Women’s Movements and Female Board Representation

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Abstract

Scholars know relatively little about the potential impact of women’s movements on gender diversity in the corporate world. We aim to fill this gap in the literature by providing the first empirical analysis of the relationship between women’s movements and female representation on boards of directors. Drawing on political process theory, we argue that the strength of a women’s movement is positively associated with its ability to increase the number of women on corporate boards. Moreover, we posit that the effect of women’s movements on female board representation is moderated by corporate opportunity structures, that is, attributes of firms that make them more or less receptive to social movement activities. Three firm characteristics are particularly relevant in the context of boardroom gender diversity: reputation-seeking behavior, commitment to corporate social responsibility, and political orientation. Using firm-fixed effects models to analyze data on more than 2,000 companies from ten countries over a period of ten years, we find support for three of our four hypotheses. Theoretical and practical implications are discussed.

Keywords

Political process theory; social movements; women’s movement; female representation; gender diversity; corporate boards
Women remain underrepresented in several social, political, and professional domains, including corporate leadership. A recent analysis of female board representation in 30 countries around five continents revealed that on average, only 16.9 percent of board members are women (Institutional Shareholder Services, Inc. 2017). In the United States, more than ten percent of companies in the Russell 3000 Index do not have a single female director (McGregor 2019). The lack of gender diversity in corporate leadership is not only problematic from a normative perspective (Franceschet and Piscopo 2013) but also potentially detrimental to firms’ economic, social, and environmental performance (e.g., Crichton et al. 2021; Post and Byron 2015). As a result, companies in many countries have been facing pressure to increase female board representation from multiple stakeholders, including governments, investors, employees, and women’s rights groups (Gupta 2020).

An example of such a group is 2020 Women on Boards, a nongovernmental organization which has been operating throughout the United States since its inception in 2010. The stated goal of this organization is to “increase the percent of females on public-company boards to 20 percent by the year 2020” (Gannon 2018). To achieve this goal, 2020 Women on Boards pursues several different strategies, including an annual event called “The National Conversation on Board Diversity”. In 2018, this event was held in 20 cities across the United States and brought together thousands of activists, academics, and senior-level executives to discuss the issue of boardroom gender diversity. As part of this event, 2020 Women on Boards honored companies which had achieved the 20 percent goal (Gannon 2018). Conversely, numerous firms have yet to reach this benchmark, and some of them have been rather unresponsive to 2020 Women on Boards’ outreach efforts.
This example illustrates that not all firms are equally receptive to the efforts of women’s organizations, which raises two interesting and important questions: Do women’s movements have a systematic effect on female board representation? And if they do, which types of firms are most likely to increase the number of women on their board in response to the activities of women’s movements? To address these questions, we draw on the social movements literature (e.g., Georgallis 2017; Kane 2003), and on political process theory (e.g., Briscoe, Chin, and Hambrick 2014; Schurman 2004) in particular, to develop a theoretical framework which details the various strategies that women’s movements employ to achieve their goal of increasing female board representation; these strategies are: shaming, informing, and empowering. Our framework also identifies three firm characteristics – reputation-seeking behavior, commitment to corporate social responsibility (CSR), and political orientation – that moderate the relationship between women’s movements and female board representation. To test these arguments, we use the Asset4 database which allows us to access information on female board representation and other firm-level variables for more than 2,000 companies from ten countries over a period of ten years (2002-2011).

By providing the first systematic analysis of the impact of women’s movements on female board representation, this study makes several important contributions. First, by developing a theoretical framework which specifies the relationships between movement strength, corporate opportunity structures, and female board representation, we contribute to the literatures on social movements and boardroom gender diversity alike. As for the social movements literature, our framework can inform future scholarship and theorizing on the effects of women’s movements, and social movements in general, on corporate outcomes other than board diversity such as sexual harassment of women in the workplace. Furthermore, we contribute to the literature on boardroom gender diversity (e.g., Huang, Diehl, and Paterlini 2020) by highlighting the importance of social
and political institutions and actors such as social movement organizations, which are factors that previous research on the determinants of female board representation has largely ignored.

Second, our study is both motivated by and has implications for the literatures on the nature of the firm and the role of corporate governance therein. Specifically, Coase (1937) and others following him (e.g., Williamson and Winter 1991) have argued that firms are typically established for a certain purpose and perform their tasks in a profitable and ethically acceptable way. In order to achieve its targets, a firm needs good corporate governance (e.g., Rodriguez-Fernandez 2016), which includes having a well-functioning board. One element that could potentially advance board effectiveness and performance is gender diversity among board members (e.g., Francoeur, Labelle, and Sinclair-Desgagne 2008). In this study, we argue – and empirically demonstrate – that women’s movements play a significant role in increasing the number of women on corporate boards, thereby potentially contributing to good corporate governance.

Third, management scholars have increasingly criticized the lack of multidisciplinary scholarship in their field and called for more integrative research (e.g., Terjesen and Politis 2015). We heed this call by integrating research from management, sociology, and political science to gain new insights into the determinants of female board representation. Our fourth and final contribution is empirical in nature. By using a large dataset that is rich in temporal and cross-sectional variation and analyzing it via a variety of model specifications that include an instrumental variable approach, we are able to provide robust estimates of the relationship between women’s movements and female board representation. Our results are therefore not only of interest to management and social movement scholars but also to women’s activists and organizations across a range of different geographical contexts.
The remainder of this study proceeds as follows. First, we develop our theoretical framework as well as hypotheses. Second, we elaborate on the data and measures we use to test our hypotheses. Third, we describe our empirical results which include sample statistics, hypothesis tests, and robustness checks. A concluding section then summarizes the main findings of this study, discusses their implications and limitations, and indicates possible directions for future research on the subject.

THEORETICAL FRAMEWORK

Social Movements and Corporate Behavior

Companies are continuously faced with the demands of various actors such as investors, employees, and customers. Another important group of actors that make demands of companies and seek to influence their behavior are social movements, which are generally defined as “networks of informal interactions between a plurality of individuals, groups and/or organizations, engaged in political or cultural conflicts, on the basis of shared collective identities” (Diani 1992, 1). Examples of social movements include the LGBT rights movement, the environmental movement, and the animal rights movement. Previous research has shown that such movements are quite effective at influencing corporate behavior (e.g., Chuang, Church, and Hu 2018; McDonnel and Cobb 2020; McDonnel, King, and Soule 2015).

But how exactly do social movements influence corporate behavior? Studies have shown that social movements use a variety of strategies to achieve their goals vis-à-vis firms (e.g., Eesley, Decelles, and Lenox 2016). In a recent conceptual study on how social movements influence
corporate behavior, Georgallis (2017) usefully distinguishes between three different levels of social movement activity: the field level, the organizational level, and the individual level. Activities at the field level are those that seek to garner support from external stakeholders, such as government agencies or consumers. The organizational level includes movement strategies that directly engage companies through either conflict or collaboration. Lastly, activities at the individual level are aimed at firms’ internal stakeholders, particularly their employees. In the following paragraphs, we further illustrate these three levels by highlighting one example of a movement strategy for each, emphasizing those that are particularly relevant in the context of women’s movements and their efforts to increase female board representation, as we will later show.

An example of a movement strategy at the field level is shaming, which is defined as the act of publicly criticizing and drawing attention to the action(s) of individuals or organizations with the goal of them ceasing or changing the action(s) in question (Bartley and Child 2011; Bloomfield 2014). This strategy operates through firms’ reputational concerns: companies may change their behavior when shamed publicly, as they fear damage to their reputation and, consequently, their bottom line. A social movement organization that is well known for its shaming efforts is Greenpeace (Bloomfield 2014). For example, in 2008, Greenpeace launched its Sustainable Seafood Campaign by targeting North American retailers through direct action (such as sit-ins in stores) as well as an extensive media campaign. Through these shaming efforts, Greenpeace was able to draw considerable attention to retailers’ weak sustainable seafood sourcing policies. In response to this negative publicity, several retailers – including Target and Safeway – updated their seafood procurement policies and increased their engagement in fisheries policy reform (Gutierrez and Morgan 2015).
At the organizational level, a strategy often used by social movements to influence corporate behavior is informing, which is defined as the “provision of information and/or material evidence to enhance the credibility of activists and the practices they seek to bring about” (Briscoe, Gupta, and Anner 2015, 304). In other words, movement actors conduct their own research or gather and organize existing evidence to convey the need for or value of their proposal(s) to key corporate decision makers. Therefore, unlike shaming, the strategy of informing does not operate through pressure and reputational concerns but rather through evidence-based persuasion. An example is the US-based social movement organization United Students Against Sweatshops (USAS), which used such informational tactics during its Rein-in-Russell campaign in 2009 to convince colleges to adopt supplier sanctions against Russell Athletic. Specifically, USAS collected testimonies from aggrieved workers about poor labor practices in Russell Athletic’s supply chain. These testimonies were disseminated among college administrators through reports and educational events on campus. College decision makers had previously been largely unaware of these labor issues, and when they learned about the poor working conditions several of them responded by cancelling their apparel licensing agreements with Russell Athletic (Briscoe, Gupta, and Anner 2015).

Lastly, an example for a movement strategy at the individual level is empowering, which is defined as restoring “to individuals a sense of their own value and strength and their own capacity to handle life’s problems” (Bush and Folger 1994, 2). Differently put, empowering means giving individuals – particularly those who belong to historically marginalized groups – the resources to better their own lives. Empowering influences corporate behavior through the engagement of internal stakeholders, especially current and prospective employees. A prominent example for a social movement that utilizes empowerment to achieve its goals is the labor
movement. Labor organizations empower employees by educating, connecting, and motivating them (Friedman 2009); empowered employees, in turn, are in a better position to address professional issues and bring about organizational change (Whiteside et al. 2006). There are numerous instances of empowered employees changing corporate behavior and practices; for example, a recent meta-analysis on the subject suggests that labor unions play a crucial role in educating employees about job-related health hazards, which allows employees to effectively change the physical and psychosocial conditions of their work through collective action (Malinowski, Minkler, and Stock 2015).

In the following section, we elaborate how women’s movements use shaming, informing, and empowering to increase the number of women on corporate boards. While we do not claim that these three strategies are the only ones utilized by women’s movements to increase female board representation, anecdotal evidence from both news articles and practitioner websites suggests that shaming, informing, and empowering play an important role in the strategic repertoire of women’s organizations working toward boardroom gender diversity.

Women’s Movements and Female Board Representation

One type of social movement that has received scarce attention in the literature on corporate behavior is the women’s movement, which is comprised of a broad range of actors – individual activists, informal groups, and civil society organizations – in a particular temporal and geographical context working toward women’s liberation and rights (Staggenborg and Taylor 2005). The specific goals of women’s movements vary over time and by country. For example, in most Western states, the main goal of the women’s movement during the early 1900s was to gain
the right to vote while during the second half of the 20th century, its primary focus were reproductive rights. Contemporary Western women’s movements pursue several goals simultaneously, most prominently freedom from sexual harassment (Carlsen et al. 2018) and equality in the workplace, including gender parity in corporate leadership (Poo 2018).

While no study has systematically examined the link between women’s movements and female board representation, there is anecdotal evidence suggesting that women’s movements use the three strategies described above to work toward boardroom gender diversity. Specifically, there are numerous women’s organizations which use shaming, informing, and/or empowering to increase female board representation. As for shaming, an organization which exemplifies this strategy is 2020 Women on Boards, a women’s organization operating in five countries with the goal of increasing the percentage of women on company boards to 20% or greater by the year 2020 (Gannon 2018). Among other activities, this organization publishes annual reports which include ratings for all companies on the Russell 3000 Index and Fortune 1000 list. The worst rating a company can receive is a “Z”, which stands for “zero female board members” (McShane 2019). These reports are readily accessible to the public, and they are publicized during their annual global event called “The National Conversation on Board Diversity”. Having a “Z” rating or another poor grade is not a good look for a company, and in this day and age may very well result in reputational costs which in turn may be detrimental to a firm’s financial performance. For some companies, such reputational costs (or even their prospect) are enough of an impetus to work toward greater boardroom gender diversity.

2020 Women on Boards is not alone in this regard. Another example of shaming as a movement strategy can be found in Singapore, where the percentage of board seats held by women at the country’s top 100 companies rose from 9.5 percent in 2015 to 14.7 percent in 2018 (Yap
This change has in part been attributed to the efforts of the Diversity Action Committee (DAC), a government-backed group established in 2014 with the goal of increasing women’s participation on corporate boards (Shah 2021). To achieve this goal, the DAC – among other things – compiled and publicized a list of companies with no female directors, thereby drawing public attention to the issue of boardroom gender diversity and calling out firms that were lacking in this regard. This shaming strategy appears to have been effective, as the number of companies with no female directors dropped by almost 30 percent within only two years (Yap 2018).

Another strategy used by women’s movements to increase female board representation is informing. This strategy is utilized by the aforementioned 2020 Women on Boards, which publishes the Gender Diversity Index (GDI), an annual review of female board representation for companies on the Russell 3000 Index and Fortune 1000 list. 2020 Women on Boards relates the GDI to firms’ financial performance and disseminates their findings among business leaders. In addition, business leaders are invited to the organization’s annual flagship event, The National Conversation on Board Diversity, where they are presented with additional information on the benefits of boardroom gender diversity. Every year, many of them accept this invitation; for example, in 2019, The National Conversation on Board Diversity was held in 32 cities across five countries and drew almost 10,000 attendees (Smuts 2019). According to the event organizers, informing is an effective strategy, as business leaders become more willing to engage in conversations about boardroom gender diversity when the discussion shifts from political and moral imperatives to arguments about financial benefits.

Examples of other women’s organizations that use informing to increase female board representation include the Thirty Percent Coalition and the 30% Club. As for the former, the Thirty Percent Coalition is a US-based women’s advocacy organization founded in 2011.
Percent Coalition has compiled numerous research reports about the benefits that increased female board representation can have for firms; these reports are not only available on the organization’s website but are actively distributed among US companies as part of the Thirty Percent Coalition’s outreach campaign (Holt 2019). Similarly, the 30% Club is a network of representatives from civil society and the business community, which was established in the United Kingdom in 2010 and by now has chapters in multiple other countries including Australia, Canada, and Ireland. The 30% Club’s work is centered on an evidence-based approach intended to amplify the business case for boardroom gender diversity. Through extensive research and numerous events, the 30% Club has been able to convince several corporate decision makers of the financial benefits of increased female board representation (Gordon 2015; Green 2021).

Lastly, women’s movements utilize empowering to increase female board representation. There are numerous women’s organizations which empower women in different ways with the goal of advancing their professional careers. For example, in the United States alone, there are dozens of organizations that provide networking opportunities exclusively for women (Hicks 2020), meaning they connect female professionals with business leaders and establish lasting relationships that can help them climb the career ladder. Similarly, an important part of empowering women to become corporate leaders is to motivate and inspire them. Some women have become resigned to achieving less than their male counterparts as a result of sexist norms and practices, so instilling them with hope and determination by highlighting examples of female success is a critical first step toward their professional advancement. Empowerment through motivation and inspiration is the primary activity of several women’s organizations in the United States and other parts of the Western hemisphere (Neal 2017).
A concrete example of a women’s organization using empowering as a strategy to increase female board representation is Strong Women Strong Girls (SWSG), which was founded in 2000 and operates primarily throughout the eastern US. SWSG utilizes a multi-generational approach to empowerment that involves high school girls, college women, and female professionals (DiGiammerino 2022). In other words, SWSG provides various mentorship opportunities and other services to females of different ages that are specifically tailored toward their respective life stages. To empower female professionals, SWSG draws on their so-called “Strong Leaders Network”, a network of more than 100 female business leaders who volunteer their time to mentor other women and prepare them for corporate leadership positions. According to SWSG, this program has helped multiple women advance in their careers, and once they reached leadership positions many of them become mentors themselves (Federoff 2018).

In sum, women’s movements use (at least) three strategies – shaming, informing, and empowering – to increase female board representation. As the previous paragraphs have shown, each of these strategies has a different target audience: shaming is directed at the general public (field level), informing addresses the businesses themselves (organizational level), and empowering is aimed at women who may one day vie for a seat on a corporate board (individual level). While there is anecdotal evidence suggesting that women’s organizations use these three strategies effectively and are therefore partly responsible for the recent increases in the number of female directors in several countries (e.g., Gupta 2020; Yap 2018), there has not yet been a systematic analysis of this relationship. We provide such an analysis by empirically testing the effect of women’s movements on female board representation. Before we elaborate on the empirics, the following section discusses the conditions under which we expect women’s movements to be most likely to have a significant impact on boardroom gender diversity.
The Importance of Movement Strength and Corporate Opportunity Structures

Not all social movements are equally effective at achieving their goals. In theorizing the effectiveness of women’s movements in increasing female board representation, we draw on political process theory (PPT), which has been used in several studies on the relationship between social movements and corporate behavior (e.g., Briscoe, Chin, and Hambrick 2014; Chuang, Church, and Hu 2018; Schurman 2004). According to PPT, which is also referred to political opportunity theory, the success or failure of social movements is primarily a function of the interaction between movement attributes, such as movement strength, and the broader economic and political context (Caren 2007). As for the former, it is intuitively convincing that stronger (i.e., larger and more resourceful) social movements tend to be more successful at achieving their goals than weaker ones. The reason for this is that social movements with greater resources – money, members, public support, international allies, etc. – are able to carry out their activities more frequently and to a greater extent (e.g., Kane 2003). In our research context, we similarly expect that stronger women’s movements can mobilize more resources and thus reach a wider audience with their shaming efforts, conduct more research to inform business leaders, and empower a larger number of women. Therefore, we hypothesize that stronger women’s movements are more successful at increasing the number of women on corporate boards.

H1: Women’s representation on boards of directors will be greater in countries with stronger women’s movements.
Social movement scholars have pointed out that strength is necessary but not sufficient for a movement to succeed (e.g., Kane 2003). As mentioned previously, PPT posits that movement strength interacts with features of the broader economic and political context. To capture this broader context, scholars have developed the concept of “corporate opportunity structures”, that is, characteristics of firms that make them more or less responsive to social movement activities (Briscoe, Chin, and Hambrick 2014). While there are undoubtedly many firm characteristics that are potentially relevant for the effectiveness of women’s movements in increasing female board representation, extant research points to three firm attributes in particular: reputation-seeking behavior (e.g., Bloomfield 2014; Schurman 2004), commitment to CSR (e.g., McDonnell, King, and Soule 2015; Schurman 2004), and political orientation (e.g., Briscoe, Chin, and Hambrick 2014; McDonnell and Cobb 2020). Building on this prior research and in light of their conceptual appeal in the current context as elaborated below, we posit reputation-seeking behavior, commitment to CSR, and political orientation as important moderators in the relationship between women’s movements and female board representation. Figure 1 below provides a visual representation of our conceptual framework.

[Figure 1]

Reputation-seeking behavior, which is defined as intentional and extensive efforts, however effective, to monitor or improve one’s public image (Baekkeskov 2017), has been described as an integral part of corporate opportunity structures (e.g., Schurman 2004). While most – if not all – firms are preoccupied with their reputation to some extent, research suggests that some organizations are much more concerned with their public image and devote significantly greater resources to reputation management than others; studies have shown that variation in reputation-seeking behavior is the result of factors such as CEO demographics (Borghesi, Houston,
and Naranjo 2014), local norms (Wæraas and Sataøen 2015), and a firm’s capabilities (Mailath and Samuelson 2001). This variation in reputational concern has important implications for social movements, as previous studies (e.g., Schurman 2004) have argued that firms higher in reputation-seeking are more receptive to movement demands, as they are more vulnerable to the perceived reputational cost that may arise from failing to accommodate challenges from social movements.

Based on these insights, we posit that firms that seek reputation to a greater extent are more likely to increase the number of women on their board in response to the efforts of women’s movements. Since one of the primary strategies of women’s movements in trying to increase female board representation is shaming, which is intended to put pressure on firms by imposing perceived reputational costs, we should observe a greater effect of women’s movements on boardroom gender diversity for firms that exhibit a greater concern about their reputation, as they are more inclined to care about such reputational costs. This is precisely what happened, for example, in the case of the No Dirty Gold (NDG) campaign. As part of this campaign, the environmental organization Earthworks has been shaming mining companies and retailers since 2004 in an effort to reduce the ecological footprint of the gold industry. However, according to a recent study, this shaming campaign was limited in its effectiveness, since the gold industry as a whole is rather unconcerned with its reputation, relative to other industries: “An industry must have a branded node in the commodity chain that draws significant value from its reputation so activists can pose a credible risk to its business interests” (Bloomfield 2014, 269). In a similar vein, we hypothesize that the effect of women’s movements on boardroom gender diversity will be more discernible among firms that hold reputation in higher esteem.
H2: Women’s movements will be more effective at increasing women’s representation on boards of directors for firms that are more reputation-seeking.

Another facet of corporate opportunity structures that is relevant for our research purposes is commitment to CSR (e.g., McDonnell, King, and Soule 2015), which is defined as private business self-regulation that helps a company be socially accountable – to itself, its stakeholders, and the public (Sheehy 2015). For many companies, CSR is more than just something that they do; it is a value system that permeates all aspects of the firm, including its senior management, employees, and culture (Lim and Phillips 2008). Previous studies (e.g., Schurman 2004) have argued that such value systems are important moderators in the relationship between social movements and corporate behavior, since they affect how firms perceive, interpret, and respond to their social and political environment, including the demands made by social movements.

Based on this, we posit that firms which are committed to CSR are more likely to improve female representation on their boards as a result of the efforts undertaken by women’s movements. As stated previously, one strategy that women’s movements use to increase the number of women on corporate boards is informing, that is, providing business leaders with research to convince them of the benefits of boardroom gender diversity. This strategy, however, can only work effectively if business leaders are open to receiving this kind of information, and if they possess the cognitive ability to accept and properly process new information. Studies have shown that information processing is dependent on prior beliefs: individuals and organizations have a tendency to accept new information that aligns with their existing ideas and values, and to reject new information that does not (e.g., Balcetis and Dunning 2006). As a result, companies that are committed to and value CSR to a greater extent are more likely to be receptive to information
provided by women’s activists and organizations, as they are more sympathetic to the cause of gender equality and therefore more inclined to both listen to and accept this kind of information.

**H3: Women’s movements will be more effective at increasing women’s representation on boards of directors for firms that are more committed to CSR.**

A third and final firm characteristic (e.g., Briscoe, Chin, and Hambrick 2014) we focus on in the study at hand is political orientation, which is defined as a set of beliefs, ideals, and principles held by individuals or groups which inform their attitudes and behavior toward the social and political arrangements and processes of their society (Jost, Nosek, and Gosling 2008). Political orientation is generally thought of as a linear, left-right spectrum. On a very general level, liberal politics are associated with advocating social change and promoting greater political, social, and economic equality; conversely, conservative views are centered on a resistance to social change, a preference for a traditional, more or less hierarchical society, and an acceptance of inequality (Jost, Nosek, and Gosling 2008). Whether a firm skews liberal or conservative influences the extent to which particular social movements can cause changes in corporate behavior. For example, McDonnell and Cobb (2020) find that liberal directors are more likely than their conservative counterparts to step down in response to social movement boycotts. Similarly, a study by Briscoe, Chin, and Hambrick (2014) suggests that social movements are less likely to succeed at forming LGBT employee groups in firms with a conservative CEO.

In a similar vein, we argue that women’s movements are less effective at increasing female board representation when their strategies are targeted at conservative firms. Given that conservative politics involve a resistance to social change and an acceptance of inequality (Jost,
Nosek, and Gosling 2008), such views are less compatible with greater boardroom gender
diversity. As stated previously, information processing is dependent on prior beliefs (Balcetis and
Dunning 2006). We contend that firms with a conservative political orientation are less likely to
be receptive to information provided by women’s activists and organizations, as they are less
sympathetic to the cause of gender equality and hence less inclined to both listen to and accept
such information. In addition, evidence indicates that it is more difficult for women to climb the
corporate ladder in firms with a conservative political orientation (Carnahan and Greenwood
2018). Thus, empowering as a strategy to increase female board representation is less effective for
companies with a conservative political orientation, as even empowered (i.e., educated, well-
connected, and inspired) women will find it relatively difficult to penetrate the leadership ranks in
those companies. Overall, then, we expect to observe a smaller effect of women’s movements on
female board representation for firms with a conservative political orientation.

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H4: \text{Women's movements will be less effective at increasing women's representation on}
\text{boards of directors for firms that have a more conservative political orientation.}
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DATA AND VARIABLE DEFINITIONS

To test these hypotheses, we primarily rely on the Asset4 ESG ("Environmental, Social,
and Governance“) dataset from Thomson Reuters, which includes more than 400 individual ESG
measures created by expert coders using publicly available information. We merge this dataset
with country-level data provided by Smith et al. (2019; see also Plummer, Smith, and Hughes
2020) as well as the World Development Indicators (WDIs) and the World Values Survey (WVS).
The final dataset contains information on more than 2,000 companies from ten European and North American countries over a period of ten years (2002-2011). These firms are not chosen at random; rather, the sample is comprised of large, public companies that are traded on major stock market indices such as the S&P 500 Index and MSCI World. Following previous studies on the determinants of female board representation (e.g., Grosvold, Rayton, and Brammer 2016), we measure our dependent variable as the percentage of women on the board of directors.

Our main explanatory variable is the strength of a women’s movement. We operationalize this variable as the number of Women’s Transnational Social Movement Organizations (WTSMOs) present in a country in a given year (Plummer, Smith, and Hughes 2020; Smith et al. 2019). We divide this number by the respective country’s total population in the same year to ensure that our measure captures the strength of a country’s women’s movement, rather than acting as a proxy for country size. We believe that this variable is an appropriate operational measure for three reasons. First, other studies have similarly used women’s organizations per capita as a proxy for women’s movement strength (e.g., Weldon 2006). Second, research has demonstrated that the number of social movement organizations is strongly associated with other measures of movement strength such as the number of nonviolent protests (e.g., Murdie and Bhasin 2011). Third, the majority of social movement activities are carried out by formal organizations rather than individuals and informal groups (e.g., Ahlquist and Levi 2013), further bolstering the reliability and validity of our measure.

To measure reputation-seeking behavior, we use a binary variable which is coded 1 if a company actively monitors its reputation or its relations with the community via surveys, audits,

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1 These countries are: Canada, Finland, France, Germany, Italy, the Netherlands, Spain, Sweden, the United Kingdom, and the United States. Our selection of the sample countries was primarily guided by the availability of information across the four data sources (Asset4 ESG; Smith et al. 2019; WDI; WVS).
or other forms of measurement. To measure commitment to CSR, we identified three binary measures related to a firms’ CSR activities (publishing a CSR/sustainability report, training employees on environmental issues, and training executives/key employees on health and safety issues),\(^2\) and then took the average of these three variables to create a composite index.\(^3\) While measuring these first two moderators is rather straightforward, capturing a firm’s political orientation is more complicated. Previous studies (e.g., Gupta, Briscoe, and Hambrick 2017) have largely measured political orientation via campaign contributions to political parties and candidates. However, this measurement approach is not feasible given the cross-national nature of our data, which leads us to construct a different proxy.

We identified four binary measures in the Asset4 database that can reasonably be viewed as indicative of a firm’s political orientation:\(^4\) whether a company has a policy aimed at maintaining good relations with trade unions; whether it promotes positive discrimination (i.e., affirmative action); whether it strives to provide its employees with freedom of association; and whether it has a general, all-purpose policy regarding human rights.\(^5\) Again, we averaged these

\(^2\) There were several reasons we picked these three variables out of the various CSR-related measures within the Asset4 ESG database. First, studies have pointed out that inward-oriented CSR initiatives, particularly those that involve employees, are better representations of a genuine commitment to CSR than outward-oriented CSR initiatives, which are often driven by strategic calculations (e.g., Andersen and Skjoett-Larsen 2009; Borghesi, Houston, and Naranjo 2014). Second, we avoided measures that were conceptually or empirically too strongly related to our dependent variable, female board representation. Third, we ignored measures that exhibited a large degree of missing data relative to the other variables.

\(^3\) Scale reliability coefficient = 0.73; average interitem correlation = 0.48.

\(^4\) There are several reasons we chose these four measures over other potential measures of corporate political orientation included in the Asset4 database. First, research has shown that political orientation is strongly associated with attitudes toward labor unions (e.g., Sanchez 2007), affirmative action (e.g., Harrison et al. 2006), and human rights (e.g., Hertel, Scruggs, and Heidkamp 2009) at the individual level, which we argue can be extrapolated to the firm level. Second, the measures we chose map most closely onto the conceptual distinction between liberalism and conservatism outlined in the theory section. As mentioned there, liberals and conservatives fundamentally differ in their views on social change, societal hierarchies, and inequality. Labor unions, affirmative action, and human rights are all directly aimed at uplifting relatively powerless and vulnerable segments of society, which has direct implications for traditional wealth and power structures. Third, we avoided measures that exhibited a large degree of missing data relative to the other variables.

\(^5\) One might argue that firms have little discretion regarding matters such as freedom of association and affirmative action, as they are subject to government regulation. However, the Asset4 codebook explicitly states that “inference through legal obligation” is not taken into account for these variables, meaning that only firms that go beyond mere
four binary items to create a composite index.\textsuperscript{6} We reverse-coded this index so that higher values indicate a more conservative political orientation. To ensure face validity, we compared the recent political activities (e.g., campaign contributions) of selected U.S. firms to their scores on our index. Firms known for their liberal political orientation such as Starbucks score low on our index while well-known conservative companies such as Exxon Mobil score high, which adds to the face validity of our index.

Aside from the dependent variable, the key independent variable, and the moderators, we include in our models a series of firm- and country-level control variables commonly found in studies on the subject (e.g., Cabeza-Garcia, Del Brio, and Rueda 2019). The firm-level controls include board size, board independence, non-gender-related board diversity, and financial performance, and the country-level controls are comprised of diffusion, female labor force participation, and public opinion on female representation. Controlling for public opinion is particularly important in the context of our analysis. By including this variable in our models, we are able to distinguish the effect of women’s movements from general public pressure and sentiment. To measure public opinion on female representation, we rely on data provided by the World Values Survey (WVS; Inglehart et al. 2014). Our measure of public opinion combines two survey items on female representation: “men make better political leaders than women do”; and “men make better business executives than women do”. Both items are coded on a 4-point ordinal scale ranging from “strongly agree” (1) to “strongly disagree” (4), meaning that higher values indicate a more favorable attitude toward female representation. After taking the mean of these two items for each respondent, we average this mean by country and year to obtain countries’

\textsuperscript{6} Scale reliability coefficient = .72; average interitem correlation = .39.
overall public opinion on female representation. Since the WVS is not conducted every year, we impute missing data using the values of the closest year for which information is available. This approach is justified in that public opinion on social issues, including female representation, changes very slowly and does generally not exhibit substantial variation from one year to the next (e.g., Pacheco 2014). For a complete list of all variables as well as their respective measures and data sources, please see Table 1.\footnote{One potential criticism is that our list of control variables omits crucial confounders, particularly national culture and quota legislation. However, we argue that these confounders are not a serious concern in our research context, for three reasons. First, all of our sample countries are part of the Western hemisphere and thus exhibit relatively small cultural differences. Second, none of the sample countries had quota legislation for corporate boards go into effect prior to 2011. Third, in the robustness section, we use an instrumental variable approach that provides reasonable protection against omitted variable bias.}

Table 1

EMPIRICAL RESULTS

Sample Statistics

Table 2 shows the descriptive statistics for the variables under analysis. As the table illustrates, on average, women account for less than eleven percent of directors on corporate boards. In fact, almost one-third of the firms in our sample (31.5 percent) do not have a single female board member. The maximum value for this variable is 66.67: in 2006, two-thirds of the directors of the French civil engineering construction company Eiffage were women. As for the key independent variable, countries exhibit substantial variation regarding the strength of their women’s movements; the United States has less than one Women’s Transnational Social Movement Organization (WTSMO) per million inhabitants while Finland has more than 14. The
average for this variable is about one-and-a-half WTSMOs per million inhabitants. Turning next to our moderators, roughly a quarter (25.6 percent) of the firms in our sample monitor their reputation and relations with communities through the use of surveys or other measurements. The mean value for our CSR index is about 0.37, meaning that the average firm engages in one out of the three behaviors we used as measures of commitment to CSR. As for our political orientation index, the mean is roughly 0.76, which indicates that the average company in our sample has only one of the following four policies: maintaining good relations with trade unions; promoting positive discrimination; striving to provide employees with freedom of association; and promoting human rights in general.

[Table 2]

As for the control variables, the firms in our sample average between ten and eleven board members. Almost two-thirds of the companies (64.4 percent) strive to maintain a well-balanced board through an adequate number of independent or non-executive board members. The mean value for our board diversity index is 0.32, meaning that the average firm strives to achieve board diversity on one of the three dimensions we included in our measure (race/religion, expertise/age, and diversity in general). The average return on assets for the firms in our sample is close to zero (0.06). Regarding our measure of diffusion, there are several countries in our sample (e.g., Italy) in which not a single firm actively strives to maintain a diverse board through adequate female representation; in the average country, less than 14 percent of companies do so. On average, slightly more than half (56.6 percent) of a country’s female working-age population participate in the labor force; female labor force participation is lowest in Italy (36.56 percent) and highest in Canada (61.99 percent). Lastly, the average country’s public disagrees with the statement that men make better political leaders and/or business executives than women do (on a 4-point scale ranging
from “strongly agree” to “strongly disagree”). Among the sample countries, public opinion on female representation is the least favorable in the United States and the most favorable in Sweden. [Table 3]

Table 3 illustrates the pairwise correlation coefficients for the variables of interest. All predictors are significantly correlated with female board representation, including our key independent variable; in line with expectations, with the exception of political orientation, all of these correlation values are positive. In addition, the table demonstrates that multicollinearity is likely not an issue, since the highest absolute value (modulus) in the correlation matrix is 0.57. Importantly, our key independent variable is not too strongly correlated with any of the other predictors. This confirms the results in Table 2, which similarly suggest the absence of significant multicollinearity as all independent variables have a variance inflation factor (VIF) below two.8

Hypothesis Testing

Given the panel structure of the data (e.g., Finkel 1995) and in accordance with other studies on the subject (e.g., Huang, Diehl, and Paterlini 2020), we estimate our models using ordinary least squares (OLS) with firm-fixed effects, year dummies, and robust standard errors clustered by firm.9 All independent variables are lagged by one year. In the baseline model (Model 1), we include our key independent variable as well as the firm- and country-level controls, but not the moderators. The econometric specification of our baseline model is shown in Equation 1,

8 To obtain the VIFs, we regressed the dependent variable on all predictors using standard OLS followed by the “estat vif” postestimation routine in Stata SE v15.0 (Baum 2006).
9 The rho value of our models is .77, which means that around 23 percent of the variation in female board representation is within firms. This is enough to warrant the use of fixed effects over random effects, especially since we ran a Hausman test that showed the superior performance of the fixed effects estimator over the random effects estimator (Allison 2009).
such that \( y \) (i.e., the percentage of female board members) in firm \( i \) at time \( t \) is a function of \( X \) (i.e., the number of WTSMOs per capita) in country \( k \) at time \( t-1 \) as well as a host of other factors related to firm \( i \), country \( k \), and year \( t \). \( F_{i,k,t-1} \), \( C_{k,t-1} \), \( I_{i,k} \), and \( T_t \) are vectors for firm-level controls, country-level controls, firm dummies, and year dummies, respectively.

\[
(1) \quad y_{i,k,t} = \alpha_0 + \beta_1 X_{k,t-1} + \theta F_{i,k,t-1} + \gamma C_{k,t-1} + \delta I_{i,k} + \tau T_t + \epsilon_{i,k,t}
\]

Models 2, 3, and 4 extend the baseline model by adding a different moderator to each model; specifically, we interact women’s movements on the one hand with reputation-seeking behavior (Model 2), commitment to CSR (Model 3), and political orientation (Model 4) on the other. Lastly, Model 5 includes all three moderators simultaneously. The results for Models 1 through 5 are illustrated in Table 4. Note that all of the fixed effects models are estimated using the "xtreg, fe" command in Stata SE v15.0, which means that the constants reported in the table can be interpreted as the average values of the fixed effects for each model.

Turning to our first hypothesis test, Model 1 shows that the strength of women’s movements has a positive and significant (\( p<.10 \)) effect on the percentage of women on corporate boards; \( H1 \) is thus supported. To better illustrate the size of this effect, we calculate a series of adjusted predictions using the “margins” postestimation routine in Stata SE v15.0. Holding all other covariates constant at their mean, the average percentage of women on boards of directors is 10.11 in countries with zero WTSMOs per million inhabitants, 14.37 in countries with five WTSMOs, and 18.36 in countries with ten WTSMOs.

To test our hypotheses regarding the moderating effect of corporate opportunity structures, we turn our attention to Models 2 through 5. As hypothesized, Model 2 shows a positive and significant (\( p<.01 \)) interaction between women’s movements and reputation-seeking behavior,
indicating that firms which are more concerned about their reputation are more likely to increase the number of women on their board in response to the efforts of women’s movements. This interaction effect remains significant (p<.05) in Model 5; thus, H2 is supported. Similarly, Model 3 illustrates a positive and significant (p<.05) interaction between women’s movements and commitment to CSR, which means that H3 is supported: as firms become more committed to CSR, the impact of women’s movements on gender boardroom diversity becomes stronger. The interaction between women’s movements and political orientation is negative and significant (p<.10) in Model 4 as expected but becomes insignificant once the other moderators are introduced to the model (Model 5), which means the results only provide partial support for H4.

Robustness

While the fixed effects models used for our analyses eliminate the possibility of omitted variable bias stemming from time-invariant unobservables, they do not account for potential omitted variable bias originating from time-varying unobservables and reverse causality. Therefore, we estimate a series of instrumental variable models that mitigate such concerns about endogeneity and provide us with considerable leverage for establishing causality (see Morgan and Winship 2015, 291-294). Specifically, we use the Arellano-Bond dynamic panel estimator (Arellano and Bond 1991) which transforms all regressors, usually by differencing, and uses the generalized method of moments (GMM); it is therefore also referred to as difference GMM (Roodman 2009). A major advantage of the Arellano-Bond estimator is that it does not require the specification of external instruments because it instead utilizes lagged levels of the endogenous
regressors as instruments. We estimate a total of four GMM models, one for the main independent variable as well as one for each moderator.\textsuperscript{10}

These instrumental variable models help us determine whether endogeneity is an impediment to causal inference in our study via a two-step process. We first estimate a series of standard dynamic panel models (i.e., lagged dependent variable models) that do not correct for potential endogeneity. We then estimate the GMM models described above; if the GMM models yield results similar to those of the standard dynamic panel models, we can conclude that our explanatory variables are truly exogenous, and endogeneity is not a serious validity threat. The results for the standard dynamic panel models as well as the GMM models are reported in Table 5. As the table shows, the GMM models yield results similar to those of the standard dynamic panel models: women’s movements, reputation-seeking behavior, and commitment to CSR have a positive and significant effect on female board representation, while political orientation has a negative and significant effect on it. Therefore, omitted variable bias and reverse causality are not a serious validity threat for our analyses, which further increases our confidence in the validity of the results reported in the previous section.

[Table 5]

DISCUSSION AND CONCLUSION

Summary of Results

\textsuperscript{10} All four models fail to reject the null hypotheses for both the Hansen test and the Arellano-Bond test for AR(2) in first differences, which suggests that the assumptions for the validity of the difference GMM are met (Roodman 2009).
This study represents the first empirical analysis of the relationship between women’s movements and boardroom gender diversity. Using a sample of more than 2,000 firms from ten countries over a ten-year period (2002–2011), we find that women’s movements positively affect female board representation. Based on the social movements literature as well as anecdotal evidence, this effect appears to be due to women’s movements empowering women to take corporate leadership positions, informing executives about the benefits of boardroom gender diversity, and shaming firms that lack adequate female board representation. Our quantitative results further indicate that the effect of women’s movements on boardroom gender diversity is moderated by corporate opportunity structures. Specifically, this effect is stronger for firms that are reputation-seeking and committed to CSR. These results are robust to the use of an instrumental variable approach that mitigates concerns about reverse causality and omitted variable bias.

Our adjusted predictions demonstrate that the effect of women’s movements on female board representation is quite sizeable. As mentioned in the previous section, the average percentage of women on boards of directors is 10.11 in countries with zero WTSMOs per million inhabitants, 14.37 in countries with five, and 18.36 in countries with ten. Interestingly, based on our sample data, the countries with the largest increase in WTSMOs also experienced the greatest improvement in female board representation. This is particularly visible in the case of Sweden, where the number of WTSMOs increased from 66 in 2002 to 80 in 2011; during the same time, the average percentage of women on boards of directors increased from 10.67 percent to 26.67 percent. Given the results of our instrumental variable models, we contend that these two increases are not coincidental but causally related (see Morgan and Winship 2015, 291-294), with women’s movements driving female board representation.
Theoretical and Practical Implications

By developing a theoretical framework which specifies the relationships between movement strength, corporate opportunity structures, and female board representation, this study makes several conceptual contributions. First, our results suggest that social movement scholars, who have been largely preoccupied with policy outcomes (see Banaszak and Ondercin 2016), should also be paying more attention to corporate outcomes when assessing the effects of social movements. Our framework can thus inform future scholarship on the effects of women’s movements, and social movements in general, on corporate outcomes other than board diversity (such as sexism and harassment of women in the workplace).

Second, our findings contribute to the political process theory (PPT) literature. Specifically, while studies in the PPT tradition have overwhelmingly focused on the political and institutional environment of social movements, our research adds to an emerging stream of recent studies (e.g., Briscoe, Chin, and Hambrick 2014; Chuang, Church, and Hu 2018) that have identified corporate opportunity structures as important moderators in the relationship between social movements and corporate behavior. Third, our findings indicate that management scholars, including those who study the determinants of female representation in corporate leadership, are well-advised to consider the roles of social and political institutions and actors such as social movement organizations. As most studies (e.g., de Cabo, Gimeno, and Nieto 2012; Hillman, Shropshire, and Cannella Jr. 2007; Huang, Diehl, and Paterlini 2020) on variation in boardroom gender diversity have focused on firm-level explanations, there are opportunities for researchers in this area to theorize the effects of social and political determinants other than women’s movements, such as gender norms, government rhetoric, and political networks.
Our findings also have a number of practical implications. First, since this study is the first to document a systematic effect of women’s movements on female board representation, our results demonstrate that women’s activists and organizations working toward greater boardroom gender diversity are—at least to some extent—successful in their efforts. In that sense, our findings are a testament to the work these activists and organizations do day in and day out. Second, in a world of limited time and resources, our study shows which companies women’s activists and organizations should primarily target if they wish to improve female board representation in the most effective way. According to our findings, women’s movements with the goal of improving boardroom gender diversity have the greatest effect on firms that are reputation-seeking and committed to CSR. To identify such firms, activists can use a variety of publicly available information sources such as RepTrak, CSRHub, Fortune’s list of most admired companies, and media reports.

Third, our study suggests that firms without adequate female board representation should more seriously consider the importance of a diverse board, as our results indicate that there is a good chance that such firms will sooner or later be targeted by the shaming efforts of women’s activist organizations. More generally, companies should earnestly ponder gender parity on corporate boards due to its potential to improve firm performance. We conducted a post-hoc, secondary analysis to examine the effects of female board representation on firms’ financial, environmental, and social performance. The results of this analysis are provided in Table 6. Using the same instrumental variable approach as before, we find that female board representation does not significantly affect financial performance, but it does have a positive and significant impact on environmental and social performance. These findings are in line with the broader literature on the subject: evidence on the relationship between female board representation and financial
performance is mixed (e.g., Post and Byron 2015), while the positive effect of boardroom gender diversity on firms’ environmental and social performance is fairly well-established (e.g., Arayssi, Dah, and Jizi 2016; Crichton et al. 2021; Sebastianelli and Tamimi 2020; Shaukat, Qui, and Trojanowski 2016). These results are particularly relevant in light of the recent push for global sustainability reporting standards and ESG disclosure regulations (Caroom 2021). With their ESG footprint becoming more readily available to consumers, investors, and other stakeholders, companies will need to address sustainability issues both meaningfully and transparently in order to continue to thrive (Poole and Sullivan 2021). Given that companies with gender-diverse boards tend to perform better environmentally and socially, the changing ESG reporting landscape further strengthens the case for increasing female board representation.

[Table 6]

Limitations and Future Research

One limitation of our study is that we were unable to measure the proposed movement strategies (i.e., empowering, informing, and shaming) and incorporate them in our model. Future research could build on our theoretical framework and devise a research design to empirically test the relative strength of the three strategies in improving boardroom gender diversity. Specifically, it would be interesting to examine which of the strategies is most (or least) effective in increasing female board representation, and whether using multiple strategies simultaneously yields greater success than focusing all efforts on one strategy. In addition, while anecdotal evidence suggests that the three strategies are complementary (e.g., 2020 Women on Boards uses both shaming and informing), future studies could more systematically examine whether and under which condition
the three strategies are used as complements or substitutes. Moreover, further research is needed to determine the extent to which the three strategies lead to long-term and meaningful improvements in boardroom gender diversity, and whether there are conditions under which some of the strategies may have detrimental effects. For example, it is conceivable that some of the increases in female board representation brought about by shaming are window dressing, such that companies add more female directors to appease public pressure but at the same time assign less weight to the board positions granted to women (e.g., by keeping female board members out of core committees).

Aside from these interesting questions related to the three strategies, another fruitful area for further study would be to examine the effects of women’s movements on corporate outcomes other than female board representation. For example, sexual abuse has been one of the primary foci of women’s movements in recent years, particularly in the wake of the so-called “Me Too movement” (e.g., Carlsen et al. 2018; Diener and Small 2019), and it would be interesting to examine if their efforts have had an impact on sexism and harassment of women in the workplace. One last promising avenue for future research would be to study whether and how female board representation can be improved through pressure from stakeholders other than women’s rights groups, such as employees.
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<th>Operationalization</th>
<th>Source</th>
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<td>Female board representation</td>
<td>Percentage of women on the board of directors</td>
<td>ASSET4 ESG</td>
</tr>
<tr>
<td>Women’s movements</td>
<td>Number of Women’s Transnational Social Movement Organizations (WTSMOs) per million inhabitants</td>
<td>Plummer, Smith, and Hughes 2020; Smith et al. 2019; World Bank</td>
</tr>
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<td>Reputational behavior</td>
<td>Binary variable coded 1 if the company monitors customer satisfaction or its reputation and relations with communities through the use of surveys or measurements</td>
<td>ASSET4 ESG</td>
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<td>Commitment to CSR</td>
<td>Average of three binary variables indicating whether a company 1) publishes a CSR/sustainability report; 2) trains its employees on environmental issues; 3) trains its executives and key employees on health and safety issues</td>
<td>ASSET4 ESG</td>
</tr>
<tr>
<td>Political orientation</td>
<td>Average of four binary variables indicating whether a company 1) has a policy aimed at maintaining good relations with trade unions; 2) promotes positive discrimination3) strives to provide its employees with freedom of association; 4) has a general, all-purpose policy regarding human rights</td>
<td>ASSET4 ESG</td>
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<td>Board size</td>
<td>Total number of board members at the end of the fiscal year</td>
<td>ASSET4 ESG</td>
</tr>
<tr>
<td>Board independence</td>
<td>Binary variable coded 1 if a company strives to maintain a well-balanced board through an adequate number of independent or non-executive board members</td>
<td>ASSET4 ESG</td>
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<tr>
<td>Board diversity</td>
<td>Average of three binary variables indicating whether a company has an internal policy aimed at achieving or maintaining adequate representation of: 1) different cultural groups (religion, race, etc.); 2) different experiences and expertise (financial or industry expertise or age); 3) diversity in general</td>
<td>ASSET4 ESG</td>
</tr>
<tr>
<td>Financial performance</td>
<td>Return on assets (ROA)</td>
<td>ASSET4 ESG</td>
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<td>Diffusion</td>
<td>Proportion of firms in a country in a given year that have an internal policy aimed at achieving or maintaining adequate female representation (excluding the focal firm)</td>
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</tr>
<tr>
<td>Female labor force participation</td>
<td>Female labor force participation rate (percent of female population age 15+)</td>
<td>World Bank</td>
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<tr>
<td>Public opinion on female representation</td>
<td>Average of two 4-point ordinal variables ranging from “strongly agree” (1) to “strongly disagree” (4): 1) men make better political leaders than women do; 2) men make better business executives than women do</td>
<td>World Values Survey (Inglehart et al. 2014)</td>
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### Table 2. Descriptive Statistics

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<tr>
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<th>SD</th>
<th>Min</th>
<th>Max</th>
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All variables are defined in Table 1. The sample spans from 2002 to 2011.
### Table 3. Correlation Matrix

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<td>Women’s movements</td>
<td>.10***</td>
<td></td>
<td></td>
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<tr>
<td>Reputation-seeking</td>
<td>.10***</td>
<td>.08***</td>
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<td></td>
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<tr>
<td>Commitment to CSR</td>
<td>.10***</td>
<td>.14***</td>
<td>.43***</td>
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<tr>
<td>Political orientation</td>
<td>-.10***</td>
<td>-.21***</td>
<td>-.42***</td>
<td>-.57***</td>
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<td>.15***</td>
<td>-.23***</td>
<td>.08***</td>
<td>.10***</td>
<td>-.03***</td>
<td>-.01</td>
<td>.46***</td>
<td></td>
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<tr>
<td>Return on assets</td>
<td>.02***</td>
<td>.03***</td>
<td>-.01</td>
<td>.02**</td>
<td>-.01*</td>
<td>-.09***</td>
<td>-.02**</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diffusion</td>
<td>.18***</td>
<td>-.20***</td>
<td>.07***</td>
<td>.13***</td>
<td>-.02**</td>
<td>-.02**</td>
<td>.41***</td>
<td>.39***</td>
<td>.00</td>
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<tr>
<td>Female labor force</td>
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<td>.03***</td>
<td>-.13***</td>
<td>-.15***</td>
<td>.25***</td>
<td>-.28***</td>
<td>.20***</td>
<td>.27***</td>
<td>.03***</td>
<td>.18***</td>
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<td>Public opinion</td>
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<td>.44***</td>
<td>.09***</td>
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<td>.18***</td>
<td>-.04***</td>
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<td>-.01</td>
<td>.16***</td>
<td>-.18***</td>
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</table>

This table displays the pairwise correlation coefficients for the variables of interest. All variables are defined in Table 1. The sample spans from 2002 to 2011. ***, ** and * denote statistical significance at the 1, 5, and 10% levels, respectively.
Table 4. Women’s Movements and Female Board Representation

<table>
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<th>(3)</th>
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<th>(5)</th>
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<tr>
<td>Women’s movements</td>
<td>0.852*</td>
<td>0.816*</td>
<td>0.898*</td>
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<tr>
<td></td>
<td>(0.469)</td>
<td>(0.472)</td>
<td>(0.460)</td>
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<td>(0.483)</td>
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<tr>
<td>Reputation-seeking</td>
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<td>-0.490**</td>
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<td>(0.248)</td>
<td>(0.249)</td>
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<tr>
<td>Reputation * movements</td>
<td>0.238***</td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<td>(0.402)</td>
<td>(0.415)</td>
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</tr>
<tr>
<td>CSR * movements</td>
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<td>0.239*</td>
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<td>(0.141)</td>
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<td></td>
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<tr>
<td>Orientation * movements</td>
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<td>-0.148</td>
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<tr>
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<td>(0.184)</td>
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<tr>
<td>Board independence</td>
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<tr>
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<td>Board diversity</td>
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<td>0.226</td>
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<td>(0.401)</td>
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<tr>
<td>Return on assets</td>
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<td>1.284*</td>
<td>1.292*</td>
<td>1.292*</td>
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<td>Diffusion</td>
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<td>(1.578)</td>
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<td>(1.577)</td>
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<tr>
<td>Female labor force</td>
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<td>0.473***</td>
<td>0.442***</td>
<td>0.439***</td>
<td>0.416***</td>
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<td>(0.148)</td>
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<td>Yes</td>
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</table>

This table displays the unstandardized coefficients and the robust standard errors clustered by firm for the variables of interest. All variables are defined in Table 1. The sample spans from 2002 to 2011. 

***, ** and * denote statistical significance at the 1, 5, and 10% levels, respectively.
<table>
<thead>
<tr>
<th></th>
<th>Standard Dynamic Panel Models</th>
<th>GMM Models</th>
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<tbody>
<tr>
<td></td>
<td>(5)</td>
<td>(6)</td>
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<tr>
<td>Women’s movements</td>
<td>0.173*** (0.030)</td>
<td>0.105** (0.052)</td>
</tr>
<tr>
<td>Reputation-seeking</td>
<td>0.246** (0.113)</td>
<td>5.531** (2.572)</td>
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<tr>
<td>Commitment to CSR</td>
<td></td>
<td>9.037*** (3.237)</td>
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<tr>
<td>Political orientation</td>
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<td>-0.719*** (0.140)</td>
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<tr>
<td>Lagged dependent variable</td>
<td>0.859*** (0.007)</td>
<td>0.864*** (0.007)</td>
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<tr>
<td></td>
<td>0.863*** (0.007)</td>
<td>0.862*** (0.007)</td>
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<tr>
<td></td>
<td>0.944*** (0.039)</td>
<td>0.807*** (0.122)</td>
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<td>0.810*** (0.117)</td>
<td>0.804*** (0.053)</td>
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<tr>
<td>Year-fixed effects</td>
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<td>Control variables</td>
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</tr>
</tbody>
</table>

This table displays the unstandardized coefficients and the robust standard errors clustered by firm for the variables of interest. All variables are defined in Table 1. The sample spans from 2002 to 2011. The control variables are included in all models but are not reported in the table for visual clarity.

***, ** and * denote statistical significance at the 1, 5, and 10% levels, respectively.
Table 6. Female Board Representation and Firm Performance

<table>
<thead>
<tr>
<th></th>
<th>Financial Performance</th>
<th>Environmental Performance</th>
<th>Social Performance</th>
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</thead>
<tbody>
<tr>
<td>Female board representation</td>
<td>0.000</td>
<td>0.013**</td>
<td>0.008*</td>
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<td>(0.006)</td>
<td>(0.005)</td>
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<td>0.574**</td>
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<td>GMM</td>
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<tr>
<td>N</td>
<td>10,943</td>
<td>10,911</td>
<td>11,050</td>
</tr>
</tbody>
</table>

This table displays the unstandardized coefficients and the robust standard errors clustered by firm for the variables of interest. The sample spans from 2002 to 2011.

***, ** and * denote statistical significance at the 1, 5, and 10 % levels, respectively.

Female board representation is measured as the percentage of women on the board of directors. Financial performance is measured as return on assets. To measure environmental performance, we use a binary variable that is coded 1 if a firm uses environmental criteria (e.g., life cycle assessment) to source or eliminate materials, and 0 otherwise. To measure social performance, we use a count variable indicating how many of the following five employment quality policies a firm has implemented: code of conduct for supply chain; internal communication tools (e.g., ombudsman); competitive employee benefits; job security processes; and good contacts with labor unions.

All three models fail to reject the null hypotheses for both the Hansen/Sargan test and the Arellano-Bond test for AR(2) in first differences, which suggests that the assumptions for the validity of the difference GMM are met.
Figure 1. Theoretical Framework