



Explaining women's presence on corporate boards: The institutionalization of progressive gender-related policies[☆]



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ABSTRACT

We draw on a phenomenological model of institutional theory to explore how sub-national policies shape corporate board gender diversity of publicly traded firms. Using a sample of S&P 1500 firms in 49 U.S. states from 2003 to 2014, we find that firms headquartered in states with progressive policies that protect women from discrimination and provide greater availability of emergency contraception and public funding for abortions have greater shares of women directors in their board of directors. Our findings hold after a series of robustness checks and offer implications for theory, policy, and practice.

1. Introduction

Considerable public discussion centers on perceived career barriers, with one of the most debated topics, the gender composition of the highest echelon of corporate leadership—the board. Presently, women comprise only 27.8% of new directors' appointments to Fortune 500 firms, a 2% decline from the prior year (Heidrick & Struggles, 2017). The share of women directors in many countries has largely stagnated over the last 20 years, prompting fourteen national governments to enact gender quotas for corporate boards and another sixteen countries to establish “comply or explain” codes (Rodrigues & Lopes, 2017; Terjesen, Aguilera, & Lorenz, 2015).

Scholarly research explores the antecedents of women's presence on corporate boards focusing on individual-, board-, firm-, and industry-level predictors (e.g., Brammer, Millington, & Pavelin, 2007; Grosvold, 2011; Grosvold, Brammer, & Rayton, 2007; Hillman, Shropshire, & Cannella, 2007). Extant research also delves into country-level determinants emphasizing, for example, the importance of female representation in managerial positions, gender pay gap, and traditions of women's political representation (Terjesen & Singh, 2008), and the role of legal, cultural, and religious systems (Chizema, Kamuriwo, & Shinozawa, 2015) and dominant institutions (e.g., government, family, education, religious, economic) (Grosvold & Brammer, 2011; Grosvold, Rayton, & Brammer, 2016).

A major gap in the literature is attention to lower levels of geographic analysis and local context (Terjesen, Sealy, & Singh, 2009). This gap may be explained by the difficulty in obtaining data and the fact that many developed countries utilize fairly homogeneous national governance systems. In large countries such as the U.S., state laws often supersede federal requirements (Caughey & Warshaw, 2016) and individual states have the power to adopt legal statutes that influence governance practices such as board composition (Luoma & Goodstein, 1999). Anecdotal evidence suggests that there are sub-national differences across the U.S. in terms of women's representation in top leadership. For example, a Massachusetts study of corporate directors indicates that larger pools of local women in academia and consulting are associated with new routes to boardrooms (Adams & Flynn, 2005), while a Tennessee study reveals low levels of board gender diversity compared with national averages (Helms, Arfken, & Bellar, 2008).

Institutional theorist John Meyer (2008, 2010) posits that adopting a phenomenological perspective can inform research on the institutional patterns that constrain and empower actors. We leverage institutional theory (e.g., DiMaggio & Powell, 1983; Meyer, 2010; Meyer & Rowan, 1977) and research on women in corporate boards (e.g., Grosvold et al., 2016; Orloff, 1993) to argue that heterogeneous institutional forces can motivate and direct women's attitudes, actions, and career aspirations such that the share of women appointed to corporate boards varies based on geography. In doing so, we investigate

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the research question: how do gender specific legislative institutions at the state level shape corporate board gender diversity of publicly traded firms? We test our theory using a sample of S&P 1500 firms which captures 90% of U.S. market capitalization and demonstrates the heterogeneity of female board representation across the U.S. Controlling for alternative explanations, we find that state-level policies that protect women from discrimination and are progressive regarding family planning are associated with greater shares of female directors. These findings suggest that as state progressive policies become institutionalized and accepted, there are more opportunities for women to attain directorships.

Our research makes three primary contributions to the literature. First, we extend *Knyazeva, Knyazeva, and Masulis' (2013)* finding that the local supply of executives and talent impacts board composition and structure by developing a phenomenological view of institutions and examining state-level policies' important role in shaping local female director talent supply. Second, we respond to calls to examine how policies explain differences in corporate governance outcomes (*Aguilera & Jackson, 2003; Aguilera, Judge, & Terjesen, 2018*) such as women's representation on corporate boards (*Grosvold et al., 2016; Terjesen et al., 2015*). Third, our single country design controls for latent institutional factors such as national differences in corporate governance systems that can confound international comparative findings (*Aguilera & Jackson, 2003*) and answers calls to explore within-country institutional heterogeneity (*Terjesen et al., 2009*) and bundles of institutions (*Grosvold & Brammer, 2011*).

1.1. Context: U.S. sub-national institutions and female labor force participation

The share of women in the American labor force rose dramatically over the last 50 years from 32% in 1948 to 56.8% in 2016, while men's labor force participation fell from 86.6% to 69.2% in the same time period (*U.S. Bureau of Labor Statistics, 2017*). Yet women's growing share of labor force employment is not met with equivalent increases in the share of female managers or directors (*U.S. Census, 2010*). Among U.S. boards, the share of women directors grew in the 1970s and 1980s, but slowed in the 1990s such that in 2017 about 27% of Fortune 500 board directors were women, compared to 10% in 1995 (*Catalyst, 2017*). These country level statistics disguise the tremendous heterogeneity in state levels of women's advancement to the corporate elite. For example, in our data of all S&P 1500 firms from 2003 to 2014, we do not find a single female director among Alaskan firms, while New York firms have as high as 64% women directors in a given year.

The vast differences across states in policies for family planning, work and family balance, and gender discrimination in hiring reflect distinct state institutional environments. While federal law provides a basic guideline, the U.S. Constitution's 10th Amendment grants extensive powers to the states, as originally articulated by *James Madison (1778: 303)* in the Federalist Papers:

“The powers delegated by the proposed Constitution to the federal government... will be exercised principally on external objects, as war, peace, negotiation, and foreign commerce.... The powers reserved to the States will extend to all the objects which... concern the lives, liberties, and properties of the people, and the internal order, improvement, and prosperity of the State.”

Thus, the majority of laws that direct Americans' opportunities and actions are passed by the state in which individuals live, work, and raise families. States' prioritization of certain legislative ideologies and programs signals commitment to specific outcomes and sets parameters for individuals' and organizations' actions.

2. Institutional theory and hypotheses

A large body of institutional theory describes how practices are

driven by “fit” to the environment such that actors' behavior is constrained by their contexts' technical pressures and societal expectations (*Meyer & Rowan, 1977; Scott, 2001*). Scholarship on institutions emphasizes “long-lasting, embedded, and persistent aspects of a social environment, which in turn have profound effects on individuals' behavior” (*Grosvold et al., 2016: 1164*). Institutional theorists such as *Meyer (2010)* highlight the complexity and richness of institutions that operate at multiple levels and include both formal dimensions such as laws, regulations, and policies around work and family life and informal dimensions such as norms, values, and conventions (*North, 1990; Scott, 2001*).

As there are many strands of institutional theory, we focus on contemporary phenomenological institutional theories that advocate for approaches that consider how “expanded and globalized modern systems of social control construct expanded models of proper persons, organizations, and states” (*Meyer, 2010: 15*). In particular, we concentrate on the extent to which “actors are constructed entities, playing parts as in the theater” (*Meyer, 2010: 4*), and emphasize the importance of institutional environments in influencing actors' actions, decisions, and behaviors. While institutional environments are multi-layered and conflicted (*Scott, 2005*), we delve into one aspect—the sub-national context. Building on the work of *Grosvold et al. (2016)*, we focus on gender-related policies specifically, a set of state-level formal institutions that are likely to define and influence the choices and behaviors of individual actors (e.g., women). Our theorizing posits that the parameters established through such policies enhance women's career prospects and aspirations, including to firms' top echelon—the board of directors.

Our focus on institutional theory mirrors a large body of comparative corporate governance research that uses institutional lenses to examine governance practices such as board composition (*Terjesen & Sealy, 2016*). Regarding the female composition of boards, extant research indicates that institutional theory is particularly suitable for examining gender-related issues given the contextual dependence on deeply embedded historical phenomena (*Grosvold et al., 2016*). For example, an early study demonstrates how stereotypes about what constitutes women's work shape compensation patterns that result in disadvantages to women (*Pfeffer & Davis-Blake, 1987*), while subsequent research examines how institutions shape gendered patterns of work-family conflict (*Thompson, Beauvais, & Lyness, 1999*). These institutional configurations are likely to set the parameters that hinder or enable women's opportunity to obtain the requisite skills, network, and confidence to obtain a board appointment.

Other research specifically compares female board representation across borders and delves into country-level determinants. For example, examining the European context, *Grosvold et al. (2016)* find that family, education, religious, economic, and government institutions influence the share of female directors. A recent study of firms in 45 countries by *Chizema et al. (2015)* finds that social institutions alleviate stereotypical attitudes viewing board directorship as a role more suitable for men than for women. While this body of work expands our understanding of country-level predictors of female board representation, such perspectives neglect the potential for significant within-country heterogeneity that may influence board composition. The present study adopts a phenomenological lens on institutional theory to survey the impact of state differences in institutional policies on women's corporate career ambitions by presenting various opportunities and constraints. Specifically, we maintain that states with more progressive policies that support family planning, offer family leave, and eliminate gender discrimination in hiring will increase the supply of better educated and more experienced women. Hence, firms originating from these states will have more female directors on their board of directors. *Fig. 1* depicts our model.

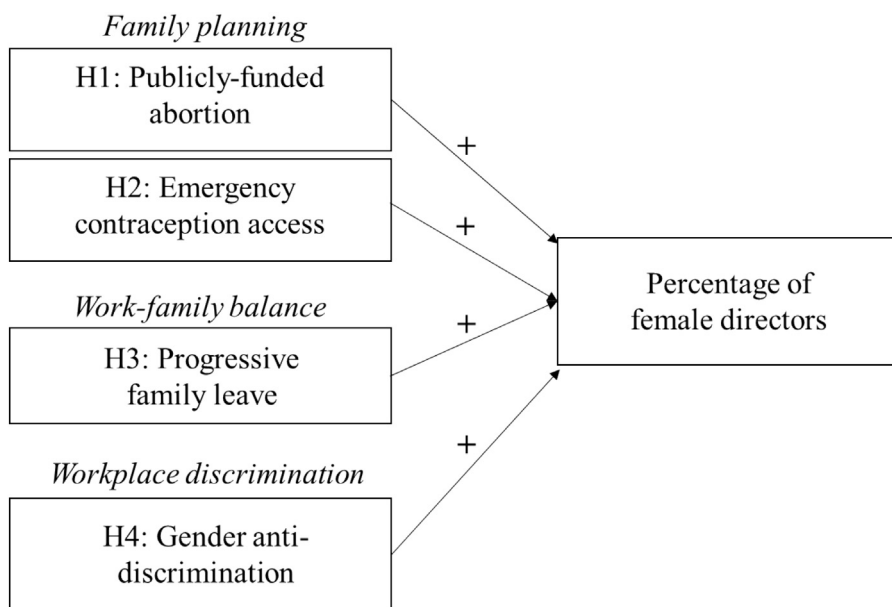


Fig. 1. Conceptual model of relationship between state-level gender-policies and the percentage of female directors.

2.1. Family planning policies: access to state-funded abortion and emergency contraception

Our institutional theory approach necessitates a focus on institutionalized systems that shape actors' behaviors. We take as a starting point institutions related to family planning that play a key role in influencing women's corporate careers (Grosvold et al., 2016). Decades of research on gender issues views policies related to family planning as central to women's "status and opportunities" in society and argues that "the effects of different physical demands on women and men in conceiving and bearing children are at the root of most social conceptions of gender roles" (McBride & Parry, 2016: 81). Women are central carers of family members and face very different family and career decisions compared with men. Indeed, Groyberg and Bell (2012) report that compared to their male counterparts, female directors are more likely to be single (9% vs. 1%) and childless (36% vs. 10%). Parenthood status explains significant gender gaps in wages, promotion, and participation in the labor market. We examine two dominant policies that shape women's empowerment and freedom of choice on parenthood status and family size: access to state-funded abortion and access to emergency contraception.

The 1973 *Roe v. Wade* U.S. Supreme Court decision legalized abortion for adult women in all states; however, states can control their residents' access to abortion and financial support (McBride & Parry, 2016). Following the 1973 court ruling, the Medicaid system of health insurance to low-income individuals covered the cost for all elected abortions by enrolled women. The Hyde Amendment, enacted by Congress in 1976 but only enforceable after a 1980 Supreme Court ruling, prevented federal Medicaid funds from covering most abortions and allowed (but did not require) states to levy similar aid restrictions. Following the Court's decision, twenty-seven states almost instantly restricted Medicaid funding, and another ten states followed by 1990.

States also exercise legal discretion regarding access to emergency contraception (EC), a safe method of contraception introduced in the 1970s and 1980s that is up to 95% effective if taken within 72 h of intercourse (U.S. FDA, 1997). Unrestricted access to EC delays fertility which is associated with increases in women's employment in professional occupations (Goldin & Katz, 2002), paid labor force participation, and total annual hours worked (Bailey, 2006). While the U.S. FDA approved EC in 1999, many state legislatures enacted policies that made obtaining EC inconvenient or almost impossible by restricting whether and to whom emergency rooms, pharmacists, and doctors

could prescribe or dispense EC (Bailey, 2006).

By offering progressive family planning policies, states signal their ideological commitment to women's empowerment and emancipation (Cueva Beteta, 2006). These states create an institutional infrastructure that enables women to make important decisions regarding their bodies and promote a social and cultural context that fosters women's independence, which ultimately creates greater gender parity and allows women to write their own history (Brieger, Francoeur, Welzel, & Ben-Amar, 2017). Favorable and progressive institutional contexts promote women's empowerment to shape their family commitments and career development, and can influence women's aspiration levels and employment prospects, which may result in eventual board appointments.

In a phenomenological model (c.f., Meyer, 2010), access to family planning is legitimated in a wider institutional system and constructs agency, identity, and activity for women. Indeed, a state's ideological commitment to women issues reflects the mobilization of social actors and various advocacy groups promoting women's reproductive rights and rights in general (Seierstad, Warner-Søderholm, Torchia, & Huse, 2017). Thus, state reproductive policies embody the social behaviors that mobilize and enact them, as well as the ritual and symbolic elements associated with women's equality and emancipation (Edelman & Stryker, 2005).

To use Meyer's (2010) theater metaphor, a female actor on a social stage who makes important decisions about her body can then enact scripted action which she believes will optimize her professional career prospects. Forty years of research consistently reports that abortion rates are higher in states with a higher opportunity cost of having children—that is, where women have stronger employment prospects (Davis, Olson, & Warner, 1993). States with more progressive family planning endow women with greater control over their education, family, and career decisions and thus increase their likelihood of pursuing professional careers and gaining the necessary experience to reach the board of directors. By contrast, states with more restrictive family planning policies ritually and symbolically institutionalize the lack of free choice for women. Based on the above arguments, we hypothesize:

Hypothesis 1. Firms headquartered in a state that publicly funds abortion will have a higher percentage of female directors.

Hypothesis 2. Firms headquartered in a state that does not restrict access to emergency contraception will have a higher percentage of female directors.

2.2. Work and family life policies

In a phenomenological view of institutions, work and family policies influence women's professional emancipation, including board composition. When women choose to have a family, a set of critical family policies concerning family caretaking and maternity leave shape societal norms around their personal and work activities (Moore & Shackman, 1996). Countries with more progressive family policies generally have higher female labor market participation (Esping-Andersen, 1999) as women and their employers face the expectation that women should be able to pursue both a family life and a work life. These policies are designed to help working family members of both genders balance work and family responsibilities by offering benefits such as time off for care-taking or childbirth, but have the greatest impact on women since they are typically their families' primary caregiver. Taken together, progressive family policies can facilitate women's opportunities to fulfill their family obligations with greater ease, less fear of discrimination, and ultimately, reduce gender inequality (Moore & Shackman, 1996).

In 1993, the U.S. government passed the Family and Medical Leave Act (FMLA) which guaranteed employees of large and private sector organizations unpaid leave for family or medical reasons. Due to FMLA restrictions on firm size and lack of paid support, at least 40% of employees are not protected by law, with many others unable to afford time off (NPWF, 2017). Since the national FMLA policy became law, stagnation of real wages and increasingly longer work weeks (50 plus hours) for women and men (DeSilver, 2014) led a coalition of local interest groups to successfully advocate for enhanced FMLA protection in some states.

States offering more progressive family policies recognize that domestic commitments that positively impact society (e.g., raising children who are well-educated and well-cared for) also influence women's career prospects and earnings (Budig & England, 2001). States signal their ideological commitment to support women in both their chosen work and domestic roles (Cueva Beteta, 2006), and establish institutional legitimacy for treating families as important “corporate stakeholders” (O'Connor, 2012). By contrast, states that only provide the minimum FMLA protections are effectively institutionalizing women's primary workplace as the home. Indeed, prior to FMLA, women regularly lost their jobs when they took time off to care for a seriously ill family member or have a child.

Family leave policies also influence outcomes at a higher echelon of women's participation in the labor market – the boards of directors. Women tend to take more breaks (e.g., to raise children or care for ill family members), which limits their time to acquire knowledge, capabilities, and networks (Lyness & Thompson, 1997). That is, women on career breaks miss out on opportunities for employer-provided training or mentoring, conference attendance, and access to leadership positions (Kossek & Ozeki, 1999)—the “motherhood penalty.” Board director nominees have impressive résumés and high levels of expertise, skills, knowledge, and relational capital (Terjesen et al., 2009), and improvements in labor market access enable women to acquire the human and social capital necessary for board recruitment (Iannotta, Gatti, & Huse, 2016). Taken together, progressive state family leave laws represent more than just a set of coercive formal requirements but a cultural framework that influences women to recognize that they are more than mere “workers” (Bailyn, 1993; Oliver, 1991) or “caretakers” (Gornick, Meyers, & Ross, 1997). Based on the above, we expect:

Hypothesis 3. Firms headquartered in a state that has a more progressive family leave policy will have a higher percentage of female directors.

2.3. Gender discrimination in hiring

A final set of critical policies relates to gender discrimination in the

workplace, defined as prejudice or bias based on sex (Becker, 1957). Research indicates that gender discrimination is a major factor holding women back from leadership positions and is often influenced by firms' institutional context (Doldor, Vinnicombe, Gaughan, & Sealy, 2012; Gabaldon, Anca, Mateos de Cabo, & Gimeno, 2016). A recent meta-analysis concludes that rampant gender-based discrimination in the past few decades has left women “grossly underrepresented at the highest levels in organizations, and in many settings receiving significantly lower pay and fewer promotions than men” (Joshi, Son, & Roh, 2015: 1516). At firms' highest echelon, there is evidence of serious gender discrimination and biases in the appointment of female directors (Gabaldon et al., 2016).

In the U.S., sex-based discrimination has been forbidden since 1964 with the passage of the Civil Rights Act. The Act's Title VII created the Equal Employment Opportunity Commission (EEOC) to implement the law and investigate gender-based discrimination in hiring, promoting, and firing practices. The pervasiveness of gender-based discrimination in the U.S. as well as the mobilization of important advocacy and social groups to address such problems prompted some states to exceed federal requirements by extending more protections to female employees and taking a strong stance against gender discrimination in the workplace (Caughey & Warshaw, 2016).

By providing more favorable legal protection against gender discrimination, states address this issue not only through coercive means, but also demonstrate their strong ideological commitment towards workplace equality through the de-institutionalization of important biases and prejudices preventing women from moving up the corporate ladder. These policies favor an institutional infrastructure centered on norms and practices around fairness and equal treatment for all workers regardless of their gender. Such norms may lead to less biased promotional systems and hiring practices as women work their way to the upper echelons (Bartlett, 2009). Indeed, as highlighted by research on women in leadership (e.g., Gabaldon et al., 2016), an important barrier for women's career advancement are biased promotional systems which stem from taste-based discrimination—a preference for male leadership entrenched in institutionalized conventions that associate top leadership with masculinity (e.g., Heilman, 2001).

We argue that by adopting legislation prohibiting gender-based discrimination, states can curb such taste-based discrimination not only through coercive means but also by promoting an institutional infrastructure around gender equality that may help erode the notion that top leadership is a “male” job (Gabaldon et al., 2016). In such settings, women's aspiration level and employment prospects may be enhanced, which may result in eventual board appointments. By contrast, states with weaker gender anti-discrimination policies can constrain women's career trajectories. Based on the above, we argue:

Hypothesis 4. Firms headquartered in a state with more progressive gender anti-discrimination policies in hiring will have a higher percentage of female directors.

3. Methods

3.1. Sample

To construct our sample, we begin with all S&P 1500 firms from 2003 to 2014. The S&P 1500 is frequently used in corporate governance research (e.g., Dezsö & Ross, 2014) because it includes the S&P 500, S&P MidCap 400, and S&P SmallCap 600 which captures 90% of U.S. companies' market capitalization. We utilize Governance Metrics International (GMI), a data source that compiles governance information annually from companies' proxy statements and public filings, ratings to ascertain female board representation and other board level information. After eliminating firms with missing variables and 74 companies that changed their headquarters during our investigation period, the final sample consists of 13,568 firm-year observations. Our sampled

firms are headquartered in 49 states with average revenue of \$7.4 billion and total assets of \$20.4 billion. On average, S&P 1500 firms are 48 years old. We exclude Wyoming as there are no governance data for S&P 1500 firms headquartered in the state. Table 1 provides each state's average percentage of female directors from 2003 to 2014.

3.2. Dependent variable

We follow prior research in measuring female board representation as the percentage of female directors in a firm's board of directors (e.g., Terjesen & Singh, 2008). This variable ranges from 0% to 64% with a mean of 12%.

3.3. Independent variables

For each independent variable, we assess policy output (i.e., the programs and guidelines) rather than policy outcomes (i.e., the societal effects of the policy). For example, instead of examining the number of women who take FMLA leave in each state, a policy outcome that would be hard to identify due to state or national policy influence, we capture whether a state's policy provisions (policy output) exceed those set at the national level. In doing so, we empirically account for state level influences while also making policy comparisons across states possible.²

Publicly-funded abortion (H1) is a dummy variable equal to 1 if the state's Medicaid system in which a firm is headquartered pays for abortion and 0 otherwise. The data source is Caughey and Warshaw (2016)³.

Emergency contraceptive access (H2) is a dummy variable equal to 1 if a firm is headquartered in a state with unrestricted access to emergency contraception (EC) or has expanded access by allowing pharmacies to dispense EC without a prescription and 0 if the state has restricted access to EC by allowing pharmacists to refuse to dispense it. These data come from Caughey and Warshaw (2016)⁴.

Progressive family leave (H3) is a dummy variable equal to 1 if a firm's headquarter state has family leave provisions exceeding federal requirements (i.e., it offers paid leave or > 12 weeks of unpaid leave, covers firms with fewer than 50 employees, or allows employees to take leave under a greater number of circumstances) and 0 otherwise. Data originate from Westlaw and Lexis.

Gender anti-discrimination (H4) is a dummy variable equal to 1 when the state in which a firm is headquartered passed its own law banning hiring discrimination on the basis of gender following the federal Civil Rights Act (of 1964) and 0 otherwise. Data for this variable come from Caughey and Warshaw (2016)⁵.

Table 1

States' average percentage of women directors among S&P 1500 firms (2003–2014).

State	% women directors	State	% women directors
Alabama	8.63%	Montana	9.95%
Alaska	0%	Nebraska	5.34%
Arizona	11.62%	Nevada	11.76%
Arkansas	10.83%	New Hampshire	9.72%
California	10.73%	New Jersey	13.53%
Colorado	9.16%	New Mexico	34.52%
Connecticut	15.41%	New York	14.97%
Florida	12.09%	North Carolina	12.56%
Georgia	11.36%	Ohio	14.42%
Hawaii	22.31%	Oklahoma	10.66%
Idaho	14.95%	Oregon	9.66%
Illinois	13.38%	Pennsylvania	12.12%
Indiana	14.65%	Rhode Island	14.73%
Iowa	18.28%	South Carolina	8.39%
Kansas	10.06%	South Dakota	12.91%
Kentucky	14.97%	Tennessee	11.69%
Louisiana	7.20%	Texas	9.38%
Maine	10.03%	Utah	9.09%
Maryland	13.74%	Vermont	24.51%
Massachusetts	12.00%	Virginia	11.01%
Michigan	14.48%	Washington	15.74%
Minnesota	16.37%	West Virginia	13.68%
Mississippi	15.24%	Wisconsin	13.80%
Missouri	11.48%		

3.4. Controls

We include several control variables to account for alternative explanations. All controls are lagged by one year following prior research (e.g., Hillman et al., 2007). Following Pe'er and Gottschalg (2011), we account for political affiliation of the state in which a firm is headquartered measured by a dummy variable, *red state*, taking a value of 1 if Republicans won the presidential election in the state (in the election cycle preceding the year under study) and 0 otherwise. Previous research shows a link between attitudes towards gender representation in leadership roles and political affiliations of organizations' local environment (Arthur, Van Buren, & Del Campo, 2009; Gupta, Briscoe, & Hambrick, 2017).

We account for the *level of education of women* in the state in which a firm is headquartered, measured by the percentage of women who are 25 years old or older with a bachelor's degree. This American Community Survey data is included based on a large body of research highlighting the importance of education to women's careers (e.g., Burke, 1997; Sheridan, 2001; Singh & Vinnicombe, 2004). *State GDP (logged)* controls for a state's economic size based on U.S. Department of Commerce's Bureau of Economic Analysis data. Prior research indicates that greater economic development is associated with higher levels of female representation among the corporate elite (Chizema et al., 2015). We control for the *average percentage of female employees* and *average age of females* in the state in which a firm is headquartered with U.S. Census Bureau data.

Regional attitude towards women is measured by the National Opinion Research Center's General Social Survey item: "It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family." The data are categorized according to the nine regions identified by the U.S. Census Bureau. We include this measure given the importance of culture in firms' regional context in shaping board gender diversity (Grosvold & Brammer, 2011; Terjesen & Singh, 2008).

We use *percentage of female employees* (based on the firm's two-digit SIC with data from the Bureau of Labor Statistics) in each industry given consistent reports that women's presence in the boardroom varies by industry (e.g., Hillman et al., 2007).

Ownership concentration refers to the percentage of shares held by institutional owners and comes from Thomson Reuters. Previous

² Data for all variables are available from the authors.

³ Caughey and Warshaw obtained policy data from primary and secondary sources to answer the question: "Does the state's Medicaid system pay for abortions?" In addition to using state statutes, Caughey and Warshaw derived their measure from: NARAL Pro-Choice America's evaluation of state government policies, Guttmacher Institute's "State policies in brief: State funding of abortion under Medicaid"; the American Civil Liberties Union's report on "Public funding for abortion"; and a Women's Rights Law Review article by Merz, Jackson, and Klerman entitled "A review of abortion policy: Legality, Medicaid funding, and parental involvement, 1967–1994."

⁴ Caughey and Warshaw obtained policy data from primary and multiple secondary sources to answer the question: "Can pharmacies dispense emergency contraception without a prescription?" In addition to using state statutes, Caughey and Warshaw derived their measure from: NARAL Pro-Choice America's evaluation of state government policies, Guttmacher Institute's "State governments"; and the National Conference of State Legislatures report on "Emergency contraception state laws."

⁵ Caughey and Warshaw derived this measure from Greenhouse and Stiegel's paper "Before Roe v. Wade: Voices that shaped the abortion debate before the Supreme Court's ruling," and Myers and Knowles's "Young women's access to abortion and contraception, 1960–present" to answer the question "Does the state ban hiring discrimination on the basis of gender?"

research indicates that firms with a greater institutional ownership concentration have more female directors (Carter, Simkins, & Simpson, 2003).

To control for *firm social performance*, we use a dummy variable equal to 1 if a firm has a code of conduct and 0 otherwise. Previous work shows a relationship between board diversity and ethical codes of conduct (Rodriguez-Dominguez, Gallego-Alvarez, & Garcia-Sanchez, 2009).

Firm performance is measured by Return on Assets (ROA) with data from Bloomberg and Compustat. Extant research suggests that performance precedes diversity (Hillman et al., 2007).

Firm size is measured by annual sales (logged) and is included due to consistent evidence that larger organizations generally have more female directors (Hillman et al., 2007). These data come from Bloomberg and Compustat. We include *company age* (logged) collected from GMI based on prior research indicating that older organizations are more likely to appoint female directors due to greater public visibility and scrutiny (Hillman et al., 2007).

Board size is the total number of board members. A large body of research indicates that bigger boards have more female directors (Hillman et al., 2007). These data come from GMI. *Board independence* is the percentage of outside directors. The literature consistently reports that boards with more independent directors have more female directors (Carter et al., 2003). Both variables come from GMI.

Finally, *year dummies* account for year fixed effects and the impact of time on firms' diversity practices (Hillman et al., 2007).

3.5. Analytical procedure

Given the longitudinal nature of the study and the lack of independence of our observations, we conduct a fixed-effects pooled time-series regression analysis employing xtreg in Stata 13. A Hausman test reveals a significant difference in the coefficients of the random and fixed-effects models ($p < 0.001$) and indicates the appropriateness of a fixed effect model.

Our results may be affected by endogeneity because headquarter locations are not exogenously determined. Although current research suggests that firms' locational choices are more likely to be determined by labor and transportation costs or tax considerations (e.g., Loughran & Schultz, 2005), it is highly probable that executives choose to locate their firms in states that best match organizational norms, values, and culture. Proper investigation of location decisions requires longitudinal data on a variety of exogenous factors (Oxelheim, Gregorič, Randøy, & Thomsen, 2013). We follow Oxelheim et al.'s (2013) suggestion to utilize fixed-effects models and include multiple controls to address potential endogeneity, but recognize that our results should be seen as evidence of association rather than causation.

4. Results

Table 2 presents the correlation matrix and descriptive statistics. As several correlations exceed 0.3 (in absolute value), we explore potential multicollinearity threats using variance inflation factors (VIFs). The full model's mean VIF is 1.93; all individual VIFs were below 3, indicating low collinearity threats (Kleinbaum, Kupper, & Muller, 1988).

Table 3 presents the regression results of six models. Model 1 is a baseline model testing the impact of the covariates. Models 2, 3, 4, and 5 respectively test the significance of the four hypothesized variables: public funding for abortion, access to emergency contraception, expanded family leave, and gender anti-discrimination in hiring. Model 6 adds the four predictors to the baseline model.

Consistent with a large body of prior research (e.g., Hillman et al., 2007; Moore & Shackman, 1996), Model 1 shows that board independence ($p < 0.001$), ownership concentration ($p < 0.01$), company age ($p < 0.001$), and female average age by state ($p < 0.1$) are positively related to female board representation. In line with previous

Table 2
Descriptive statistics and correlations.

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. % women directors	0.12	0.1	1																	
2. Red state	0.34	0.47	-0.12	1																
3. State female education level	0.18	0.02	0.05	-0.49	1															
4. State GDP ^a	753,491.82	611,638.03	-0.06	-0.25	0.17	1														
5. State female employment	0.56	0.04	-0.01	-0.02	0.43	0.21	1													
6. State female average age	49.91	1.52	0.16	-0.44	0.06	-0.27	-0.35	1												
7. Attitude towards women	2.77	0.1	0.14	-0.38	0.38	-0.12	0.05	0.47	1											
8. Industry female employment	36.45	13.12	0.06	-0.06	-0.02	-0.02	-0.05	0.1	0.04	1										
9. Ownership concentration	0.78	0.18	-0.06	-0.02	0.05	0.08	-0.04	0.01	0.02	0	1									
10. Firm social performance	0.03	0.16	-0.02	-0.03	0	0.01	0	0.01	0.02	0.01	0	1								
11. Firm performance	0.05	0.09	0.05	0.01	0	0	0	0.03	0.02	-0.02	0.08	0.02	1							
12. Firm size ^a	7385.29	21,713.22	0.17	0	-0.02	0.03	-0.03	0	-0.02	0	-0.16	-0.02	0.05	1						
13. Log of company age	3.53	0.89	0.15	-0.06	-0.02	-0.12	-0.02	0.17	0.1	-0.06	-0.13	0	0.08	0.04	1					
14. Board size	9.55	2.49	0.26	0.03	-0.09	-0.13	-0.02	0.09	-0.01	0.07	-0.25	-0.05	-0.01	0.28	0.18	1				
15. Board independence	0.83	0.09	0.2	-0.03	0.05	-0.05	-0.01	0.08	0.07	-0.08	0.03	-0.05	-0.05	0.12	0.09	0.29	1			
16. Publicly-funded abortion (H2)	0.51	0.5	0.07	-0.62	0.59	0.39	0.1	0.14	0.32	0.08	0.02	0.02	-0.01	0	-0.04	-0.08	-0.01	1		
17. Emergency contraception access (H1)	0.83	0.38	0.01	-0.24	0.15	0.21	0.04	0.02	0.15	-0.08	0.02	0.01	0.01	0	-0.06	0	0.14	0.14	1	
18. Progressive family leave (H3)	0.3	0.46	0.01	-0.46	0.44	0.42	0.13	0	0.19	-0.01	0.01	0	0.01	-0.12	-0.03	-0.12	0.53	0.3	0.53	1
19. Gender anti-discrimination (H4)	0.93	0.26	0.03	-0.33	0.2	0.2	0.1	0.18	0.2	-0.03	0.09	0	0.01	-0.05	-0.08	-0.01	-0.08	0.28	0.36	0.18

^a Not logged; firm size sales and state GDP data are in millions.

Table 3
Fixed effect regression results: determinants of female share of board directorships^{a,b,c,d}.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Red state	−0.006** (0.00)	−0.005* (0.00)	−0.007** (0.00)	−0.006** (0.00)	−0.006** (0.00)	−0.006** (0.00)
State female education level	−0.073 (0.12)	−0.147 (0.13)	−0.070 (0.12)	−0.068 (0.12)	−0.097 (0.12)	−0.136 (0.13)
State GDP	0.006 (0.00)	0.004 (0.00)	0.005 (0.00)	0.006 (0.00)	0.004 (0.00)	0.002 (0.00)
State female employment	−0.019 (0.03)	−0.019 (0.03)	−0.019 (0.03)	−0.019 (0.03)	−0.024 (0.03)	−0.023 (0.03)
State female average age	0.001+ (0.00)	0.001 (0.00)	0.001+ (0.00)	0.001+ (0.00)	0.001 (0.00)	0.001 (0.00)
Attitude towards women	−0.005 (0.01)	−0.007 (0.01)	−0.005 (0.01)	−0.005 (0.01)	−0.006 (0.01)	−0.007 (0.01)
Industry female employment	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)
Ownership concentration	0.015** (0.01)	0.015** (0.01)	0.015** (0.01)	0.015** (0.01)	0.015** (0.01)	0.015** (0.01)
Firm social performance	−0.004 (0.00)	−0.004 (0.00)	−0.004 (0.00)	−0.004 (0.00)	−0.004 (0.00)	−0.004 (0.00)
Firm performance	−0.004 (0.01)	−0.004 (0.01)	−0.004 (0.01)	−0.004 (0.01)	−0.004 (0.01)	−0.004 (0.01)
Firm size	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)
Company age	0.012*** (0.00)	0.012*** (0.00)	0.012*** (0.00)	0.012*** (0.00)	0.012*** (0.00)	0.012*** (0.00)
Board size	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)
Board independence	0.033*** (0.01)	0.033*** (0.01)	0.033*** (0.01)	0.033*** (0.01)	0.033*** (0.01)	0.033*** (0.01)
Publicly-funded abortion (H1)		0.013* (0.01)				0.015* (0.01)
Emergency contraception access (H2)			0.012** (0.00)			0.011* (0.00)
Progressive family leave (H3)				−0.002 (0.01)		−0.013 (0.01)
Gender anti-discrimination (H4)					0.033** (0.01)	0.022+ (0.01)
Constant	−0.102 (0.08)	−0.061 (0.08)	−0.105 (0.08)	−0.104 (0.08)	−0.083 (0.08)	−0.055 (0.08)
R ²	0.120	0.120	0.120	0.120	0.120	0.121

^a Unstandardized regression coefficients are reported (standard errors in parentheses).

^b (***) $p < 0.001$, (**) $p < 0.01$, (*) $p < 0.05$, (+) $p < 0.10$.

^c Models include year dummies.

^d $N = 13,568$ for all models.

research (Gupta et al., 2017), red state affiliation is negatively related to female board representation ($p < 0.01$). Model 2 supports Hypothesis 1, indicating a positive relationship between public funding for abortion and female board representation ($p < 0.05$). Model 3 shows that better access to emergency contraception is significant and positively related to female board representation ($p < 0.01$), providing strong support for Hypothesis 2. Model 4 provides no support for Hypothesis 3 that firms headquartered in a state with more progressive family leave policies have a higher percentage of female directors. Model 5 results strongly support Hypothesis 4 ($p < 0.01$) that firms headquartered in a state with policies banning gender discrimination in employment hiring have more female directors. The aforementioned results hold in Model 6 (full model) since the coefficients for Hypotheses 1 and 2 are statistically significant ($p < 0.05$). The coefficient for Hypothesis 4 is statistically significant at $p < 0.1$.

4.1. Robustness checks

We conduct several additional checks to substantiate our findings. First, using Bloomberg and Compustat data, we create a new measure of firm performance, return on equity. We find support for Hypotheses 1, 2, and 4 at $p < 0.05$.

Second, to test our analysis' sensitivity, we retest all models excluding the largest 100 firms (by annual sales) to account for large

firms' tendency to have more gender diverse boards. Large firms have higher visibility and face stronger public scrutiny compared to smaller firms. We find the following results: Hypothesis 1 is significant at $p < 0.05$, and Hypotheses 2 and 4 are significant at $p < 0.1$. We also retest the statistical models excluding Delaware to take into account the possibility that firms locate their headquarters in Delaware for tax purposes; however, removing Delaware firms from the analysis yields results that are similar to those reported in the main Results section. We test an additional model that excluded all non-significant controls: ethics code dummy, state GDP, state female education level, state female employment, industry female employment, firm performance, firm size, and state attitude towards women, and find results consistent with the ones obtained previously.

Third, we incorporate several additional controls: (a) state's gender pay gap as the percentage of the median earnings of women compared with men, (b) state's history of women in political office as the number of years since the first woman was elected as a U.S. Senator or U.S. Representative, and (c) firm's degree of internationalization (DOI) measured by the ratio of foreign sales to total sales. The first two measures take into account prior comparative governance research revealing the importance of the gender pay gap and legislative history (Terjesen & Singh, 2008) and are gathered from the Center for American Women and Politics. DOI comes from Compustat Segment and is included because a firm's international exposure is likely to influence its

governance practices (Sanders & Carpenter, 1998). After including these controls, Hypotheses 1 and 2 are supported at $p < 0.05$, while Hypothesis 4 is not supported.

We include state corporate tax rates as an additional control to account for the state's level of business-friendliness with data obtained from Caughey and Warshaw (2016). We test other covariates from the Census Bureau to address household size (e.g., via state marriage and fertility rates, average state household size, percentage of students attending state-funded preschool, and percentage of children under age six living with parents in the state's labor force) and education (number of Ivy League universities per state). After including these variables in six separate models, Hypotheses 1 and 2 remain supported at $p < 0.05$; while Hypothesis 4 remains supported at $p < 0.1$. The full set of results from the robustness analyses yields very similar findings to those documented in Table 3, and is available from the authors.

5. Discussion

The vast institutional differences across the American states enable an investigation of the link between gender-related policies and board gender diversity. Our study examines the critical role played by institutions in shaping individuals' family and family/work practices, and answers calls to investigate the degree to which government shapes corporate governance structures and strategies (Aguilera & Jackson, 2003), including at the sub-national level (Adams & Flynn, 2005). This sub-national focus is also particularly relevant for our context since the U.S. is unlikely to adopt board gender quotas, as noted by Kogut, Colomer, and Belinky (2014).

To the best of our knowledge, there are no prior studies of between-state (or between-region, territory, etc.) policy differences in women's career advancement to firms' board directorships. Rather, existing studies treat the U.S. (and other countries) as a single entity (e.g., Hillman et al., 2007) or explore concentrated geographical contexts such as Long Island (e.g., McCormick Hyland & Marcellino, 2002), Massachusetts (Adams & Flynn, 2005), or Tennessee (Helms et al., 2008). The non-monolithic nature of the U.S.'s highly complex regulatory environment (including differences in cultures and institutions) accords individual states their own legal codes, judiciary, and governmental apparatus (Luoma & Goodstein, 1999; Pe'Er & Gottschalg, 2011) which has implications for women and business. While the U.S. may be somewhat distinct in that state-level policies can supersede national laws, our study provides a richer understanding of within-country differences.

This study contributes to institutional theory and research on women on corporate boards in several ways. First, we show that states' gender-related policies are associated with differences in corporate governance outcomes. Specifically, we find fairly broad support for three of the four hypotheses concerning institutions that are associated with greater female inclusion among the corporate elite: public funding for abortions, greater availability of emergency contraception, and anti-discrimination hiring policies based on gender. Taken together, our findings suggest that as state progressive policies become institutionalized and accepted, there are more opportunities for women to attain directorships. This contribution is particularly salient given that institutional theorizing predominantly focuses on non-family and non-gender institutions. As gender-related topics are critical inputs to organizational and individual choices, we believe our study makes a significant contribution by examining certain state-level institutions that impact the supply of well educated, highly qualified women while also empowering them to seek board positions.

Second, contrary to previous research on gender and the boards of directors which examined broad gender-specific institutions (e.g., Terjesen & Singh, 2008) or comprehensive institutional contexts (e.g., Grosvold et al., 2016), we offer a more focused theoretical investigation of gender-specific policies that are likely to further women's career opportunities and aspiration levels.

Third, and more broadly, this study may help address the equivocal results found in the literature addressing the link between board female diversity and firm performance. While many studies show that including more women on the board is associated with better firm outcomes such as superior governance performance (Perryman, Fernando, & Tripathy, 2016), positive reactions from investors (Kang, Ding, & Charoenwong, 2010), and reduced agency costs (Jurkus, Park, & Woodard, 2011), Post and Byron (2015) argue that there may not be a strong enough business case for doing so. Instead, Post and Byron (2015) suggest that it is not the number of women on the board, but their level of participation that leads to more profitable firm outcomes. Therefore, by examining the local institutional contexts in which women may realize greater empowerment (states with progressive gender policies), our findings may also reveal some important boundary conditions that could mitigate stereotyping and unproductive board conflict –which could lead to increased participation by female directors on the board as well as greater profit.

Lastly, our results highlight a more nuanced interpretation of Meyer's (2010: 14) assertion that “the more participants subscribe to the interests of sustaining their actorhood, the greater the overall pressure to conform, but those who conform may not be the same participants as those who adopted the plan.” On the one hand, we support Grosvold et al.'s (2016: 1183) skepticism of Meyer's (2010) assertion that “institutional decoupling between policy and practice means political intent is seldom realized through policy.” Indeed, we show that states with more progressive family planning and anti-discrimination policies have greater shares of female board members which suggest that change can follow from legislation. On the other hand, Meyer may be correct at the individual level. Meyer (2010:14) provides the following example: that an individual's plan to publish more articles “may indicate a widespread academic value in leading universities... to increase the number of articles written, rather than predicting whether an individual will publish an article.” To adapt this example to women directors, a woman in a particular state may voice a desire for more women directors. This woman's voice could indicate a shift in state-wide values among women and firms such that more women seek and are appointed to boards – even if the woman with the original desire for more appointments is not appointed herself.

While three hypotheses in our model were supported, the hypothesized relationship between a state's extended family leave policies and women's presence on the board was not significant. There are several potential explanations, the most likely of which is that America's family leave policies are relatively limited vis-à-vis those of other developed countries (Ray, Gornick, & Schmitt, 2009). For example, average paid leave in the EU is 21.8 weeks (OECD, 2016) compared to New Jersey which offers the most paid leave of any state at six weeks. As most states do not provide paid leave, U.S. policies may not be strong enough to lead to meaningful board changes.

From a public policy standpoint, our paper offers important implications and specifies what levers governments may use to improve shares of female directors. In jurisdictions in which the concept of board gender quotas is met with resistance, our results indicate to policymakers that other health, work, and family policy levers that provide women more freedom and support are associated with greater levels of women's advancement into the corporate upper echelons. While our findings point to the fact that state-level legislative policy change is both possible and necessary to move more women into the boardroom, political forces may hinder such efforts. For example, there is increasing pressure on state governments to both provide and restrict access to affordable birth control and abortion which has already resulted in new laws that widen or narrow women's access to care (Vestal, 2017). As 97% of Americans support gender equality (Pew, 2010), it is unlikely that states will repeal anti-discrimination policies.

At the state level, political actors, community leaders, and other stakeholders seek to develop the strongest possible levels of human capital. Indeed, many states prefer to keep their young and well-

educated citizens in state as these individuals provide a constant supply of labor and a strong tax base. Our findings imply that states may also need to concern themselves with the “push and pull” factors affecting their female residents. As there is a potentially mobile market for top female talent, state policymakers can use institutional levers to both attract female talent and to foster this talent internally. As the nature of the labor market and the opportunities for work change or diminish due to increased robotics and AI, workers may need to become more mobile. States that provide fewer opportunities for women in terms of paths to positions in the upper echelons of organizations could see increases in out-of-state migration, and thus a decreased population. States that are unable to attract and maintain a large, well-educated, and diverse labor pool may find it difficult to attract high quality employers and entrepreneurs.

While our hypotheses highlight many medium and long-term policies that may lead to more women on future boards, our models also offer short term opportunities for advocacy groups and organizations to increase these numbers. Specifically, we find that greater proportions of independent board members and institutional investors are associated with more female directors. This suggests that an additional layer of scrutiny from financial institutions that hold concentrated ownership positions leads to more egalitarian boards. A greater proportion of independent directors also seems to offer new paths to recruiting and appointing more gender-diverse board members. Thus, policy-makers and advocacy groups' focus on enacting state-level institutions that are more female friendly will likely impact women's careers in the medium and long-term. In the shorter term, actions such as increasing the proportion of independent directors and institutional investors seems to yield increases in female directors.

Our findings also offer some insights for managers and female employees. Given the positive relationship between firms located in a state that bans gender discrimination in hiring and that state's firms' female presence on boards, we expect managers who foster respect for diversity and offer strong anti-discrimination training for employees will be more likely to have more female directors. For women at all stages of their careers, our research highlights that American states offer vastly different institutional regimes. Broadly speaking, women who want greater freedom to pursue a career path of their choosing have three options.

First, women can move to a more female-friendly state. Using Meyer's metaphor that institutions structure outcomes such that actors play parts as in a theater, then states offer different theaters wherein female actors can utilize greater or fewer repertoires. Women who aspire to higher level professional careers may wish to relocate to states that provide such opportunities. While only a minority of the population is mobile at any given time, there are two key milestones when moving to another state is more actionable: attending college and obtaining a first job. While 28% of all American high school students attend college in another state, that number doubles to 56% among the highest-achieving graduates (Chokshi, 2014). With respect to one's first job, 15% of college graduates migrate to another state within one year of graduation (Kodrzycki, 2001). Ambitious young women should be counseled that the location of their college and post-graduation employment can impact their career trajectory.

Second, women can choose to stay in their state and run for office to legislate change, or advocate for workplace change through organizations such as 2020 Women on Boards, a nonprofit that mobilizes stakeholders (e.g., consumers and directors) to work on improving women's access to boards and educating society on the issue. Lastly, women may choose to do nothing and accept that despite these concerns they prefer their home state over relocating to another state.

5.1. Limitations and suggestions for future research

Before concluding, we acknowledge three limitations. First, although the analysis of within-country heterogeneity necessitates a

single country design, we acknowledge that the U.S. is unique in some ways, and our findings may not be generalizable to other country contexts, particularly those with vastly different institutional structures. For example, the U.S. has some of the developed world's least generous leave policies (Ray et al., 2009). Future research could examine countries with smaller, more homogenous populations or more limited variation of gender-related state/province policies. Second, our sample of the largest public firms in the U.S. are, compared to smaller, private firms, subject to greater scrutiny on social issues from shareholders, consumers, legislators, and the media. We therefore encourage future researchers to examine other firm contexts. Third, although we sought to “explore the underlying components of the broad clusters of institutions” (Gros vold & Brammer, 2011: 132) as independent and control variables, we acknowledge that there are policies for which we do not have data, for example regarding telecommuting and childcare provisions at the state level.

In addition to the afore-mentioned suggestions to address research limitations, we offer five additional paths for future research. First, to complement our study's within-country focus and the extant literature at multi-country and firm levels, we encourage future researchers to pursue multi-level research. Future researchers should explore the chain of antecedents to females moving up corporate ladders across multiple levels of analysis in a holistic multi-level manner; for example, incorporating individual-level data on directors' marital status, age, and number of children. This model could be expanded to test new mediators and moderators that offer new contributions to established lines of enquiry. Drawing from our model, future research could examine whether boundary conditions are established at the state-level via political affiliation, at the firm level via ownership concentration, or at the board level via board independence – all of which were shown to correlate with the number of female directors within a state. By testing the potential mediating impact of state-level policies on the strength and duration of state political affiliation, we may be able to more easily observe how differences in political party platforms impact women's career opportunities. Moreover, by examining several firm and board characteristics (e.g., institutional ownership concentration and board independence) which may moderate state-level policies' influence on the number of women on the board, scholars could ascertain whether and how such influence can be manipulated. For instance, the relationship between state-level gender policies and female board representation might be more positive in firms that have greater levels of institutional ownership concentration or when blockholders have a long history of holding large stakes in the firm, especially if ownership is held by just a few institutions.

Second, we propose that future research investigate the limits of medium and long-term gender-related state policies to increase the share of female directors in the U.S. As an example, anti-discrimination policies may have less impact on board appointments a generation from now as organizational culture absorbs these practices and as firms evolve into organizations that value their female employees to the same degree as their male employees. Conversely, laws affecting the availability of emergency contraception and public funding for abortions can oscillate between expanding and contracting women's access to the boardroom depending on the state's political party platforms and climate.

Third, future research could investigate potential within-country differences in the profiles of women appointed to boards, the speed at which women join boards, and the share of women at lower levels in firms. That is, some states may have patterns of female leadership in terms of distinct routes to the top or mimetic pressures to diversify boards in industry clusters. As female CEOs are even scarcer than female board members (Knippen, Palar, & Gentry, 2018), this research could explore this highest echelon. Fourth, because appointing women to the board is a voluntary act, i.e., beyond the requirements of law in many countries, research could view board gender parity in the context of the firm's entire corporate responsibility portfolio to better

understand how firms create and manage “good deeds.” This approach would move research beyond an issue-by-issue approach to examine the array of issues that firms face across many functions. Lastly, researchers could investigate the relationship between state-level institutions and other measures of women's progress in the labor market and professional emancipation such as the share of female entrepreneurs starting high potential growth-oriented ventures.

6. Conclusion

We leverage Meyer's (2010) phenomenological perspective of institutional theory to argue that U.S. state-level progressive gender-related policies will institutionalize norms that eventually lead to more women on boards. Data from 13,568 publicly traded firm-year observations in 49 states over twelve years indicate that in states with policies that support more progressive family planning and gender anti-discrimination have greater shares of female directors. A series of robustness checks confirm these findings.

Declarations of interest

None.

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