only ‘Widespread Childcare Services’ meets the criteria for necessity (consistency: 0.91; coverage: 0.70). Separately analysing the sub-indicators that comprise this condition revealed that both dimensions meet the criteria for necessity: consistency is 0.92 for spending (coverage: 0.66) and 0.99 for enrolment rates (coverage: 0.47). A Necessary Condition Analysis (online supplementary material, page 7) confirmed this finding. The case of Italy – which, among all countries that display the outcome, has the lowest scores on childcare spending and enrolment rates – tells us that achieving at least 30 per cent of women on boards becomes possible when spending is $\geq 3,900$ per capita and enrolment is $\geq 61.8$ per cent (these are the respective figures for Italy).

Subsequently, a ‘truth table’ was constructed (Table 2). This lists all logically possible combinations of conditions and whether each combination is associated with the outcome. A consistency score of $> 0.75$ indicates that a combination is ‘sufficient’ for the outcome (Schneider and Wagemann, 2012). On this basis, rows 1–5 are sufficient.

Using the truth table, the QCA software package produced a ‘solution formula’, which summarises all the combinations of conditions associated with the outcome in the simplest form possible. In fuzzy-set notation, ~ denotes the absence of a condition. Meanwhile,
Table 2. Truth table.

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Notes: ‘1’ indicates the presence of the condition, ‘0’ its absence. L: ‘Optimal Leave’; CC: ‘Widespread Childcare Services’; PS: ‘Large Public-Sector Workforce’; HQ: ‘Hard Gender Boardroom Quota’; SR: ‘Soft Gender Boardroom Regulations’. Outcome: ‘Women on Boards’. Rows 12–32 are ‘logical remainders’: potential configurations that are not empirically observed. Among these, rows marked with ‘ζ’ are ‘impossible remainders’ that cannot possibly exist, as membership to both HQ and SR is impossible; hence, these rows are scored 0 in the ‘Outcome’ column. Rows marked with ‘ε’ are ‘incoherent counterfactuals’ in that they contradict the statement of necessity, as the outcome cannot occur in the absence of CC; thus, these rows are scored 0 in the ‘Outcome’ column as well. Logical remainders in 26–32 are also scored 0 in the final column in line with the ‘complex’ solution (see Schneider and Wagemann, 2012).

Source: own calculations (Table S1 in the online supplementary material provides data sources).
* denotes logical ‘AND’; for example, \( H^*O_2 \) signifies that oxygen combined with hydrogen leads to the outcome of water. Finally, + denotes ‘OR’; for example, FLU + PNEUMONIA indicates that one can be ill from either flu or pneumonia – that is, there is more than one pathway to the outcome. Recall that the presence of hard quotas (HQ) implies an absence of soft regulations (~SR) and vice versa. Hence, the solution formula is most simply expressed as:

\[
\sim L^*CC^*PS^*HQ + \sim L^*\sim CC^*\sim PS^*HQ + L^*CC^*\sim PS^*HQ + CC^*PS^*SR
\]

Pathways: (1) (2) (3) (4)

(solution coverage: 0.74; solution consistency: 0.89)

The solution formula shows four alternative pathways to the outcome. As Table 2 shows, France and Norway are in Pathway 1, which is defined as hard quotas combined with widespread childcare services and a large public-sector workforce. Italy belongs to Pathway 2 (a hard quota under residual work–family policies), while Germany displays Pathway 3 (a hard quota combined with optimal leaves and widespread childcare services but a smaller public sector). Denmark, Finland and Sweden are in Pathway 4 (soft regulations combined with widespread childcare services and high public-sector employment).

**Discussion and conclusion**

This article has sought to address a ‘gap’ in the literature on work–family policies and women’s professional advancement by examining the combinations of ‘women-friendly’ welfare-state interventions and gender quota legislation under which a ‘critical mass’ of women in private-sector board positions is achievable. A fuzzy-set Qualitative Comparative Analysis revealed that both generous (e.g. Norway) and lean welfare states (e.g. Italy) have realised this outcome under ‘hard’ gender boardroom quotas; yet, certain countries with ‘soft’ targets and recommendations have achieved this outcome too. Denmark, Finland and Sweden – which also have relatively large public-sector workforces and widespread childcare services – are the only countries with soft regulations to have achieved gender-diverse boards, which suggests that the institutional context matters for the success of soft measures (Mensi-Klarbach and Seierstad, 2020 make a similar point).

By decomposing welfare states into separate policy dimensions, the analysis further revealed that childcare services are a ‘necessary’ condition for a critical mass of women on boards. Only Italy violates the statement of necessity. However, the operationalisation of childcare effort masks high regional variation in childcare provision across Italy, as well as high rates of informal care by grandparents (e.g. Del Boca et al., 2004) and a large undocumented migrant care workforce characterised by low wages and high flexibility (e.g. Da Roit and Sabatinelli, 2013). This might help to explain how Italy has achieved a critical mass of women, despite inadequate childcare spending. Nevertheless, the role of the Italian hard quota in generating this outcome should not be understated, as other Southern European countries adopting the ‘soft’ approach have not realised the outcome.
Thus, the findings corroborate evidence that childcare services can impact positively on high-earning women’s careers. These women have the most to gain from paid employment in terms of job quality and wages, and so may be highly responsive to childcare policies (e.g. Cipollone et al., 2014). In addition, high-earning women do not face many of the structural barriers that impede lower-income women’s access to childcare services (e.g. Pavolini and Van Lancker, 2018). For high-earning, mid-life women seeking board positions, the availability of childcare at earlier stages of their careers may have helped them to maintain continuous employment and accumulate more human capital and employment experience, so they are well-placed to compete for a board seat. While public childcare is not always flexible, private forms of childcare have begun to encroach on public provision, even in Nordic countries (e.g. Mahon et al., 2012). Therefore, higher-income women can plug gaps in public provision with more flexible private alternatives, like hiring a private nanny (although they may have more flexible working options anyway, such as compressed hours).

Further against paradox theory, the findings suggest that a large public sector does not necessarily impede women’s access to private-sector board positions. Certain countries with high public-sector employment levels – namely, the four Nordic countries plus France – display a critical mass of women on boards. What mechanism(s) might underlie this finding? Potentially, the less family-friendly working conditions offered in the private sector are not a major deterrent for higher-income women seeking elite positions. Alternatively, this finding may reflect that private-sector employment can be family-friendly too, at least in some contexts. Where the public sector is a major employer and offers flexible working, private-sector companies may compete for the ‘best’ employees by offering their own family-friendly corporate policies (see e.g. Wiß and Greve, 2020). In addition, by increasing the visibility of women in public life, a large public sector – in which women are better-represented in senior and leadership roles (e.g. Sealy et al., 2009) – may intensify normative pressures on private-sector companies to address a lack of gender diversity at the top. The pressures may be especially acute in countries that have achieved more women in public life through gender quotas, targets and recommendations in the public sector, as in Finland and Sweden. Furthermore, a by-product of such measures is a larger pool of women with public-sector board experience, whose skills are readily transferable to the private sector.

An additional finding is that the design of leaves for mothers does not appear to be associated with women’s share of board seats: certain countries with ‘optimal’ leave systems and certain countries with suboptimal leave systems have at least 30% of women on boards. This may reflect that high-income women’s employment behaviour and outcomes are less affected by the design of leaves, since these women are usually career-oriented anyway (e.g. Morgan and Zippel, 2003). It may also reflect that the design of leaves does not necessarily influence employers’ bias against women.

Overall, then, the findings reveal beneficial or at least neutral effects of women-friendly welfare states on women’s access to powerful and lucrative positions. Thus, progressive welfare policies need not necessarily result in a zero-sum exchange (Cooke, 2011): governments can provide the public-sector jobs and generous work–family policies that help bring lower-income women into the labour force without major negative consequences for better-off women (Korpi et al., 2013 make a similar point).
Still, the findings suggest progress towards gender-diverse boards will remain stalled without direct government intervention targeted at corporate boards, as only countries with quotas or regulations have achieved a critical mass of women on boards. This highlights that the underrepresentation of women in high-authority and powerful positions is not just about motherhood; there is ‘plain old discrimination to deal with, too’ (Orloff, 2009: 139). Gender stereotypes that run deeper than motherhood (e.g. women are ‘nice’, men are ‘assertive’) continue to influence hiring and promotion decisions and processes for board positions (Koenig et al., 2011). Affirmative action offers an effective policy tool for overriding such discrimination by disrupting usual selection procedures. Potentially, other dimensions of gender inequality in employment on which progress has similarly been slow – for example, women’s underrepresentation in lower levels of management or in science and engineering – could also benefit from such direct intervention.

Nevertheless, the results show that ‘hard’, mandatory quotas are not a ‘necessary’ condition for achieving a critical mass of women on boards; ‘soft’, voluntary regulations have also worked in certain countries. This finding will likely be welcomed by policymakers given opposition to hard quotas from business leaders and representatives. Instead, governments can appear less hostile to business by adopting the self-regulatory approach. Even so, the success of this approach appears to hinge on a broader welfare-state context that is ‘women-friendly’. This may be why countries lacking such policy supports have had less success with soft recommendations (e.g. Spain). Here, normative pressures on companies to comply with gender boardroom regulations are likely weaker, as gender equality is not as institutionally embedded. Thus, policymakers should also prioritise work–family policies to reap the benefits of the voluntary approach to gender boardroom regulations.

That said, at the time of writing, Australia and the UK – which have adopted numeric, albeit non-binding targets – are close to reaching 30 per cent of women on boards. While the state plays a much smaller role in the provision of childcare services than in Scandinavia, both Australia and the UK reach or almost reach the minimum levels of childcare spending and enrolment rates associated with gender-diverse boards according to the Necessary Condition Analysis. Hence, it is possible they will soon ‘catch up’ with Nordic countries in terms of women’s board representation. Further research is required to better understand the mechanisms that underlie the relationships between policy interventions and women’s board-level representation. One avenue involves examining the interplay between women’s individual characteristics (e.g. education level, number of children, years of labour force experience) and national-level policies in shaping cross-national patterns in the prevalence and profiles of women on boards. Certain ‘individual enabling traits’ (Dotti Sani and Scherer, 2018: 76), such as a higher education level, may be more important for women seeking board positions in gender-unequal national contexts, as these traits help individual women to ‘stand out’ amid a broader setting that is working against them. Alternatively, in gender-unequal countries, women’s individual traits may make less difference because women are undervalued anyway (Dotti Sani and Scherer, 2018). Another avenue for investigation concerns the role of firms and industry-type in mediating the relationship between national-level policies and women’s board membership. Finally, although this article has stressed the impact of welfare-state interventions, future research should consider other potential national-level influences on
women’s board membership, such as religion, culture and advocacy groups (e.g. the 30% Club).

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Supplementary material

The supplementary material is available online with the article.

Notes

1. While mid-life women may have elderly parents(-in-law) who require care, few women have these responsibilities when compared with the percentage of women with childcare responsibilities; furthermore, most women with elder care responsibilities do not reduce or withdraw their labour (e.g. Naldini et al., 2016).
3. Data for Austria, Czechia, Denmark, Estonia and Germany cover women’s share of non-executive directorships only.
4. Countries’ performance in terms of women’s share of board seats varies depending on which data source is used. This study used the source that covers the greatest number of companies to give the most representative picture (Tables S1 and S2, online supplementary material).
5. A Necessary Condition Analysis confirmed these findings (online supplementary material, p. 7).

References


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