Citation for published version:

DOI:
10.1177/0007650315613980

Publication date:
2016

Document Version
Early version, also known as pre-print

Link to publication


University of Bath

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.
Women on Corporate Boards: A Comparative Institutional Analysis

Abstract: How do a country’s basic institutions enable or hinder women’s rise to the boards of public companies? The study evaluates this question with reference to the five basic institutions which research suggests are common across all countries: education, family, religion, economy and the government. Our sample consists of 23 countries and the study is framed in institutional theory. In analyzing the role of these institutions the paper seeks to understand better the relationships between individual institutions and the share of board seats held by women. The results suggest that four of the five basic institutions are related to the share of board seats women hold. In particular, the institutions of education, government, economy and family influence women’s rise to the board.
Women on Corporate Boards: A Comparative Institutional Analysis

Abstract

How do a country’s basic institutions enable or hinder women’s rise to the boards of public companies? The study evaluates this question with reference to the five basic institutions which research suggests are common across all countries: education, family, religion, economy and the government. Our sample consists of 23 countries and the study is framed in institutional theory. In analyzing the role of these institutions the paper seeks to understand better the relationships between individual institutions and the share of board seats held by women. The results suggest that four of the five basic institutions are related to the share of board seats women hold. In particular, the institutions of education, government, economy and family influence women’s rise to the board.

Keywords: Corporate Board Diversity, Corporate Boards, Board Demography, Institutional Theory
Women on Corporate Boards: A Comparative Institutional Analysis

Female corporate board directors remain a minority in the vast majority of boardrooms of publicly listed companies the world over (Branson, 2012). The relative absence of women corporate board directors has been the subject of extensive research designed to establish the business case for women corporate board directors (Nielsen & Hagen, 2009; Bear, Rahman & Post, 2010; Adams & Ferreira, 2009; Nielsen & Huse, 2010), and to begin to unravel the circumstances and characteristics that facilitate or impede qualified women’s access to corporate board directorships (Singh & Vinncombe, 2004; Burke & Mattis, 2000; Sheridan & Milgate, 2005, Sheridan, 2001; Burke, 2003; Grosvold & Brammer, 2011, Terjesen & Singh, 2008). The business case for increased female corporate board participation rests on the premise that women directors have been shown to enhance firm financial performance (Hillman, Harris, Cannella & Bellinger, 1998; Catalyst, 2007; Erhardt, Werbel & Shrader, 2003; Carter, Simkins & Simpson, 2003; Huse et al., 2009) and firm’s corporate governance practices (Adams & Ferrerira, 2009; Thomson et al., 2005). The relative roles of the characteristics and circumstances that facilitate women’s rise to the top have been addressed with reference to individual (Sheridan & Milgate, 2005; Singh & Vinnicombe, 2004), board (Westphal & Zajac, 1995; Westphal & Milton, 2000; Westphal & Stern, 2007), firm (Carter et al., 2003; Hillman, Shropshire & Cannella, 2007) and industry (Brammer, Millington & Pavelin, 2007a; Grosvold, Brammer & Rayton, 2007) characteristics.

One level of analysis that has received comparatively little scholarly attention is the national level. Aside from a few notable exceptions (e.g., Terjesen & Singh, 2008, Grosvold & Brammer, 2011, Grosvold et al., 2007), comparative cross-national research designed to uncover the national level mechanisms that facilitate or impede women’s progress to corporate boards remains scarce. Scholarship evaluating the role of national level constructs in shaping corporate board demography has established that gender specific institutions, such as the female managerial talent pool, are associated with a greater number of board directors (Terjesen & Singh, 2008) and that conceptual frameworks designed to capture national level
institutions such as culture (Gupta, Hanges & Dorfman, 2002) are associated with the share of
corporate board directors in a given cluster of countries (Grosvold & Brammer, 2011). These
studies have made contributions to the comparative national level literature on what drives
gender corporate board participation, but these studies have not systematically analyzed the
role of social and societal institutions such as the nature of educational systems, the role of
family in women’s lives, nor how religion, the economic labor market structure and the state
shape the context within which women make their career choices. It is this gap this study
begins to address.

In the wake of Norway’s decision to pass legislation requiring corporate boards to
have a minimum of 40% of each gender represented on the board of publicly listed companies
(Grosvold et al., 2007), other countries followed suit, such as Spain (Campbell & Minguza-
Verea, 2008). Legislation has however proved controversial with businesses typically
preferring voluntary initiatives intended to increase the share of board seats held by women.
The European Union recently dropped their proposal for EU wide legislation designed to
make the boardrooms of the EU more gender diverse, and Sweden shelved earlier proposals
for legislation similar to that of Norway (Thomson, Graham & Lloyd, 2005). These rejections
of legislative interventions to make boardrooms more diverse suggests that a clearer
understanding of the institutions analyzed in this paper can not only contribute to the debate
on what types of levers are available at the national level to increase female board
participation, but it can also help delineate how board demography is impacted by different
institutions. It therefore seems timely that these institutions are analyzed with respect to
female corporate board participation by addressing the research question; how do a country’s
basic institutions enable or hinder women’s rise to the top of publicly listed companies? The
research question is addressed with reference to five fundamental institutions common to
every society (Reus-Smit, 1997): the family, education, economy, religion and government.

This study is framed in institutional theory, and in particular in Meyer’s (2010)
discussion of new institutionalism, which suggests that institutional contexts shape people’s
actions and decisions. This context includes national level institutions as embodied in the prevailing political, economic, religious and cultural constructs of a given society (Meyer, 2010). Institutional theory, therefore, sees the choices and behaviors of individual actors as being defined and constrained by the particular constellation of institutional characteristics that make up their immediate context. Thus, the focus herein is on the parameters set by the national institutional context for women’s executive career ambitions, rather than what compels firms to appoint women corporate board directors. The study thus focuses on the supply side and addresses this focus through studying national level institutions. This study argues that a country’s institutional context plays an important role in influencing the extent of female corporate board participation by affecting the challenges, and constraints faced by women as they build their careers.

This study makes three important contributions. First, the paper systematically evaluates the role played by national institutions in shaping corporate board demography of publicly listed companies and thus begins to highlight which national institutions can facilitate women’s rise to the board. Secondly, it responds to calls for more research into the relationships between macro level constructs and micro level practices in the context of corporate boards. In particular it responds to the call made by Terjesen and Singh (2008) for longitudinal cross-national research that extends the set of institutions they addressed to encompass broader institutional contexts in order to understand women’s corporate board participation of publicly listed companies in a cross-national perspective. The paper also address Grosvold and Brammer’s (2011) call for research that explores the direct relationship between defined, ‘unbundled’ institutions and women on the board. The analysis herein therefore moves away from firm or board level explanations for the persistent absence of female corporate board directors (Hillman et al., 2007, Erhardt et al., 2003; Terjesen & Singh, 2009; Grosvold & Brammer, 2011) to focus on the role of national level institutions as conduits for corporate board demography. Thirdly, this study makes a theoretical contribution and proposes an extended view of Meyer’s (2010) institutional decoupling.
Literature review

Scholarly attention paid to the presence or absence of women board directors has increased over the last decade: Terjesen et al. (2009) and Davidson and Burke (2012) offer excellent reviews of the peer-reviewed literature published to date. The central themes of the debate have centered on why women are, in general, absent from the corporate board room (e.g., Singh & Vinnicombe, 2004; Thomson et al., 2005; Hillman et al., 2007), what can be done to remedy the situation (Singh, Vinnicombe & Terjesen, 2007) and what the nature of these remedies should be (Biligoria & Piderit, 2007; Thompson et al., 2005). Particularly controversial has been the decision by certain governments to legislate in favor of increased board participation (Grosvold et al., 2007). Opponents have argued that such interventions detract from shareholders’ rights to appoint the individuals they would like to see as custodians of the firm (Grosvold et al., 2007), and that there is an absence of qualified female candidates (Broome, 2007). Proponents, on the other hand, argue that structural interventions of this kind are necessary since qualified women candidates are available who continue to meet obstacles in their paths to the boardroom (Mattis, 2000).

Much research concerned with corporate board gender heterogeneity to date has focused on the performance imperative as a justification for an increased concern with, and interest in women corporate board directors. The empirical results of gender heterogeneous boards is mixed. Some studies have shown that women corporate board directors contribute to better governance and firm performance (Coffey & Wang, 1998; Williams 2003; Webb 2004; Adler, 2001). Women require more robust discussions and thorough analysis before agreeing to corporate proposals (Singh & Vinnicombe, 2004; Van der Walt & Ingley, 2003), leading Thomson et al., (2005) to argue that gender diverse boards are less inclined to rubber stamp the CEO’s decisions, and that the presence of women can “...limit the power of male ‘groupthink’ to nod through ostensibly value-creating proposals or policies that are ethically questionable” (Thomsen et al., 2005, p. 18). The inclusion of female board directors has also proved financially beneficial, resulting in increased shareholder returns, and higher returns on
equity (Hillman et al., 1998; Catalyst, 2007; Erhardt et al., 2003; Carter et al., 2003). Other studies have highlighted that gender diverse boards can result in increased conflict and delayed decision making (Erhardt et al., 2003; Knight, Pearce, Smith, Olian, Sims, Smith & Flood, 1999). With a more diverse range of views and opinions, consensus may also be harder to achieve, which in turn may delay decision-making and devolve personal responsibility (Erhardt et al., 2003; Knight et al., 1999), leading to lower performance. On balance, the argument suggests that board diversity adds more to a company than it takes away (Daily, Certo & Dalton, 1999); and increases rather than decreases the board’s independence. Selby (2000, p. 239) makes this point when noting that, “directors with diverse skills, experiences and backgrounds are more likely to raise questions that add to, rather than simply echo, the voice of management”.

A less commonly adopted, yet equally important, motivation for analyzing the imperative of women corporate board directors, is that qualified women board candidates have the same inherent right to accessing board seats as men (Grosvold, Brammer and Rayton, 2007). Until women and men have the same access to and opportunities for corporate board directorships, gender parity will not prevail, and firms will continue to miss out on the skills, insights and contributions women bring (Holton, 2000). Whilst women are now better represented across the labor force in general, some argue that the tendency towards only justifying commitment to gender equality in the board room on the premise of firm performance undermines the basic tenet of equality, which seeks to offer the same opportunities for women as men (Conroy, 2000).

Scholarship has only relatively recently begun to address the contextual impediments to and facilitators of female board participation (Davidson & Burke, 2011), and as a result comparatively little is known about the circumstances and drivers which encourage female board participation. In a review of the available research on female corporate board participation, Terjesen et al. (2008) identified a number of individual; firm and industry characteristics that encourage women to take up board positions (Terjesen et al., 2008).
At the industry level, particular industries have been identified as seemingly attracting more female board directors than other industries. For example, Brammer, Millington and Pavelin (2007a) studied the prevalence of women on the corporate boards of UK companies and found that women occupied a larger share of the board seats in the health care, media, banking and utilities sectors. This finding led Brammer et al. (2007a) to conclude that proximity to the final consumer was an influential factor in whether women were represented on the board in a given industry. Similar findings are also evident in the US (Fryxell and Lerner, 1989). Hillman, Shropshire and Cannella (2007) found that a 1% increase in the share of female labor force participation in a given industry was associated with approximately 1% increase in the chance that a board had at least one female board director. Research has thus successfully established that there is a relationship between a firm’s industry and the share of board seats women hold across the sectors’ companies, and that female board participation in any given industry differs on a country-by-country basis.

Research at the firm level has similarly established a relationship between an increased presence of female corporate directors and particular firm characteristics. For instance, company size has been associated with more gender diverse boards across a range of countries including Canada, the UK and the US (Burke & Mattis, 2000, Grosvold et al., 2007; Peterson & Philpot, 2007; Terjesen & Singh, 2008). Firms with a stronger financial performance record have also been found to have more women board directors (Farrell & Hersch, 2005; Catalyst, 2007). What is not clear however is the degree to which women opt to serve on better performing corporate boards, or whether boards do better as a result of women’s participation (Farrell & Hersch, 2005).

At the individual level, researchers have focused on identifying the formal educational attainment and experiential characteristics women need to ascend the board. Burke (1997), Sheridan (2001) and Singh and Vinnicombe (2004) surveyed female board directors in Canada, Australia and the UK respectively, and higher education attainment in the form of university degrees was prevalent amongst the female directors in all three countries as
well as extensive business experience. Previous CEO experience is seen as a key requirement for board appointments (Singh & Vinnicombe, 2004; Zelechowski & Bilimoria, 2004). Zelechowski and Bilimoria (2004) researched female executive directors and found that boards were not willing to give women the same influence as their male counterparts, and that women were less likely than their male colleagues to be considered for CEO appointments. Bilimoria and Piderit (1994) concluded that even when women possessed the relevant skills and credentials, women “...continue to be blocked in their rise to the top” (Bilimoria & Piderit, 1994, p. 1471).

Compared with the research concerned with industry, firm and individual level drivers of women’s ascension to the board, a relatively small, but growing body of research has begun to address systematically the role of national level drivers in shaping corporate board demography. An important stream of research has highlighted the large and persistent cross-national variation in the share of board seats that women hold. Studies from the UK, the US and Canada show that in 2001 women held 12.4% of board directorships on Fortune 500 companies in the US (Catalyst, 2001), 6.43% of board directorships in the UK (Singh & Vinnicombe, 2001), and 9.8% of the directorships of the Canada Post’s top 500 companies (Catalyst, 2001a). By 2010, women held 15.7% of US board seats (Catalyst, 2011), 12.5% of UK board seats (Vinnicombe, Sealy, Jacey & Doldor, 2010) and 17.7% in Canada (Catalyst, 2011a). Similarly descriptive studies of other countries have shown that women are less represented than men in corporate boardrooms, with 3.2% female Spanish board directors (Campbell & Minguéz-Vera, 2008), and boards in Switzerland have only 0.31% women board directors (Ruigrok, Peck & Tacheva, 2007), 0.2% in Japan and 22% in Slovenia (Terjesen & Singh, 2008).

Despite this sustained and widespread variation in women’s share of board seats, only a handful of studies have sought to understand what explains these different participation rates. Terjesen and Singh (2008) in their study covering 43 countries explore the role of national context for the prevalence of female board directors. They establish that in countries
where women occupy a larger share of managerial positions and where the pay gap between men and women is less, women are also better represented on the corporate board of directors. Grosvold and Brammer (2011) in their study of 38 countries extend the analysis of national context and women on the board; however their focus is on determining the explanatory power of five commonly adopted institutional frameworks in the context of women corporate board directors. They explore whether the proposed conceptual frameworks of Whitley (1992, 1999), Hall and Soskice (2001), Gupta et al. (2002), La Porta et al. (1998) and Weimar and Pape (1999) offer useful empirical views on female board participation. These five institutional systems categorize countries into clusters, depending on their cultural (Gupta et al., 2002), legal (La Porta et al., 1998), corporate governance (Weimar & Pape, 1999) and economic (Whitley, 1992, 1999; Hall & Soskice, 2001) systems. Grosvold and Brammer (2011) find that some of the conceptual frameworks have explanatory power, and in particular that national culture and legal systems are important constructs in understanding female corporate board participation. The authors conclude that as much as half of the observed cross-national variation in share of board seats women hold can be attributed to the national institutional factors. Grosvold and Brammer (2011), however, recognize that the nature of their analysis fails to identify which levers and drivers of women’s career progression are most effective in encouraging increased female corporate board participation, and that future research should seek to go beyond “national institutional systems (…), and explore the underlying components of the broad clusters of institutions” (Grosvold & Brammer, 2011, p. 132). The research presented in this paper addresses this void. By studying a set of salient national institutional structures that have the capacity to influence women’s career progressions and aspirations this study seeks to address the “underlying components” of wider institutional systems, and through this research to identify some of the national initiatives and policies that have the capacity to increase the share of women corporate board directors.

Conceptual development
Central to both the theoretical and empirical scholarship concerned with understanding the role and relevance of institutions is the emphasis on the significance of long-lasting, embedded, and persistent aspects of a social environment, which in turn have profound effects on individuals’ behavior (Lawrence & Suddaby, 2006), or specifically in our case; on women’s career progression. Given this view, the identification of relevant institutions and how these institutions impact on the prevalence of women board directors is central to the context and issues under study.

Comparative institutional analysis has played an important role in research concerned with a variety of gender-related issues such as female participation in the occupational system (Stadelmann-Steffen, 2008), male-female wage differentials (Mandel & Shalev, 2009), and female involvement in legislative and political systems (Childs, 2004; Kenworthy & Malami, 1999). Comparative institutional analysis therefore offers particular value in such contexts because of the recognition that many gender issues should be seen as deeply embedded historical phenomena that are reflected in many structural and cultural artefacts of modern societies (Mackay, 2004).

Our decision to draw on a range of institutional structures stems both from the recognition of the contextual dependence of many gender-related issues; but also from the observation that the professional emancipation of women who seek to further their careers is in part influenced by the social context and institutional structures within which they find themselves (Lawrence et al., 2011). Orloff (1993) commented that, given women’s roles not just as professionals, but as central carers and parents, women remain more likely to make different career and educational decisions compared with men. Research therefore should seek to understand how these basic institutions that make up that society contribute to these different decisions. Our analysis is specifically focused on the character of a country’s five basic institutions: the family, government, economy, education system, and prevalence of religion. These institutions were chosen because they reflect those institutions that comparative institutional analysis suggests all societies exhibit (Reus-Smit, 1997), thus
affording the opportunity to make meaningful cross-national comparison around a set of defined institutions. Additionally, these institutions have also been highlighted in comparative institutional research as central to understanding gender issues (Sjöberg, 2004; Orloff, 1993; Martin, 2004). The subsequent sections substantiate these arguments and develop the hypotheses that are tested in this paper.

Education

From an institutional perspective, two salient characteristics make education, and higher education in particular, an influential institution both in a generic national sense but also specifically for the prevalence of women on corporate boards. Educational institutions are an important manifestation of national character, values and norms as education “more than any other institution both shapes a nation’s belief about ‘how things ought to be done’ and transmits those beliefs and practices to successive generations” (Calori, Lubatkin, Very & Veiga, 1997, p. 681). Advanced educational attainment has also been found to be an important driver of female professional success and eventual board appointments. Burke (1997), Sheridan (2001) and Singh and Vinnicombe (2004) surveyed female board directors in Canada, Australia and the UK respectively, and higher education attainment in the form of university degrees was prevalent amongst the female directors in all three countries as well as extensive business experience. Given the role of education in disseminating and instilling national normative patterns of behavior and opinions (Calori et al., 1997) and the necessity of higher education qualifications for women who wish to pursue executive careers, where women attend university, men are more likely to view women as equals and consider them similarly well suited to professional office later on in life (Kanter, 1976).

The second respect in which education is a key institution in the context of board demography is the network ties that college attendance can bring and which have been found to create “an upper class courting environment” (Baltzell, 1964, p. 350) which often ‘funnels’ students into the nations’ corporate elite (Westphal & Stern, 2006) Research further finds that university ties and social capital in the form of networks drawn from alumni connections ease
the path to the boardroom for men (Westphal & Milton, 2000). Sheridan and Milgate (2003) also found that senior women highlighted the need for a similar network to acquire corporate board directorships in addition to university level educational qualifications. This evidence suggests that women who wish to pursue executive careers stand to benefit from both acquiring the necessary qualifications for board directorships as well as the requisite network by attending university, and simultaneously help foster normative views amongst college educated men that women belong in the professional sphere as peers and colleagues thus:

Hypothesis 1: There is a larger proportion of women on the board in countries with higher female participation rates in tertiary education, given the level of participation in tertiary education by men.

Government & the Economy

In the context of women corporate board directors, one of the primary implications of a society’s economic and government institutions are the incentives and constraints placed upon women in respect of their access to labor markets and their ability to progress to more senior positions where they acquire the necessary skills and competencies for board directorships. Economic and government institutions are therefore important for how they inform our understanding of women’s employment patterns and skill investment, and whether these institutions enable women to accumulate the necessary professional experience required for board appointments. In particular, if companies are to hire female corporate board directors, a necessary prerequisite is a sizable pool of credible female candidates eligible for board nomination. However, before women can be considered for board positions, they will need to acquire the necessary work experience whilst often also raising a family (Singh & Vinnicombe, 2004). Although a conceptual distinction can be made between the government institution and that of the economy, female employment opportunities are meaningfully
influenced by the government, which in turn influence women’s career trajectories in the labor market and their role in the economy at large. Conceptually the role of the government is outlined first, before that of the economy.

**Government**

By prioritizing particular legislative programs, a government can signal its ideological commitment to particular labor market outcomes, such as women’s career choices (Kahn, 2012; Steinmetz, 2012). From a gendered perspective, laws that are designed to safeguard women’s autonomy and laws that ensure women’s access to welfare provisions designed to enable women to balance work and family commitments better, are examples of governmental legislative and ideological priorities that shape women’s professional careers. The emphasis here is on the normative intent and ideological commitment to equality that underpins such interventions. National governments play a key role in creating the institutional infrastructure that allows women to pursue professional careers - and eventual board appointments - whilst acting as primary carers in the home (Houseknecht & Sastry, 1996).

A related consideration in this regard is whether governments’ policies and legislative programs are translated into substantive choices for women. A policy that is not legislated for or financially supported may signal an important ideological commitment, but may not have the necessary momentum to achieve the policy’s normative intent. A second and important consideration is thus whether governments follow up on their policies and translate them into economic reality for professional women wishing to build an executive career. This discussion suggests that:

**Hypothesis 2:** There is a larger proportion of women on the board in countries that have laws safeguarding women’s right to a work life balance than in countries that do not afford similar legislative safeguards.
Hypothesis 3: The proportion of women on the board of directors is positively related to investments in initiatives designed to enable women to have a better work-life balance.

Economy

The size and structure of the national labor force is a determining factor in whether women acquire senior executive positions (Carli & Eagly, 2011). For women to be eligible for corporate board directorships they must exhibit similar educational and experiential credentials to those of their male colleagues (Sheridan & Milgate, 2005). The elite that makes up the nexus of corporate power that is the corporate board of directors is made up of individuals with extensive executive experience and managerial skills (Westphal & Milton, 2000). This requirement for experience necessitates that any efforts to increase female representation on corporate boards makes a sustained commitment to career development and career advancement by women. Women must have held and succeeded at senior managerial, technical, financial or judicial roles to qualify for corporate board positions. Where countries adopt legislative programs designed to ease women’s way back into the labor force following child birth the pool of female managerial talent qualified for corporate board directorships increases (Thompson et al., 2005). This increase in the female talent pool follows as women who benefit from the welfare provisions discussed above have been found to be less likely to leave full time employment (Jaumotte, 2005; Klerman & Leibowitz, 1993; Ruhm, 1998), more likely to gain the necessary skills and experience for higher managerial roles (Standing, 1999) and are therefore better able to build the requisite contact network necessary to acquire corporate board directorships. This discussion suggests that:

Hypothesis 4: There is a larger proportion of women on the board in countries where women make up a larger share of the national labor force than in countries where women represent a smaller share of the national labor force.
Hypothesis 5: There is a larger proportion of women on the board in countries where women make up a larger share of the female managerial talent pool than in countries where women represent a smaller share of the female managerial talent pool.

Family

Recent research has come to recognize the family institution as a “corporate stakeholder” (O’Connor, 2005, p. 1197), and highlighted the influence that domestic relationships and arrangements have on women’s corporate careers. In particular, the nuclear family structure has been held to represent an important influence on women’s labor force attachment (Budig, Misra, & Boeckman, 2012), where married women’s roles as main carers of family and the home in particular have been identified as impacting on women’s career prospects and earnings (Budig, Misra & Boeckman, 2012). The role and salience of the nuclear family has been subjected to change over the last four decades, and increasingly research has shown that alternate family structures are common amongst women with executive ambitions, as analysis of women corporate executives have found that the women who do ascend the corporate ladder are more likely to be unmarried (Burgess & Tharenou, 2002). Research has also found that that woman’s increasing career aspirations, commitment to their own career and executive aspirations are associated with increasing rates of divorce and monoparental families (Mathur-Helm, 2006; Sander, 1985). Some estimates suggest 50% of marriages now end in divorce, compared with 10% 50 years ago (OECD, 2010; White, 1990), marking a change in the salience of the nuclear family as an institutional structure in women’s lives. The relationship between female professional emancipation and divorce is an ambiguous one. Whilst some research has attributed increased female career aspirations with increasing rates of divorce, others have argued that the increase in divorce rates are forcing women to remain active in the labor force since there is approximately a 50% chance that they will have to provide for themselves again in the event of the breakup of their marriages (White, 1990). This uncertainty creates an incentive to stay active in the labor force and continue to develop their professional capital (White, 1990), despite the ‘motherhood penalty’ (Budig et al.,
2012), so called because even when controlling for differences in professional experience, formal education, tenure, and other variables, working mother still earn less. Whichever line of argument is taken, it suggests that from a corporate board perspective, a positive unintended consequence of the rise in and social acceptance of divorce and the increase in monoparental family units is a marked increase the degrees to which women actively develop senior professional careers outside the home (Uunk, 2004). Thus, reflecting these changes in the structure, nature and character of the family institution it is posited that:

Hypothesis 6: There is a larger proportion of women on the board in countries where the nuclear family structure is less prevalent than in countries where the nuclear family structure is the norm.

Religion

Religion has been identified as an important institution in shaping women’s career (Chadwick & Garrett, 1995; Clark & Dawson, 1996). Research has found that religion has been associated with the reinforcement of traditional gender patterns, which sees women’s role as centering on domestic rather than professional responsibilities. The reinforcement of gender-based roles has been identified across all the main religions (Lindsey & Silk, 2005), but also specifically related to Catholicism and the Protestant belief (Mayer & Smith, 1985; Sjöberg, 2004), as well as Islam (Brammer et al., 2007b), Buddhism and Hinduism (Lindsey & Silk, 2005; Ludwig, 2001), though variation in the interpretation of women’s role in society does exist across the religious spectrum. For example, Brammer, Williams & Zinkin (2007b) concluded in their study of the role of religion in shaping outcomes, including gender quality, that “Muslims are supportive of holding companies responsible (…), but do not in general expect companies to uphold equal rights between genders. [In Islam] genders are given equal value, but different rights” (Brammer et al., 2007b, p. 240). The Catholic faith has also been identified as unlikely to be supportive of professional gender equality, with Sjöberg (2004) noting that any Catholic based government that sought to address gender equality in the labor
market stood to lose popularity. The Protestant faith by comparison has historically viewed men and women’s joint labor as central to the faith, but the tenets of the faith have also emphasized the central role of women as good wives, mothers and homemakers (Sjöberg, 2004). The rise of capitalism and the market economy has, however substantively changed women’s professional role from a Protestant perspective. Whereas previously women and men’s joint labor had been central to married life, the rise of capitalism mean that men’s role was focused more in terms of making money, and women’s that of home maker. “With the rise of capitalism the Protestants’ image of women took on a new form, which they would have found scarcely recognisable” (Hamilton, 2013, p. 98).

Religion is also an important factor for women’s career paths through its defining role in national value systems (Hargrove, Schmidt & Davaney, 1985, Verweij, Esther & Nauta, 1997). As such, religious beliefs are still a pervasive force in shaping perceptions of gender and often define what is perceived to be right, wrong and acceptable behavior for a given society (Parboteeah, Hoegl & Cullen, 2008). In this research, our concern is with the degree to which religion may influence women’s access to the corporate boardroom. All the major world religions define the role of women in society and delineate the parameters of work and economic activity (Parboteeah, Hoegl & Cullen, 2009). Despite the provision within the major world religions for women to take up paid employment outside the realm of the home, research suggests that countries where a larger proportion of the population classifies themselves as religious have a lower proportion of women in their workforce and in leadership and executive positions (Lehrer, 1995), as women’s roles is more often defined with references to the home rather than the workplace (Chadwick & Garrett, 1995; Clark & Dawson, 1996), with some religious women taking the view that they cannot reconcile a professional career with a family without going against the teachings of their faith (Manning, 1999). The institutional logic offered by religion will thus impact on whether women are able to accumulate the requisite work experience necessary to qualify for board room service:
Hypothesis 7: There is a larger proportion of women on the board in countries where a greater proportion of the population is non-religious than in countries where a greater proportion of the population is religious.

Figure 1 depicts our conceptual model

PLEASE INSERT FIGURE 1 HERE

Methods

Sample

The sample used in this paper was constructed from a dataset obtained from BoardEx, a commercially available database that tracks board related information on publicly listed companies for a large set of countries globally. For the time period under study, BoardEx data was available for 46 countries. A set of criteria was defined that a country had to meet in order for it to be included in the sample for this study. The country had to have a financial reporting requirement that meant firms published annual reports which would allow us to verify the board data contained in BoardEx. The country had to operate a governance structure that meant the board was the firm’s highest corporate decision-making body, as the presence of this structure provided the similarity needed to facilitate comparisons across the sample. Thirdly, as the number of publicly listed companies varied greatly on a country-by-country basis and a number of countries had only one or two firms, it was decided that there had to be a minimum of ten firms for which there were observations year-on-year and finally the final sample had to represent as geographically and institutionally diverse set of countries as possible, to allow for the institutional variation across countries to be analyzed. These parameters allowed us to construct a sample of 23 institutionally distinct, yet comparable countries. The sample includes observations from Europe, including the former Eastern Bloc, European Economic Area countries, Australasia, Japan and the United States. Cumulatively, an unbalanced panel dataset of 163 national observations for 23 countries from 2000-2006 was constructed. Whilst the sample represents an interesting range of countries, the sample is
not globally representative as data restrictions meant that the sample did not include any
countries from the African continent, nor from Latin America, and the sample includes only
one Asian country. This issue is revisited in the limitations section of the paper. The focus on
this period of time is driven in part by a desire to remain focused on data after the collapse of
the ‘dot com’ bubble in 2000 and before the onset of the financial crisis in 2007. In any event,
the ability to extend the panel much earlier than 2000 is constrained by the availability of data
(especially on board directorships), and as such the choices involved in the construction of the
sample reflect a desire to represent as wide a range of countries as possible across the sample
period. As the number of years for which data was available from each country differed, the
dataset used was unbalanced. This decision seems appropriate as the use of a balanced dataset
would necessitate losing seven countries from the analyses and substantially reduce the
institutional variety in the panel. This effect could be partially mitigated by shortening the
length of the panel, but this mitigation would have only a marginal effect on the number of
countries with complete data while substantially shortening the longitudinal dimension of the
panel. Following earlier research on women corporate board directors, our dependent
variable is the percentage of corporate board seats filled by women in a given country-year
and is calculated according to methods similar to those followed by Terjesen and Singh
(2008) and Arfken, Bellar and Helms (2004). For each corporation the number of board seats
available was identified, and then a count was made of how many of the available seats were
occupied by women in each year. The data was then aggregated to the national level by
calculating how many board seats the largest publicly listed companies had between them in
total, and then how many of these seats were held by women. The total number of board seats
women held was then divided by the total number of available board seats. This gave a
percentage share of board seats held by women for a given country in a given year.

For analytical reasons of consistency, it was necessary that there be a meaningful way
of comparing corporations across countries, and publicly listed companies fulfill key criteria
in this regard. Publicly listed companies are generally obliged to submit annual reports which
not only detail their financial performance, but also the composition of their corporate board.
Importantly, this information is also publicly available. A related, but equally important, point is that for the purpose of comparison the unit of analysis needs to be the same. All publicly listed firms in the countries included in our analysis had a corporate board of directors that represented the highest decision making body of the firm. To fulfill these criteria it was necessary to select publicly listed firms. This restriction meant that alternate corporate forms such as e.g. privately owned firms, family companies and cooperatives or small entrepreneurial companies could not be investigated, as data was not available across the sample countries.

Data was aggregated from the firm to the country level using board data from company annual reports as compiled by BoardEx, a commercially available database of the largest listed companies in a wide range of countries, which has been used in earlier academic research (Singh, 2007). To ensure that this method produced estimates of female board participation in line with previous published studies BoardEx’s data was triangulated with other sources including the European Commission, Spencer Stuart Board Indices, Catalyst, and the Australian Equal Opportunities for Women in the Workplace Agency (EOWA). Where comparison was possible, these sources provided similar estimates of female board participation, and as such BoardEx data was used throughout to maximize the breadth of countries available for analysis with data collected from a single source.

The number of companies listed on particular stock exchanges varies considerably across countries – for example, the New York Stock Exchange currently has over 8,000 listed companies, whereas Finland’s Helsinki Stock Exchange lists only 130 companies. Our approach to dealing with this issue was threefold. First, firms were typically picked based on membership of the set of largest listed stocks in each country by reference to a locally prominent stock index, such as the S&P 500 for the United States, the DAX for Germany, the CAC for France etc. This approach reflects the necessary flexibility in defining a representative set of companies listed in a given country but does so in a non-arbitrary manner. Second, wherever possible every effort was made to triangulate our estimate with
estimates available in a range of secondary sources as described. Third, a range of robustness tests were run that imposed different thresholds for the number of company observations used in the analysis to ensure that our findings were robust to this decision.iii

Independent variables

The measurement of female enrollment in tertiary education, given the levels of enrollment of men in tertiary education is operationalized as the difference between the participation rates of women and men as indicated by tertiary enrollment data from the World Bank’s Development Indicators Database. This metric is not a measure of the level of education, but a measure of relative access. The data represents the difference between two percentages, with positive values suggesting that a greater proportion of women are enrolled in tertiary education relative to men (Hypothesis 1). The World Bank Development Indicators Database has been used in previous peer reviewed research relating to education (see e.g. Shin & Harman, 2009; Yang & McCall, 2013). The use of lagged values of this variable was considered, in order to reflect the state of the educational environment at the time today’s directors were being educated, but this consideration raised a concern that the loss of observations and country coverage would be severe. The correlation between the contemporaneous and a 20-year lagged measure is high (0.77), suggesting that the contemporaneous values serve as a useful proxy for the lagged measures, thus allowing us to preserve the largest and broadest sample possible for use in this paper, but for completeness a regression based on the lagged values is reported as Model 7 in Table 3.

To measure national commitment to safeguarding women’s right to return to work (Hypothesis 2) a binary variable equaling one where women have the right to return to their previous role or zero otherwise was used. To determine which countries afforded women the right to return to their previous role, the Women Business and the Law report published by the World Bank and the International Bank for Reconstruction and Development in 2009 was used. To measure national investment in work-life initiatives designed to enable working parents to raise a family whilst being active in the workforce data was collected that looked at
the generosity of state funding for childcare (Hypothesis 3). These data come from the OECD
Social Expenditure Database. Childcare funding was measured as the per capita number of
US dollars per head invested in subsidized childcare. These measures were chosen as they
represented direct interventions likely to impact women’s careers. This measure from OECD
Social Expenditure Database has also been used by e.g. Kalwij (2010), Goerres and Tepe

To measure the prevalence of women in the workforce and managerial positions the
percentage of women between the ages of 25-54 active in the workforce and the percentage of
women employed in legislative and managerial occupations from the International Labor
Organization’s LABORSTA database (Hypothesis 4 and Hypothesis 5) was extracted. Given
the very small number of legislative positions relative to managerial roles in the private
sector, this percentage is dominated by the extent to which women acquire managerial
positions in commercial organisations. The International Labor Organization is a tripartite
United Nations Agency and the data it produces has been used in related research on women
corporate board directors (e.g. Terjesen & Singh, 2008).

In recognition of the changing structure of the family institution and in particular the
decline in the nuclear family that may have had the unintended consequence of increasing
women’s professional capital investment, divorce was measured as a proxy for the changing
face of family structures (Hypothesis 6). Divorce rates were calculated as the number of
divorces granted in a given year as a percentage of the number of marriages entered into in
the same year. The number of marriages and the number of divorces were both collected from
the United Nations (UN) Demographic Year Book (2004 and 2007 editions). This measure
was used as it best reflects the prevalence of divorce in a given country and therefore also
provides a useful indicator of the acceptability of divorce in a given country. The measure has
been previously adopted in research: see for example Ruppanner (2012) and Neugart, (2012)

The institution of religion was quantified by obtaining the percentage of the
population in each country who characterized themselves as religious using data from the
Association of Religion Data Archives (ARDA) (Hypothesis 7). The ARDA database of religious beliefs draws in the main on the 2003 US State Department’s International Religious Freedom Reports, but is also augmented by further data from such institutions as the United Nations to create a more complete and reliable dataset. The data collected is based on the question: “Do you consider yourself as belonging to a particular religion”. The data collected by ARDA has been used in previous research (e.g. Karakitapoglu, Mahmut and Salih, 2008).

Empirical approach

Empirically, the objective is to test the specific relationship between the share of board seats women hold and the individual institutions included for analysis before presenting a model that encapsulates the entire set of institutions. This approach is adopted to provide transparency regarding the nature of the individual relationships before presenting the final, collective model on which we base the tests of our hypotheses.

The analysis is carried out using a random effects model. This empirical approach was the most appropriate given the size and nature of the sample. In common with other comparative research relating to boards of directors (Terjesen & Singh, 2008; Jackson, 2004), the unit of analysis (the country) results in a relatively small sample size when compared to firm-level research. Our use of panel data raises the possibility that the multiple observations taken from any single country may not be independent, thus violating the assumptions of an ordinary least squares regression model. This issue is particularly relevant in our sample because country-level institutions are, by definition, relatively stable and slow to change over time (Hall & Soskice, 2001; Scott, 1995). The temporal stability of the institutional features of countries also leads us to select a random effects approach to dealing with the non-independence of observations. Following Gray, Kittilson and Sandholtz, (2006) and Queralt, Witte and Griesinger (2000) the appropriateness of this choice was evaluated using the Baltagi-Li lagrange multiplier test (Baltagi & Li, 1990), which formally tests the null hypothesis that the variance of the intercept component of the error term in a random effects model is zero as opposed to the alternative that it is not. Rejection of the null hypothesis of
this test, as occurs in all of our regression models, indicates a preference for random effects estimators over OLS.

Findings

This section presents the findings of our empirical analyses. Table 1 shows the percentage share of women board seats held by women in the most recent year for which BoardEx data is available for each country in our sample. Consistent with the observations of earlier studies undertaken in particular country settings, Table 1 shows that there is considerable variation across countries in the proportion of directorships held by female directors (Burke, 1999; Singh et al., 2001, 2004). At one end of the spectrum, over 30% of directorships are occupied by women in Norway, whilst at the other end of the spectrum; female directors are almost entirely absent from boardrooms in Japan.

INSERT TABLE 1 HERE

Table 2 presents descriptive statistics for the variables in our regression sample, which provides a way to evaluate the broad characteristics of our data. These statistics are calculated by weighting the information from each country-year equally. The mean proportion of directorships held by women is 7.95 percent on this basis. The natural logarithm of this variable was used to address the non-normality of the dependent variable. Countries for which the reported proportion of women on the board is zero are given values of zero for this newly transformed variable. The average rate of divorce for the sample was 42.84 percentage points, whilst enrollments in tertiary education are on average 16.01 percentage points higher for women than for men. This variable ranges from a high of 44.46 in Iceland to -10.96 in Switzerland. Female labor force participation between the ages of 25-55 was on average 76.41 percentage points. The proportion of women employed in managerial roles ranges from 9 per cent in Japan to 43 per cent in the United States, with a mean of 31.90 per cent. State funded daycare provisions had a mean value of $186.31 per head, and approximately 86 percent of the population expresses some religious affiliation in our sample.
Table 2 also presents the bivariate correlations between our regression variables. This table includes both the raw and the log-transformed dependent variable for comparison, as interpretation of the mean score of the former is transparent and the latter is used in the regression analyses. These measures are understandably highly correlated due to their arithmetic linkage. Both of these variables are significantly correlated with variables supporting the importance of our institutional measures. Indeed, there are significant correlations between the natural logarithm of the percentage of board directorships held by women with all of our institutional measures. The variance inflation factors reported on the main diagonal of Table 2 are all well below the levels typically associated with high levels of multicollinearity.

Table 3 presents the regression analyses. These are separated into seven models in order to assess each institution separately, thus ensuring that the correlation between the institutional proxies does not drive the results, and each of these are described in turn. The first five models produce acceptable model fit statistics that are consistent with the exclusion of other meaningful institutional measures, and Model 6 demonstrates the combined power of these institutions for understanding the percentage of board seats held by women around the world (R-squared of 0.564), and the results of this model are relied on in testing our hypotheses. Model 7 replaces the contemporaneous value of the female-male difference in the rate of enrollment in tertiary education with a 20 year lag of the same variable to assess the robustness of our hypothesis testing. The Baltagi-Li test statistic was used to verify the need for an empirical approach that controls for the country-level blocking of the data described in the methods section of the paper. The minimum value of our Baltagi-Li test statistic across the seven models of Table 3 is 103.10 (in Model 7), which is substantially larger than the critical value required to reject the null hypothesis that a pooled cross sectional approach is appropriate. This result supports our use of a random effects approach.
Model 1 focuses on the possible importance of educational institutions for the prevalence of women on corporate boards. The model fits fairly well, with an R-squared of 0.326. The regression coefficient for this variable is 0.039, and it is significant at the 99 percent level (t=7.761). This finding suggests that female access to tertiary education may contribute to the share of board seats held by women.

Model 2 examines the possible impact of government on women corporate board directors. The model has acceptable fit, with an R-squared of 0.175, and illustrates significant links between government spending on daycare (99 percent level) and the legal protection of a mother’s right to return to her pre-pregnancy job role (95 percent level).

Model 3 investigates the labor market position of women. This model fits very well, with an R-squared of 0.507. The regression coefficients for the female labor force participation rate and the proportion of women employed in managerial roles are both positive and are both significant at the 99 percent level.

Model 4 explores the relationship between family institutions, as proxied by divorce rates, and the proportion of directorships held by women. The fit of the model is acceptable, with an R-squared of 0.134. The results suggest a significant positive relationship between divorce rates and the proportion of board directorships held by women.

Model 5 examines the impact of religious affiliation on the proportion of board directorships held by women. This model fits very poorly, with an R-squared of only 0.023. This result is reinforced by the insignificance of the regression coefficient attached to religious affiliation in Table 3. While this coefficient is near the 90 percent significance level (t=1.539), this lack of significance is a consistent feature throughout the robustness checks described earlier regarding our sample selection.

Having examined each of these categories in separate models the next step is to include all of these variables in one regression in order to assess overall model fit and to seek support for our hypotheses. Model 6 fits well, with an R-squared of 0.564. The results of the
previous models are broadly confirmed. Positive and significant links persist with women corporate board directors associated with divorce rates, educational enrollment differentials, the proportion of women employed in managerial roles and government spending on daycare, albeit with weaker significance levels associated with divorce rates ($t=2.528$) and the proportion of women in managerial roles ($t=2.513$). While the effect of religious affiliation remains insignificant, the insignificance of the effect of female labor force participation rates ($t=1.485$) and the existence of a right to return to work ($t=0.478$) in Model 6 are notable. These hypothesis tests are unaffected by the use of a lagged value of female-male rates of enrollment in tertiary education (Model 7).

**Discussion and limitations**

This article addressed the research question; how do a country’s basic institutions enable or hinder women’s rise to the top of publicly listed companies? The research was framed in Meyer’s (2010) phenomenological view of institutional theory. Our research question was addressed with reference to five basic institutions that the literature has argued are present in all countries (Reus-Smit, 1997), and which based on the literature and theory outlined above were deemed likely to be related to women’s prevalence on corporate boards of directors. Thus, family structures, tertiary education, religious pervasiveness, state interventions and economic structures were explored in relation to the share of board seats women hold at national level. As such, this study has begun to unbundle some of the parameters of the frameworks evaluated by Grosvold & Brammer (2011). Our descriptive findings validate the observations made in numerous previous studies that have examined the prevalence of women on boards in particular country settings (Terjesen, Sealy & Singh, 2009; Hillman, Shropshire & Cannella, 2007; Grosvold, Brammer & Rayton, 2007; Ruigrok et al., 2007) that the proportion of directorships held by women varies substantially across countries. Our argument in this study is that these differences are strongly associated with features of countries’ basic institutions. Broadly, our results provide a high level of support
for our hypotheses with some statistically significant associations being identified for four out of the five areas of country institutions.

Our results suggest that the institutions of education and family structures influence women’s rates of board participation. Our hypothesis arguing that where women are well represented in tertiary education, given the level of male participants, countries had higher rates of female board participation was supported. This finding aligns with those of Grosvold and Brammer (2011) who found that liberal market economies as defined by Hall and Soskice (2001) and that compartmentalized economies as identified by Whitley (1992; 1999) where tertiary education were central to professional career progression, had a larger share of female board directors.

Similarly, our findings support our hypothesis that an unintended outcome of the higher rates of divorce seen over the decades, has had the effect of increasing women’s labor force commitment, their investment in human capital and ultimately their access to corporate boards. Furthermore, our results show that where women constitute a larger share of the managerial segment of the labor market they are also more prevalent in the context of corporate boards. The economy provides both incentives and constraints on women’s career progression. Our findings suggest that where the labor market is structured in such a way that women are able to progress to managerial ranks in greater numbers they are also able to accumulate the necessary human capital that is required for board directorships. When viewed in conjunction with the statistically significant positive link between the availability of subsidized childcare and women on the board, these findings suggest that financial commitment is arguably a stronger driver for female board participation than legislation alone. In light of the fact that in our sample 75 percent of women between the ages of 25-54 were active in the labor force yet had a mean representation on the board of less than 8 percent, this finding is interesting. It suggests that governments that substantiate their policy commitment with financial supports may be more successful in channeling women into executive positions than governments that signal a commitment to women managerial careers.
through legislation but don’t go as far as making financial investments designed to deliver on the signaled commitment. These findings also help add nuance to the findings in Grosvold and Brammer (2011) who found that women were more prevalent on the boards of firms in countries where the state was bound by common rather than civil law as defined by La Porta et al. (1998). Having hypothesized that women board directors were more prevalent in countries with civil law protection in the form of greater employment safeguards and welfare benefits, Grosvold and Brammer (2011) instead found that women were more prevalent across boardrooms of firms operating in common law countries. This finding led Grosvold and Brammer to conclude that “women prevail to a larger degree on corporate boards in countries where the legal institutional system is based on market forces” (p. 132).

Cumulatively, these findings add weight to Clegg’s (2010) argument that “some basic institutional elements seem to have gone missing in action, notably discussion of power, in part…due to the absence of the state” (p. 11).

These findings shed new empirical light on what facilitates and impedes the access of women to the corporate boardroom. Although the role of the education and family institutions have been qualitatively explored in individual country contexts previous research (e.g. Davidson & Burke, 2011) our study shows the statistically significant salience of tertiary education enrollment for women wishing to access the corporate boardroom across our sample countries. Similarly, our finding that the state and economy appear to play a role in shaping board demography has to our knowledge, not been systematically ascertained in previous-c cross national research.

Conceptually our study makes three distinct contributions. Compared with previous literature, which has either focused solely on gender specific institutions (Terjesen & Singh, 2008) or has analyzed previously defined bundles of institutions (Grosvold & Brammer, 2011), our research responds to Whetten’s (1989) call for conceptual comprehensiveness which encourages the inclusion of all constructs that could logically be considered relevant to the phenomenon under study. Given that the five basic institutions included are those deemed
to be the most central and most prevalent across all societies, they were all deemed relevant either on the basis of previous empirical research, conceptual development or answered direct calls from earlier research to understand better the nuanced institutional ‘macro worlds’ that women face (Terjesen & Singh, 2008; Grosvold & Brammer, 2011), so our construct decisions were parsimonious. In light of our empirical results, this theoretical framing sheds new light on the nature and relationship between institutions. In particular, our findings suggest that the relationship between the market and the state may not be as diametrically opposed as previous institutional research has suggested (Zald & Lounsbury, 2010). The finding that the provision of state subsidized childcare was associated with a greater share of women board directors and that where the economic labor market structures were such that they enabled women to rise up to the managerial ranks boards were demographically more diverse suggests that the state helps enable growth of the female managerial talent pool. Firms should therefore not necessarily deem state intervention as an obstruction since the evidence points to a more diverse talent pool as a result. Secondly, our results also seem to question Meyer’s (2010) observation that institutional decoupling between policy and practice means political intent is seldom realized through policy. Meyer (2010) points to previous research which has shown a discrepancy between policy and practice, and argues that nation states frequently seek to retain international legitimacy by passing legislation and making investments in areas that are high on the political agenda in other countries. He argues that social change will often happen irrespective of policy, instead arguing that agency, the purposeful, directed and autonomous behavior of the individual, causes national institutional change, irrespective of state intervention. Our results question the veracity of this conceptual premise. Countries that invest more in state funded childcare have more women on the board, pointing to the importance of policy backed up by investment. If Meyer’s (2010) postulation was correct the expectation would be that the effect of state intervention would be smaller. Instead, there was little evidence of an ‘agentic’ effect. On average more than 75% of women were active in the labor force across our sample and constituted nearly 32% of the managerial talent pool, yet women had on average less than 8% of board seats. The absence of a significant effect from
the legislation safeguarding women’s right to return to work should similarly be accompanied by a greater share of board directors, if institutional agency does replace policy. This finding leads the authors to propose a modified view of the role of the state, a view which is aligned with Clegg’s (2010) observation that the role of power and the state should not be ignored in the debate on basic institutions, and argue that the state, rather than being a peripheral and opposing force to the market and economic structure, has the power to play a role in facilitating market outcomes that are in the interest of women and business.

Secondly, our findings that the institutions of education and family are related to female executive outcomes points to the importance of social institutions for more gender diverse boards, elements which previous research has in the main not explored in relation to corporate board participation. An unintended consequence of the increased rate of divorce and the rise of monoparental households seen across our sample countries was a higher rate of female corporate board participation. The view by O’Connor (2005) of the corporation as a stakeholder in people’s private sphere thus seems accurate, as depending on which line of argument is posited, women either divorce to pursue their careers (Mathur-Helm, 2006; Sander, 1985) or are forced to have a career as a result of divorce (White, 1990). Recently however Özcan and Breen (2012) have argued that there is consistent evidence that women pursue career advancement in anticipation of divorce. Irrespective of the causal direction, our finding reveals that the relationship between the family institution and women’s executive careers may be more complex than originally thought. Although the link between women’s commitments to child rearing and responsibilities in the home, lower labor force participation, lower pay and different career prospects have been well established, the finding that societal acceptance of monoparental households is linked to a larger share of women board directors does not imply that divorce is an optimal outcome for women. Rather, it recognizes that in countries where monoparental families are more common women seem to make different career choices in relation to their family and work commitments. Lauer and Yodanis (2010) argue that these choices do not represent a rejection of the nuclear family paradigm, rather they afford women choices with regards to their circumstances and priorities, which in turn
enables them to recognize when their circumstances are compatible with the institution of marriage and when other family structures are better suited to their circumstances.

Thirdly, the importance of tertiary education for female corporate board participation also speaks to our conceptual framing. Meyer (2010) points out that the phenomenological view of institutional theory sees higher education as key to empowerment and socialization, and in particular that access to the right social networks is central to gaining access the societal power elites, such as corporate boards. The institution of education has also been found to serve as a “receptor site” (Soysal, 2012, p. 48) to entitlements and privileges, where students become cognizant of their ability and perceived right to join societal elites and consequently through education become; “endowed with enormously expanded competencies and powers” (Meyer, 2010, p. 9). However women have seemingly benefitted comparatively less in an executive context from these competencies and powers, given that on average across our sample countries they were better represented in tertiary education than their male counter parts and have been for nearly 20 years (United Nations Demographic Yearbook, 1991).

Our findings have implications for practice, both at the firm and country level. At the country level, investment in policies that encourage women to return to, and remain in the work force following childbirth should be prioritized, as should labor market structures that don’t disadvantage women and discourage human capital investment. This prioritization is particularly important in light of our educational result. Since it is not access and participation in education per se which is problematic, but the ‘talent leakage’ between graduation and the board room, the state should focus its efforts on investments in initiatives that begins to stem the talent loss and encourages professional talent development and consolidation. Welfare provisions that enable women to balance to their careers and other commitments may work well in this regard. At the firm level, companies can put in place complimentary initiatives that allow women the necessary flexibility in managing their home commitments and their
professional lives. Supportive working policies may also contribute to taking some of the time pressure off working parents, and potentially also contribute to more stable family lives.

Reflecting on our findings and their implications for the future of women on corporate boards of directors, our results may be good news for women. The natures of institutions of government and economy are such that they can be changed more quickly than other institutions such as the influence of e.g. religion. This difference in speed of adjustment arises because legislation and market interventions like changes to employment parameters and incentives can be implemented coercively, as was done in Norway. Socially grounded institutions (e.g. family structure) cannot generally be changed in this way as they are more closely aligned with societal values, norms and taken-for-granted patterns of behavior, which by their very nature are slow to change (Deeg, 2007). The relative efficacy of the government and economy institutions means that women can see a change in their ability to rise to the very top of corporate power, though the efficacy of these institutions is of course dependent on a state that has the power and the determination to implement such changes successfully.

This study has some limitations, several of which could profitably be addressed in future research. Firstly, our analysis was concerned with understanding the nature of the relationships between specific basic institutions and the share of women on the corporate board. These specific relationships were the focus of our study in order that the findings of Grosvold and Brammer (2011) could be disaggregated. Whilst the analysis sought to pry the five basic institutions apart to understand the relationships between women on the board and each individual institution, in reality, the basic institutions operate together to form a societal whole. Future research could therefore profitably address this limitation to understand potential interactions between institutions better. Other measurement techniques such as hierarchical linear modelling could be useful in this regard. Second, our analysis examined large publicly listed companies, and did therefore not take account of the difference in representation women may enjoy in other corporate forms such as family owned firms, entrepreneurial firms and cooperatives. A better understanding of women’s status in the
governance context of these types of firms would extend our understanding of the role executive women are given in different firm contexts. Thirdly, as our intent was understand what drives the share of board seats that are allocated to women at a national level rather than what drives the absolute size of the female directorial talent pool, our data did not take account of board interlocks. Future scholarship could map the incidence of female board interlocks to uncover both the absolute size of the female directorial talent pool and to understand how interlocks serve women directors. Whilst our study focused on women’s career progression, it did not explore what compels firms to appoint women corporate board directors. There is thus an opportunity to assess the demand side of this equation, and explore how firm’s institutional context e.g. the salience of corporate governance codes or the passing of gender equitable legislation such as that adopted in Norway, impact on firm’s decision to foster more gender heterogeneous boards. Furthermore, the sample on which the study is based, was not globally representative as it did not include any countries from Africa and Latin America, and only one Asian country, due to data limitations from these areas. Our results are therefore restricted to the sample countries. Future research should focus on better understanding how national institutional contexts play a role in the share of board seats that women hold across those countries not included in our study, and seek to understand how the particular constellation of national institutions in these countries impact on corporate board gender heterogeneity.

Finally, although the institutional argument put forward in this article has been lent credence in our statistical results, inherent in the use of statistical analysis is the absence of a constructivist perspective anchored in organizational discourse and broader meaning systems. The voice of the women themselves is distinctly absent from this analysis, in particular as regards their career ambitions. An interesting future avenue of research could address whether women themselves see board directorships as something to covet, and similarly whether the status of interest in board directorships is uniformly appraised across countries, or whether it has inherently different characteristics and attractions in different national contexts. Indeed,
the resource dependence perspective may have a complimentary lens to offer our understanding for women corporate board directors.

Despite these limitations, this study has contributed to furthering our understanding of what drives corporate board demography, and highlighted the wide variation in the prominence of women on corporate boards across countries. The study also clearly shows that governmental institutions and prevailing economic systems are most strongly associated with the prevalence of women on companies’ boards of directors.
References


Burke, R.J. (2003). Women on the corporate board of directors the timing is right! *Gender in Management: an international review, 18*(7), 346-348.


http://mc.manuscriptcentral.com/bas


Proceedings Annual Meeting of the Academy of Management, San Diego, CA, August


http://mc.manuscriptcentral.com/bas


Figure 1 Conceptual model

[Diagram showing the relationship between various factors (Economy, Government, Family, Religion, Education) and the percentage of women on the board.]

- Economy
  - Female labour force/managerial participation
- Government
  - (Gender equality law & welfare)
- Family
  - (Divorce rates)
- Religion
  - (Prevalence religiosity)
- Education
  - (Women tertiary education)

Factors:
- H4/H5
- H2/H3
- H6
- H7
- H1

Outcome:
- % Women on the board
Table 1: The percentage of company directorships held by women by country in 2006.

These figures are based on data from BoardEx.

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>6.92</td>
<td>Japan</td>
<td>0.00</td>
</tr>
<tr>
<td>Austria</td>
<td>5.36</td>
<td>Netherlands</td>
<td>5.52</td>
</tr>
<tr>
<td>Belgium</td>
<td>6.97</td>
<td>New Zealand</td>
<td>8.65</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>11.00</td>
<td>Norway</td>
<td>36.10</td>
</tr>
<tr>
<td>Denmark</td>
<td>10.33</td>
<td>Poland</td>
<td>12.00</td>
</tr>
<tr>
<td>Finland</td>
<td>19.74</td>
<td>Portugal</td>
<td>3.07</td>
</tr>
<tr>
<td>France</td>
<td>8.20</td>
<td>Republic of Ireland</td>
<td>5.69</td>
</tr>
<tr>
<td>Greece</td>
<td>6.94</td>
<td>Spain</td>
<td>7.66</td>
</tr>
<tr>
<td>Hungary</td>
<td>11.00</td>
<td>Sweden</td>
<td>20.78</td>
</tr>
<tr>
<td>Iceland</td>
<td>14.00</td>
<td>Switzerland</td>
<td>6.09</td>
</tr>
<tr>
<td>Italy</td>
<td>5.02</td>
<td>United Kingdom</td>
<td>8.40</td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
<td>15.06</td>
</tr>
</tbody>
</table>
Table 2: Descriptive statistics and correlation matrix

Summary statistics are based on the regression sample of 163 country-years. Variance inflation factors from Model 6 of Table 3 are included in parentheses on the main diagonal to assess potential multicollinearity. Figures relating to the lagged value of Female-Male difference in the rate of enrollment in tertiary education are based on Model 7 of Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Percentage of board directorships held by women</td>
<td>7.95</td>
<td>5.16</td>
<td>(na)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Natural logarithm of the percentage of board directorships held by women</td>
<td>2.04</td>
<td>0.57</td>
<td>0.90**</td>
<td></td>
<td>(na)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Divorce rate</td>
<td>42.84</td>
<td>14.88</td>
<td>0.30**</td>
<td>0.37**</td>
<td></td>
<td>(1.85)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Female-Male difference in rate of enrollment in tertiary education</td>
<td>16.01</td>
<td>11.26</td>
<td>0.57**</td>
<td>0.60**</td>
<td>0.05</td>
<td>(2.37)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Female-Male difference in rate of enrollment in tertiary education (20 year lag)</td>
<td>-3.02</td>
<td>5.40</td>
<td>0.58**</td>
<td>0.65**</td>
<td>0.11</td>
<td>0.77**</td>
<td>(2.48)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Female labor force participation rate for women aged 25-55 (%)</td>
<td>76.41</td>
<td>7.00</td>
<td>0.50**</td>
<td>0.54**</td>
<td>0.34**</td>
<td>0.26**</td>
<td>(2.77)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Proportion of women employed in executive/managerial roles</td>
<td>31.90</td>
<td>5.76</td>
<td>0.25**</td>
<td>0.46**</td>
<td>0.17*</td>
<td>0.43**</td>
<td>0.49**</td>
<td>-0.02</td>
<td></td>
<td></td>
<td></td>
<td>(1.74)</td>
</tr>
<tr>
<td>(8) Government spending on daycare in annual US Dollars per head</td>
<td>186.31</td>
<td>132.04</td>
<td>0.43**</td>
<td>0.42**</td>
<td>0.20**</td>
<td>0.45**</td>
<td>0.21**</td>
<td>0.61**</td>
<td>-0.10</td>
<td></td>
<td></td>
<td>(2.34)</td>
</tr>
<tr>
<td>(9) Existence of a 'right to return' to job after maternity leave (1=Yes)</td>
<td>0.88</td>
<td>0.33</td>
<td>0.25**</td>
<td>0.34**</td>
<td>-0.09</td>
<td>0.59**</td>
<td>0.59**</td>
<td>-0.07</td>
<td>0.45**</td>
<td>0.24**</td>
<td>(2.01)</td>
<td></td>
</tr>
<tr>
<td>(10) Percentage of population expressing some religious affiliation</td>
<td>86.47</td>
<td>9.23</td>
<td>0.07</td>
<td>0.17*</td>
<td>-0.30</td>
<td>0.20**</td>
<td>0.41**</td>
<td>-0.08</td>
<td>0.24**</td>
<td>-0.18</td>
<td>0.20*</td>
<td>(1.35)</td>
</tr>
</tbody>
</table>

* p < 0.05
** p < 0.01
Table 3: Influences on the prevalence of women on corporate boards

Random effects panel regression results. Dependent variable is the percentage of corporate board positions held by women in each country-year.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female-Male difference in rate of enrollment in tertiary education</td>
<td>0.039 **</td>
<td></td>
<td></td>
<td>0.020 **</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7.761)</td>
<td>(3.471)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female-Male difference in rate of enrollment in tertiary education (20 year lag)</td>
<td></td>
<td>0.053 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5.030)</td>
<td></td>
<td>(3.193)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government spending on daycare in annual hundreds of US Dollars per head</td>
<td>0.239 **</td>
<td>0.132 **</td>
<td>0.147 **</td>
<td>(5.579)</td>
<td>(3.023)</td>
<td>(3.193)</td>
<td></td>
</tr>
<tr>
<td>(5.030)</td>
<td>(3.193)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of a 'right to return' to job after maternity leave (1=Yes)</td>
<td>0.604 *</td>
<td>-0.119</td>
<td>-0.203</td>
<td>(2.145)</td>
<td>(-0.478)</td>
<td>(-0.834)</td>
<td></td>
</tr>
<tr>
<td>(0.203)</td>
<td>(0.476)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female labor force participation rate for women aged 25-55 (%)</td>
<td>0.049 **</td>
<td>0.014</td>
<td>0.000</td>
<td>(6.477)</td>
<td>(1.485)</td>
<td>(-0.003)</td>
<td></td>
</tr>
<tr>
<td>(2.824)</td>
<td>(2.824)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of women employed in executive/managerial roles</td>
<td>0.051 **</td>
<td>0.032 *</td>
<td>0.030 *</td>
<td>(4.794)</td>
<td>(2.513)</td>
<td>(2.387)</td>
<td></td>
</tr>
<tr>
<td>(2.387)</td>
<td>(2.387)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorce rate</td>
<td>0.012 **</td>
<td>0.008 *</td>
<td>0.009 **</td>
<td>(3.602)</td>
<td>(2.528)</td>
<td>(2.991)</td>
<td></td>
</tr>
<tr>
<td>(2.991)</td>
<td>(2.991)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of population expressing some religious affiliation</td>
<td>0.016</td>
<td>0.007</td>
<td>0.002</td>
<td>(1.539)</td>
<td>(0.941)</td>
<td>(0.269)</td>
<td></td>
</tr>
<tr>
<td>(0.269)</td>
<td>(0.269)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.392 **</td>
<td>1.074 **</td>
<td>-3.357 **</td>
<td>1.525 **</td>
<td>0.665</td>
<td>-1.456</td>
<td>0.570</td>
</tr>
<tr>
<td>(11.830)</td>
<td>(4.071)</td>
<td>(-5.040)</td>
<td>(-8.915)</td>
<td>(0.746)</td>
<td>(-1.655)</td>
<td>(0.566)</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.326</td>
<td>0.175</td>
<td>0.507</td>
<td>0.134</td>
<td>0.023</td>
<td>0.564</td>
<td>0.581</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.322</td>
<td>0.165</td>
<td>0.501</td>
<td>0.129</td>
<td>0.017</td>
<td>0.544</td>
<td>0.560</td>
</tr>
<tr>
<td>Change in R-squared relative to Model 6</td>
<td>-0.238</td>
<td>-0.388</td>
<td>-0.057</td>
<td>-0.430</td>
<td>-0.541</td>
<td>Baseline</td>
<td>0.017</td>
</tr>
<tr>
<td>Number of observations</td>
<td>163</td>
<td>163</td>
<td>163</td>
<td>163</td>
<td>163</td>
<td>163</td>
<td>163</td>
</tr>
<tr>
<td>Number of countries</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Baltagi-Li test statistic</td>
<td>165.82 **</td>
<td>193.06 **</td>
<td>156.02 **</td>
<td>179.27 **</td>
<td>210.55 **</td>
<td>112.63 **</td>
<td>103.10 **</td>
</tr>
</tbody>
</table>

*p < 0.05
**p < 0.01
i The lowest number of firms for a country in any one year was 14.

ii The results of this paper are not affected by modest variations in these sampling decisions.

iii We undertook analyses based on a range of samples built from a variety of cut-off values for the minimum number of companies used in the construction of country-year data on board directorships (0, 5, 10, 15, 20 and 25), reducing the sample size to as few as 134 country-years of data with no impact on the signs or significance levels of estimated coefficients. Furthermore, we included the number of companies used in the construction of country-year data as a control variable in our analyses without effect.

iv At the request of an anonymous reviewer we explored first order interactions between our independent variables associated with education, government and economy, finding no improvement in overall model fit associated with inclusion of these interactions. Another anonymous reviewer asked us to explore the impact of the gender wage gap as an independent variable, and we found that it was not significant when added to Model 6.
For the attention of reviewer A

We present the text of your comments below followed by our response in italics. We believe that the changes we have made in response to your comments have improved the paper, and we thank you for all of your feedback on our paper.

This revision represents a great improvement. The flow is much clearer and comprehensive. The main issue now is length. If the authors can reduce the length by 10 pages or so, then it will make a good and concise contribution to our understanding of women on boards. I have some suggestions on cutting down length. To reduce size, try to edit any repetitious parts - the introduction is good and may be edited down a bit but more cutting can be made on the theoretical background part and the references.

First, your reference section is very long - try to eliminate older and more marginal papers and focus on those papers most salient to your study.

Thank you, we have responded to this comment by removing some older references, as well as focusing the reference list on those that support the core of our argument. We have cut 24 references, and we think this has improved the paper.

In the theoretical background section, try to focus on those aspects of the theory that is most relevant to your study and what you are trying to accomplish in your paper.

Thank you for challenging us to tighten our conceptual framing. In responding to your comment we have been mindful of deleting those elements of the theory development that were superfluous to the argument we were making. For example, we have deleted instances of repetition making the case for examining the micro-level outcomes of macro-level phenomena. We feel this has resulted in a more concise exposition of the theoretical framing and thus improved the paper.
For the attention of reviewer B

We present the text of your comments below followed by our response in italics. We believe that the changes we have made in response to your comments have improved the paper, and we thank you for all of your feedback on our paper.

(1) Women on boards and firm performance. I agree with your comment (in your response to my last review) that overall, there is a commonly held assumption that women on boards improve firm performance. However, I continue to take issue with your statement about the extent to which peer-reviewed research finds this commonly held assumption to hold. In the revised version of the paper, almost two entire pages are spent discussing the issue, which is summarized with the sentence: “Despite the empirical evidence indicating that gender diverse boards are beneficial to firms…” The empirical evidence is, in fact, quite mixed, with many studies finding a negative relationship (e.g., Bøhren & Strøm, 2010; Darmadi, 2011; Minguez-Vera & Martin, 2011) and several others finding a null relationship (e.g., Carter, D'Souza, Simkins, & Simpson, 2010; Rose, 2007; Shrader, Blackburn, & Iles, 1997). If I am interpreting your latest response to my review correctly, you see value in alluding to the women on board firm performance relationship, because “the findings that women board directors contribute to increased financial performance and governance practices are often highlighted as reasons why the issue board gender diversity is important and worthy of study”. However, the core issue in your paper - female board representation - is important regardless of whether it improves firm performance. In other words, even if adding women to boards did not affect firm performance, ensuring equal access is a worthy cause! If you still find it important to discuss this issue, I would suggest alluding to the commonly held assumption in the media that women improve firm performance, while acknowledging the truly conflicting evidence in academic research. □□

Thank you for your comment. We now mention the normative case for female board membership as well as streamlined our presentation of the performance case. The discussion of the literature on the performance case is now a single paragraph instead of two pages in length, and it includes the statement, “The empirical results of
gender heterogeneous boards is mixed.” We have also added the following paragraph on page 6 to recognize the normative case for women on the board:

A less commonly adopted, yet equally important, motivation for analyzing the imperative of women corporate board directors, is that qualified women board candidates have the same inherent right to accessing board seats as men (Grosvold, Brammer and Rayton, 2007). Until women and men have the same access to and opportunities for corporate board directorships, gender parity will not prevail, and firms will continue to miss out on the skills, insights and contributions women bring (Holton, 2000). Whilst women are now better represented across the labor force in general, some argue that the tendency towards only justifying commitment to gender equality in the board room on the premise of firm performance undermines the basic tenet of equality, which seeks to offer the same opportunities for women as men (Conroy, 2000).

(2) The pipeline issue. The core institutions under study in your paper are primarily relevant to understanding the pipeline issue. In many places in your manuscript, you refer to women opting to serve on board (p. 11); women making choices (p. 38), etc. A different institutional analysis would consider the factors that lead firms to appoint women to their boards. What about the demand-side: do governance-related issues contribute to this (e.g., SOX; institutionalization of regulation, pending legislation, and legislation)? A discussion of the other side of the coin (the demand side) should be featured in the limitation section.

You are right to point out that we have only looked at the supply side of the issue, and in response to your comment we now make it clear on page 4 that we are considering the supply side only, and we have added the absence of a focus on the demand side as a limitation on p. 34.

(3) Countries in your sample. Given the increasingly global scope of the question of women on boards and the number of countries represented in the study of women on boards, how would you address the concerns some of your readers may have, about the very select group of countries in your sample (only 1 Asian country, no African countries; no South American countries)? Please add a paragraph or statement in the limitations section. (I realize that there are data collection issues, but can we assume that the same institutions will work similarly all over the world?)
This limitation is now explicitly recognized on page 34, as you requested.
For the attention of the Editor

Reviewer A recommends that the manuscript be trimmed back by say 10 pages. I concur that the present manuscript is unwieldy; and also wordy (see editor’s comments further below). The reviewer recommends reducing the theoretical section and eliminating older, less important references. I do not know that you can remove 10 pages, but a tighter manuscript would be better for publication. I do not set an absolute maximum requirement but reducing the manuscript back by 5 to 10 pages is desirable. Manuscripts have a habit of length creep during revisions.

Thank you for your guidance, we have successfully cut 7 pages from the manuscript.

Reviewer B makes three recommendations concerning content. I support these recommendations.

(1) Assuming there is literature (as cited by reviewer) that leaves the empirical relationship between board composition and firm performance unresolved, I concur with reviewer that it would be better to (a) acknowledge the range of findings – briefly, (b) separate the firm performance issue explicitly from the equal access rights issue (which would hold even if firm performance suffered somewhat, and certainly if the effect were neutral). Then you explain your findings and which possibility they support. I think reviewer has a good point that a neutral exposition of the literature would be better.

We have responded to reviewer B’s concerns and those you summarize above, and we have acknowledged the variety in the literature, whilst also highlighting the equal rights argument. We feel the result is a better and more balanced view. Please see the final paragraph beginning on p. 5 and the first paragraph beginning on p. 6 (copied into the response to reviewer B) for the relevant text.

(2) It is not feasible (I think) to tackle the demand side of the problem in this manuscript. However, I concur with the reviewer that you should (a) differentiate supply and demand early in the manuscript, (b) add a paragraph in the limitations section on this point. You may want to state in both locations that you address
demand through national level intervention (that is, the other factors are working only very slowly on demand, which was changed dramatically in Norway). The point may be useful.

*Thank you for this suggestion. We now make it clear on page 4 that we are considering the supply side only, and we have added the absence of a focus on the demand side as a limitation on p. 34.*

(2) I concur with reviewer that the limitations inherent in the sample should be addressed through a sentence early where sample is described and then through a paragraph in limitations. You should in the latter explain briefly data collection issues. The findings are effectively restricted to the sample countries. This point should be highlighted.

*This limitation is now explicitly noted at the bottom of page 18, and we return to this in the limitations listed on page 34, as requested.*

Plainly, B’s requirements (although limited) add content (and perhaps some references – I did not check the existing set), while A recommends trimming content and references. Authors will need to work out the balancing of the manuscript, but it is too long and somewhat unwieldy. A tighter manuscript will do better in publication (I think).

*We think the changes we have made in response to these comments has resulted in a shorter, tighter and more focused paper, while also responding fully to reviewer B’s requests for additional content. We hope you will agree.*

**EDITOR’S REQUIREMENTS**

The editor also has requirements for finalization – but these requirements concern format and style for BAS. In this regard, I attach a mark-up of the manuscript for assistance and guidance. Note that I did not mark the manuscript all the way through, rather I highlighted what I think are key matters – which you must carry out now throughout the next revision as well as possible. I think we can save time by prepping
the manuscript fully for Sage production. The list below is not necessarily exhaustive and again I did not thoroughly mark the whole manuscript but mostly key instances as guidance.

Thank you for this. We found it very helpful.

I also attach a BAS citation – reference – writing guidance document for your assistance. I have moved footnotes to endnotes (BAS structure), to be numbered 1 to 4 (Sage production should handle the matter). Thus be aware that in BAS notes are separated from text – thus notes should be for technical matters that do not readily fit into the text (or eliminate in some way). Key issues are:

(1) BAS promotes formal writing (the authors). “Our” is generally OK, but “we” should be restricted and not appear in abstract, introduction, or last couple of pages. “We” can then be artfully woven into the center of manuscript which is more about methodology. This writing style (although popular at some journals) is in this instance combined with multiple instances of undefined this, split infinitives, lengthy sentences, and passive voice. The purpose of formal writing is to tighten up loose expression. Each “this” should be replaced or defined concretely.

(2) The CONCLUSION section is useless, being one paragraph which is repetitive. While journals promote a standardized structure for empirical papers (introduction, literature review, hypotheses exposition, methodology, findings, discussion, limitations, conclusion), in this instance the resulting manuscript is unwieldy and should be trimmed back. A possible solution (I mark at the point) is to think in terms of a final DISCUSSION OF FINDINGS AND LIMITATIONS, with integration of the present last paragraph in some way. You may want to end the DISCUSSION section with that paragraph so that the manuscript does not appear to end abruptly – but the standardized structure is in conflict with the length issue.

(3) References need to be put systematically into BAS format (APA standards as used in BAS). I marked some obvious instances. The BAS guidance document provides some standards and examples.

Look through the mark up. You can save a copy and then in that copy “accept all changes” and remove all highlighted (to draw your attention at certain items). Note that BAS uses commas in all strings (text and in-text cites of 3+ authors). There is a
problem in how Brammer et al. 2007a is cited; see my suggestion which amounts to the first Brammer et al. (which is in the wrong order alphabetically I believe) should be a systematically and the second Brammer et al. should be b systematically; or perhaps Brammer, Millington ... should be cited as such throughout. You should look at the problem; and then Sage copyediting (which comes next) may resolve what to do.

The third revision (thus R3) can be uploaded to manuscript central when you are ready. I will set manuscript central to conditional acceptance of the second revision (R2). We are ready to proceed to finalization, but there is some significant writing work to address. If you have a question on any particular point, email me for assistance.