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Board diversity in the United Kingdom and Norway: an exploratory analysis

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Introduction

In spite of considerable progress during the last 20 years, corporate board members remain largely white, male and middle aged (Bilimoria & Piderit 1994, Conyon & Mallin 1997, Singh *et al.* 2001, Daily & Dalton 2003a, b, Singh & Vinnicombe 2004). A growing academic and practitioner literature has highlighted the homogeneity of corporate boards and has suggested that this raises significant ethical, political and economic issues (e.g. Bilimoria & Piderit 1994, Conyon & Mallin 1997, Singh *et al.* 2001, Carter *et al.* 2003, Daily & Dalton 2003a, b). The widespread recognition of the difficulties involved in improving the gender balance of corporate boards has prompted the introduction of a number of initiatives such as those that support the educational development of women leaders, mentoring activities within organisations, the generation of increased media attention,[1] more sustained political pressure and, in some countries, legislative compulsion.

Diversity issues have recently acquired a higher level of strategic salience within organisations for several reasons. First, institutional investors have begun to implement diversity screens as part of their investment practices and a commitment to diversity in employment practices is part of the inclusion criteria for many socially responsible investment indices (e.g. FTSE4Good). Second, board diversity is desired by customers, employees and other stakeholders for whom it is a demonstration of the sensitivity of management to stakeholder preferences, aspirations and concerns that may bring benefits through improved customer loyalty, and employee motivation and retention (Powell 1999, Bilimoria & Wheeler 2000). Third, board diversity issues have been the subject of discussions of best practice in corporate governance. For example, the recent Higgs Review of the role and effectiveness of non-executive directorships highlighted that 'the current population of non-executive directors is narrowly drawn' (Higgs 2003: 13) being mostly, 'white males nearing retirement age with previous PLC director experience' (Higgs 2003: 42). Furthermore, the Review argued that 'a commitment to equal opportunities . . . is inevitably undermined if the board itself does not follow the same guiding principles' (Higgs 2003: 42).

Existing conceptual and empirical work has defined and measured board diversity in a variety of ways. As van der Walt & Ingley (2003: 219) argue, 'the concept of diversity relates to board composition and the varied combination of attributes, characteristics and expertise contributed by individual board members'. Within this definition, a primary distinction has been made between demographic (i.e. observable) and cognitive

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(i.e. unobservable) dimensions of diversity (e.g. Maznevski 1994, Milliken & Martins 1996), with much of the existing empirical work focusing upon demographic aspects of diversity such as gender, age and ethnicity (e.g. Conyon & Mallin 1997, Singh *et al.* 2001, Daily & Dalton 2003a, b). Within this literature, most of the empirical studies choose to focus upon a single dimension of board diversity, most typically the incidence of women on main boards (e.g. Harrigan 1981, Burgess & Tharenou 2002, Daily & Dalton 2003b, Singh & Vinnicombe 2004).

Earlier investigations of board gender diversity typically explore diversity within a particular national context and have tended to use a cross-sectional research design. Nevertheless, such studies have collectively highlighted the variation across countries in board diversity, and mapped its evolving pattern. For example, recent studies suggest that in the United States, 13.6% of the main board directors of large companies are women, compared with 8.6% in the United Kingdom, 11.2% in Canada, 8.6% in Australia and 7.1% in South Africa (Catalyst 2003, Singh & Vinnicombe 2004). Research also suggests that these percentages have risen considerably in recent years. For example, the proportion of FTSE 100 directors that were female more than doubled from 3.7% to 8.6% in the period from 1995 to 2003 (Conyon & Mallin 1997, Singh & Vinnicombe 2004), while in the United States the proportion of female directors grew from 4.7% to 13.6% between 1987 and 2003 (Daily *et al.* 1999, Catalyst 2003). A more limited number of studies have shed light on the antecedents of board diversity with good evidence that firm size, board composition and industry sector play significant roles in shaping the gender composition of boards (Bilimoria & Piderit 1994, Conyon & Mallin 1997, Burke 1999, Daily *et al.* 1999, Singh & Vinnicombe 2004).

In this paper, we explore the issues associated with voluntary and mandatory solutions to the low level of board diversity by examining the pattern of board gender diversity in the United Kingdom and Norway on a longitudinal basis. We make two distinctive contributions. First, ours is among the first studies to adopt an international comparative perspective to board gender diversity. As such, our analysis is able to shed light on the roles played by institutional, cultural and social factors in shaping board diversity. In particular, the countries chosen for our analysis differ markedly in their approaches to increasing the representation of women on boards of directors. The UK approach, broadly speaking, has been essentially voluntary with an emphasis on highlighting the importance of the issue, public identification of 'good' and 'bad' performers and arguing in favour of the business case for greater board diversity. In Norway, the approach has been to legislate, or to threaten to do so, for greater representation of women on boards. Because the business imperatives for greater board diversity apply equally in the United Kingdom and Norway, this legislative difference provides a valuable natural experiment within which to study the evolving patterns of female representation on main boards of directors.

Second, our analysis is longitudinal, drawing on a database of board diversity in the United Kingdom that covers a 7-year period and in Norway that covers a 4-year period. By examining the experience of UK and Norwegian companies over a longitudinal period, we are able to explore several important issues. First, a comprehensive longitudinal approach is capable of shedding more light on the processes through which board diversity changes over time than repeated cross-sectional analyses. In particular, a longitudinal analysis is capable of distinguishing between changes in the behaviour of companies and the shifting pattern of economic activity in the economies under study. It is also able to shed light on whether the changing size of boards and companies has any direct association with the evolving pattern of board diversity.

The remainder of the paper is organised as follows: the next section reviews the literature relating to board diversity with a particular emphasis on international comparisons. The following section discusses the institutional context of Norway and the United Kingdom, highlighting institutional, social, cultural and demographic variations between the countries. A further section introduces the empirical methodology used in our study, the findings of which are described and discussed in the next section. A final section then concludes the paper.

Literature review

Much of the existing academic literature on board diversity argues that the low levels of board diversity observed in many contexts raise significant ethical and economic concerns. An important strand of the literature makes the normative case for greater board diversity, arguing that it is unethical for groups of people to be denied access to societal power on the basis of their gender, race, religion or any other individual traits unrelated to their ability (Garratt 1997, Keasey *et al*. 1997, Carver 2002). The literature argues that society would benefit and companies would better reflect their customers and stakeholders by increasing the gender diversity on their boards, arguing that business should view diversity as a positive attribute in its own right rather than a means to an end.

The economists' argument against board homogeneity is one of foregone talent and, by implication, reduced performance. If a segment of society's talent is systematically excluded from board directorships not because of talent, but gender, the company's board is sub-optimal (Burke 1997, Cassell 2000, Carver 2002). Alternatively, if talents and competencies are not evenly distributed across demographic groups, companies are missing out on some of these resources by limiting their selection to men (Bryan 1995, Burke 2000, Westphal & Milton 2000). Other economic motivations for improved board diversity stem from a firm's board better reflecting its stakeholder constituencies. Customers may feel their requirements and concerns are better handled by somebody they can identify with whether gender or ethnicity related (Bilimoria & Wheeler 2000). Employees of the firm may also be more motivated if they see a better reflection of themselves at the board level (Powell 1999). A recent rise in shareholder activism and corporate governance also indicates that firms that take these issues seriously may reap economic benefits and better relationships with their investors and pressure groups (Kuczynski 1999, Carver 2002, Carter *et al*. 2003).

At an operational level, board diversity has been subject to two dichotomous views: its perceived enhanced independence on the one hand (Mattis 2000, Selby 2000, van der Walt & Ingley 2003) and increased conflict, delayed decision making and group-think on the other (Hambrick *et al*. 1996, Knight *et al*. 1999, Erhardt *et al*. 2003). Board performance will be affected by the combined intellectual capital available, and the experiences, competencies and views of its members (Nicholson & Kiel 2004). The wider the talent pool from which board members have been picked, the more capable the board should be. The contrasting view is that diversity produces some practical problem in terms of board dynamics. A token woman may be, or feel, marginal to the decision-making process, thus feeling unable to voice the valued contribution she was elected to make. With a more diverse range of views and opinions, consensus may be harder to achieve, which in turn may delay decision making and devolve personal responsibility (Hambrick *et al*. 1996, Knight *et al*. 1999, Erhardt *et al*. 2003). It has been argued that board diversity adds more to a company than it takes away, and increases rather than decreases the board's independence. Selby (2000: 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'.

While there are both ethical and economic reasons for greater board diversity, it is still the case in the United Kingdom, Norway and many other European countries that the board is predominantly male and Caucasian in spite of some significant growth in diversity in recent years (Burke 2000, Singh *et al*. 2001). A more limited literature has investigated the antecedents of board diversity. Board diversity has been found to be influenced by a range of diverse factors, including company size, profitability and the size of the board itself (the number of executive and non-executive directors). The literature suggests that the increase in women on the board has been a result of additions to the board, as opposed to a review of the current compositional structure, predominantly in non-executive roles (Conyon & Mallin 1997, Singh *et al.* 2001). This may partly be due to implementation of equal opportunity programmes, where it has proved problematic at the senior management level to identify suitable candidates as the pool of suitably qualified contenders is small and often homogeneous (Powell 1999). The debate thus indicates, in line with earlier evidence (e.g. Conyon & Mallin 1997), that boards with more non-executive directors and a larger size are also more likely to be more diverse.

Internationally, there have been a number of studies focused on the gender diversity of corporate boards in recent years (Burke 1999, Sheridan & Milgate 2003, Farrell & Hersch 2005). Burke's (1999) study of the largest 350 companies in Canada highlighted the small number of women represented on Canadian boards and the link between female presence on the board and firm size, where bigger boards had more women. Sheridan & Milgate (2003) surveyed Australian listed companies and found that men favoured homogeneity at the board level, while women were advocating diversity. At the time of Sheridan & Milgate's (2003: 148) study, only 3.4% of Australian board directors were women. Farrell & Hersch (2005) surveyed Fortune 500 and Service 500 companies to establish the extent to which gender influenced board selection. They found that women were added to the board until the company's diversity goal was met and that once they were satisfied that minimum acceptable female board representation was ensured, they no longer looked to increase gender diversity.

Cumulatively, this international research from the United States, Canada and Australia indicates a situation where women generally have a small presence in the boardroom, male board directors are happy with a homogeneous board and they are not looking to change beyond a minimum acceptable level that satisfies stakeholders' criteria of diversity. Table 1 provides a composite picture of boardroom diversity across a wide range of countries in Europe, North America, Australasia and Africa. In every country, men make up over 78% of corporate boards, but some countries have more female representation than others. Seen in a wider international context, Norwegian and UK boards have a larger proportion of women directors than many other European countries. Norway tops the list, closely followed by their Nordic neighbours Sweden and Finland. The United Kingdom comes fourth among the European countries. While the majority of countries included in the table have more than 3% females on the board, as was the case in Australia in 2000, the overall picture may imply continued tokenism (Kanter 1977). There are, however, a few methodological points to be aware of.

Table 1: Estimates of board diversity in 18 countries

Country	Sample size	Year	% of board positions held by women
Norway		2004	22
Sweden		2004	20
Finland		2004	14
United States	500	2003	13.6
Canada	500	2003	11.2
South Africa	355	2005	10.7
Australia	300	1999	10.7
United Kingdom	100	2005	10.5
Germany		2004	10
Switzerland		2004	9
France	40	2004	7.44
Austria	0	2004	6
Denmark		2004	4
Holland	100	2004	3.6
Spain		2004	3
Belgium		2004	3
Italy		2004	2
Japan	2396	1998	0.2

Canada, Japan, South Africa, Australia and Spain from http://www.globewomen.com/cwdi/colloquium03.asp. Numbers for Norway, Sweden, Finland, Germany Switzerland, Austria, Denmark, Spain, Belgium and Italy from http://www.europeanpwn.net/pdf/womenboard_pres_europe.pdf. Numbers for the United Kingdom from http://www.som.cranfield.ac.uk/som/research/centres/cdwbl/downloads/FTSE2005Index.pdf. Numbers for the United States, numbers for Holland from Spencer Stuart (2005), *The Netherlands Board Index* 8th Edition (http://content.spencerstuart.com/sswebsite/pdf/lib/dbi2005-web.pdf)

Table 1 was compiled using data from research commissioned by the European Professional Women's Network, Corporate Women Directors

International and Cranfield University. Typically, studies of board diversity examine the largest companies, usually the largest 100–500 publicly listed companies in a particular national context (Conyon & Mallin 1997, Burke 1999, Adams & Flynn 2005). However, in the research carried out on behalf of European Professional Women's Network, the 200 largest companies in Europe were considered. Where a country did not have 10 companies sufficiently large to make it into the top 200, the next largest companies were included to enhance representation. This is likely to impact the results in two ways. First, larger companies tend to have more diverse boards, and so the over-representation of the largest companies in some national contexts is likely to provide over-estimates of the true picture of board diversity for those countries. Second, a country's industrial composition may influence female representation. For example, Germany has a large number of big engineering firms, an industry where women have traditionally had less presence. Hence, the estimate of diversity of German boards in Table 1 may be an underestimate of the actual pattern of women on German boards.

Contextual factors

In this section, we explore the variation between Norway and the United Kingdom in contextual factors that we expect to play a significant role in shaping the cross-country pattern of board diversity. In particular, we focus on the different institutional pressures to improve board diversity and upon social, cultural and demographic contrasts between the countries. We first concentrate on the different institutional context before exploring the social, cultural and demographic context.

The nature of corporate boards

A necessary first step when conducting cross-country comparative analysis is to ensure the broad comparability of the unit of analysis – in this case the corporate board. British and Norwegian boards share broadly similar responsibilities. In particular, boards in both countries are responsible for ensuring that the business is run responsibly, approving plans, transactions and budgets, and ensuring appropriate accounts and other audit materials are maintained and published as required (Norsk anbefaling eierstyring og selskapsledelse: 23–27, Cadbury Report 1992). However, there are some notable differences between British and Norwegian boards. First, executive directors are generally absent from the Norwegian boardroom. According to Oslo Stock Exchange best practice guidelines, neither the CEO nor any other member of the executive management team should be board members (Norsk anbefaling eierstyring og selskapsledelse: 25). Second, while the executive management are advised to stay out of the boardroom, employee representatives are encouraged to participate. If a majority of employees in companies with a workforce totalling <200 requests it, they have the right to representation on the board of up to a third of the board or at least two members of the board, depending on the size of the company. In companies with over 200 employees, a company can reach an agreement with employees or unions and waive the need for a corporate council and instead elect an additional employee representative to the board, over and above those required as outlined above (Allmenaksjeloven: §6-3, §6-35).

Norwegian corporate governance is not dissimilar to the United Kingdom, but differs in three main respects. As in the United Kingdom, the Annual General Meeting (AGM) is the main instance for shareholder decision making, where votes are cast on board and senior management changes and the company is answerable to their shareholders on all matters that substantially impact the long-term value and performance of the company such as proposed mergers and acquisitions, or corporate re-structuring. Below the AGM but above the corporate board is the corporate council. Corporate best practice guidelines issued by the Norwegian stock exchange call for a corporate council in all companies employing more than 200 employees. The council must have at least 12 members. Shareowners elect two-thirds of the members to the council while the company employees elect the remaining one-third. The corporate council is tasked with overseeing the board and the senior management team to ensure the on-going well-being of the company (Norsk anbefaling eierstyring og selskapsledelse: 23–24).

Institutional pressures for improved diversity

As we briefly noted above, the most striking difference between Norway and the United Kingdom as relates to board diversity is the different regulatory/legal approach adopted to achieving an improved gender balance in corporate boardrooms. In the United Kingdom, the approach has been to highlight the opportunities offered by improved board diversity but to leave companies free to appoint their chosen candidates for board positions. In the United Kingdom, best practice guidance in corporate governance focuses upon the processes through which a board executes its duties, rather than the characteristics of the directors themselves (e.g. Combined Code 1998, Turnbull Report 1999). Guidance on board composition is largely restricted to a suitable presence of independent (or outside) non-executive directors, rather than demographic attributes (e.g. Cadbury Report 1992, Higgs 2003). For example, in the Combined Code, it is advised that appointments to the board 'should be made on merit and against objective criteria', and it stresses the importance of 'an appropriate balance of skills and experience' (Combined Code 1998: 8), but there is no mention of demographic diversity, gender or ethnicity. The recent Higgs Review, however, is more explicit concerning the homogeneity of most boards of directors and the desirability of drawing non-executive directors from a broader demographic pool. Hence, while an absence of board diversity does not imply a failure to comply with the established guidelines for good corporate governance and firms have the scope to tailor the demographic composition of their boards according to preferences and circumstances, there is some pressure for firms to consider diversity within recent discussions of good corporate governance.

The Norwegian approach, by contrast, has been to legislate for improved board diversity. The idea of legislating for improved board diversity had existed for some time without political agreement having been reached (Clark 2005) before, in early 2002, the Ministry for Trade and Industry in Norway proposed affirmative action for Norwegian corporate boards. Specifically, the proposal suggested that boards should comprise a minimum of 40% of each gender, in order to better reflect the general population and to make use of untapped female talent. The legislation would apply to all public limited liability companies except those where one gender comprised <20% of the workforce in which case the rule would not apply, to avoid a skewed representation; nor would it apply to private companies,[2] as the vast majority of these companies had fewer than 10 employees. During 2002–2003, the government engaged in extensive consultation with a wide range of stakeholders including the Oslo Stock Exchange, the Confederation of Norwegian Enterprise, corporations, ministries, academic institutions, women's interest groups, equality bodies and religious organisations (Det Kongelige Barne og Familie Departement Ot.prp nr. 97 2002–2003). The proposal was approved by Parliament at the end of 2003 with a provision that the law would not come into force if all companies concerned complied voluntarily by the summer 2005. By the end of August 2005, the goal of 40% gender representation was still some way off, and the affirmative action law came into effect from January 2006.

Social, cultural and demographic differences

Since the 1970s, the Norwegian women's liberation movement has fought for equal access to work and education for all women. Access to education would help to ensure economic independence for women and was seen as a crucial lever in achieving gender equality. Norwegian women's career aspirations grew from being one of the western countries with the lowest female labour force participation rates in the 1960s (Likestillings Senteret 2005a) to entering the boardroom four decades later. In 2003, 24% of women had higher degree qualifications compared with 23% of men (Likestillings Senteret 2005b). This increased level of education is also reflected in workforce participation. As of 2002, more than 80% of women with one or no child worked, while 78% of women with two children were in paid employment. In the United Kingdom, just under 80% of women with no children were active in the labour market, while only just over 70% of women with one child were and 60% of women with two children were in paid employment (HM Treasury 2004: 12). Of women with two children, 40% work part-time in Norway, compared with 60% in the United Kingdom. For one child, the numbers are 30% and 45%, respectively (HM Treasury 2004: 78). There are two main reasons for this inter-country difference: availability of childcare and family-friendly policies and cultural differences. The United Kingdom lacks sufficient affordable, high-quality childcare (HM Treasury 2004: 2), while this has been a priority in Norway since the introduction of the welfare state in the early 1950s. A place in full-time kindergarten in Norway costs £195 per month (Kunnskapsdepartmentet, Nyhetsbrev om barnehage Nr. 1: 1), vs. £560 in the United Kingdom (BBC News 2006). In Norway, 73.4% of all children between the ages of 1 and 5 were in kindergarten in 2005, compared with the United Kingdom where there is one registered childcare place for every four children under the age of 8 (The Day Care Trust 2006). The second major difference is that of perceptions. In Scandinavian countries, non-working mothers are disdained, as it is generally accepted that kindergartens are pedagogically good for children and mothers can continue to contribute to the welfare of society and themselves while rearing children (Newell 1996: 37). The case is less so in the United Kingdom, where it is more widely accepted that women stay at home for longer when a child is born and more frequently return to work in a part-time capacity. The cumulative effect is that women in the United Kingdom gain less full-time work experience once they have had children than their Norwegian counterparts, who have longer, more sustained employment records, allowing them to build up a large and more continuous work experience portfolio. Norwegian women are therefore in a better position to be promoted and gain managerial experience.

Methodology

Our analysis explores the gender diversity of boards of directors of leading companies in the United Kingdom and Norway. Following earlier studies, we focus on the 100 largest companies as measured by market capitalisation in each country (Conyon & Mallin 1997, Singh *et al.* 2001). The primary data source is each corporation's published annual report and accounts, which, by law in each country, identifies the board of directors. The content of the corporate annual reports was used to identify board members and in many cases to provide supplementary evidence concerning board directors, for example evidence of their ages. For UK companies, the *Directory of Directors* was used as a supplementary data source. For all the directorships held in our sample companies, the genders of almost all directors were clearly signalled by their names and titles. For those remaining, the matter was clarified by the use of gender-specific language in a biography given in the annual report (he, she, his, her, etc.); by a photograph given in the Annual Report; by internet materials (mainly news articles and the websites of foreign companies); or by cross-referencing across companies within our data set.

For our analysis of cross-sector variation and of the link between firm size and board diversity, we made use of *Datastream*. A principal business activity for each firm was obtained from *Datastream*, along with data relating to its market capitalisation. *Datastream* applies an industry classification roughly equivalent to the three-digit Standard Industrial Classification (SIC). These (approximately 100) classifications were mapped onto 10 sectors: consumer services, chemicals, oil/gas, utilities, IT/telecommunications, finance, transportation, engineering, consumer goods and construction.

Findings

We begin our discussion of our research findings by examining the evolution of the broad pattern of board diversity in the United Kingdom and

Table 2: The evolving rates of board gender diversity in the United Kingdom and Norway

	United Kingdom Female directors as % of total directorships	% of companies with one or more female director	Norway Female directors as % of total directorships	% of companies with one or more female director
1999	4.9	64	–	–
2000	5.8	58	–	–
2001	6.4	57	9.1	40
2002	7.2	62	10.3	46
2003	8.6	68	13.7	56
2004	9.7	70	15.7	61
2005	10.5	78	–	–

Norway in recent years, as reported in Table 2. The figures indicate that UK board diversity, measured as the proportion of FTSE 100 directorships held by female directors, has roughly doubled over the period from 1999 to 2005. For the 4-year period where a direct comparison is available, this index is fairly consistently approximately 50% higher in Norway than it is in the United Kingdom. Over the same 4-year period, the proportion of total directorships in large companies held by women has risen by 6.6% in Norway compared with 3.3% in the United Kingdom. In absolute terms, then, board diversity has grown twice as rapidly in Norway as in the United Kingdom. Controlling for the difference in initial levels of diversity, the rate of growth in board diversity between 2001 and 2004 captured as a percentage of its 2001 level is 73% in Norway compared with <52% in the United Kingdom. It does seem, therefore, that Norwegian firms have made moves to increase board diversity in anticipation of potential legislation to mandate a lower bound to female board representation of 40%.

Table 2 also reports an alternative index of board diversity – the percentage of large companies with at least one female board director. Consistent with the observations made above, there has also been considerable growth in this index of board diversity. Over the 4-year window of direct comparison, the index has grown by roughly 20% in each country and, controlling for the difference in initial levels, to a greater degree in Norway than in the United Kingdom. Perhaps surprisingly, though, a significantly lower proportion of large Norwegian companies has a female board member than corresponding UK companies, in spite of having a higher proportion of female directors overall. Taken together, these findings suggest that where females are represented on Norwegian boards they are found in greater numbers than they are on UK boards.

Table 3 presents an analysis of board diversity for each of 10 sectors of economic activity and how that pattern has evolved within those sectors over the period 2001–2005. Broadly, the evidence in Table 3 shows that, within each country, the overall rise in the rate of board diversity masks a considerable degree of variation in the growth of diversity at the sectoral level. In the United Kingdom, there has been relatively rapid growth in diversity in the extractive industries, consumer manufacturing and construction but almost no change in the diversity of boards in consumer service industries such as retailing and in engineering. In Norway, rapid growth in the diversity of boards in the chemicals, IT/telecoms and consumer services sectors is balanced by the relative stability or decline of diversity in finance and oil/gas. To some degree, the pattern of stability or low growth reflects the relatively good performance of firms in those industries in 2001, but it is worrying that the pattern of diversity has not evolved significantly since then.

Table 3 also identifies significant cross-country variation in the sectoral pattern of board diversity.

Table 3: Sectoral variation in board diversity in the United Kingdom and Norway

		Female directors as % of total directorships	
		United Kingdom	Norway
Finance	2001	7.7	13.9
	2002	8.5	11.6
	2003	11.6	13.0
	2004	13.3	16.3
	2005	13.7	–
Consumer manufacturing	2001	3.3	13.6
	2002	4.3	13.8
	2003	6.1	20.0
	2004	9.0	23.0
	2005	10.1	–
Consumer services	2001	11.0	3.2
	2002	12.2	10.5
	2003	12.2	20.0
	2004	10.0	16.1
	2005	10.1	–
Utilities	2001	6.0	0.0
	2002	8.9	0.0
	2003	9.7	0.0
	2004	12.9	16.7
	2005	11.8	–
Oil/gas	2001	3.8	12.0
	2002	4.9	11.0
	2003	6.9	10.9
	2004	7.7	10.2
	2005	8.9	–
Transport	2001	8.3	9.1
	2002	12.1	9.5
	2003	10.5	12.2
	2004	12.8	14.5
	2005	13.3	–
Construction	2001	3.2	4.3
	2002	3.3	3.4
	2003	1.8	4.8
	2004	5.5	7.4
	2005	6.1	–
IT/telecoms	2001	8.1	7.2
	2002	8.0	10.6
	2003	7.2	14.2
	2004	5.6	16.7
	2005	11.3	–
Chemicals	2001	7.3	8.1
	2002	7.8	6.3
	2003	9.2	15.2
	2004	10.8	19.0
	2005	10.4	–
Engineering	2001	3.8	8.2
	2002	2.3	12.2
	2003	3.7	10.7
	2004	2.9	15.9
	2005	3.9	–

Different industries are associated with relatively high board diversity in the two countries. For the latest comparable year, 2004, the leading industries in the United Kingdom are finance, utilities and transport, with very low levels of diversity observed in engineering, construction and IT/telecoms. In Norway, the leading sectors are the consumer manufacturing, chemicals and IT/telecoms sectors, while the laggards are the construction and oil/gas sectors. Figure 1 underlines the cross-country variation in the sectors associated with relatively high rates of board diversity by examining the distribution of female directorships across industries for each country in 2004. The variation across countries is very striking, with almost a third of female-held directorships in the United Kingdom being attributable to the finance sector compared with only 6% in Norway, and 22% of female directorships in Norway residing in the IT/telecoms sector compared with only 5% in the United Kingdom. That there is a very significant sectoral variation in the pattern of board diversity suggests that industry context plays an important role in shaping firm decisions regarding board diversity. However, the fact that the pattern in that sectoral variation differs so markedly across countries suggests that sectoral variation is only part of the story, a point we return to below.

Taken together, the analyses of the growth in board diversity and the variations across and within countries in the sectoral pattern of board diversity discussed above suggest that the changing composition of economic activity in Norway and the United Kingdom may have played an important role in shaping evolving board diversity. Put differently, the question is: is the rise in board diversity between 2001 and 2004 attributable to the changing behaviour of firms or is it due to turbulence in the identity and characteristics of the leading companies over the same period? This issue is significant, given the trend in many western economies to service sector activities that tend to employ relatively large proportions of women compared with more traditional manufacturing industries. In order to investigate this issue, we split each country's data into two sub-samples, the first of which consists of

Figure 1: Distribution of female board directors across industry sectors in the United Kingdom and Norway in 2004

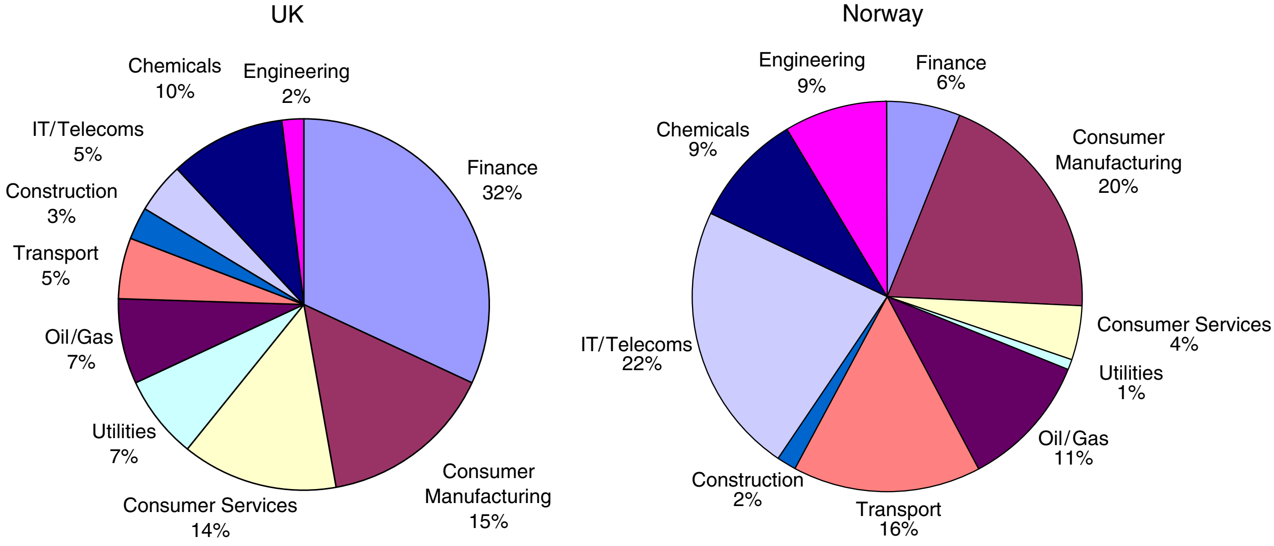

Table 4: Correlations between board diversity and board and firm size

	Norway Board size	Market capitalisation	United Kingdom Board size	Market capitalisation
Levels				
% women on boards	0.349**	0.434**	– 0.028	0.063
Year-on-year changes				
% women on boards	– 0.197**	– 0.045	– 0.157**	0.001

**Statistical significance at the 1% level on a two-tailed test.

companies that were present in each of the 4 (5 for the United Kingdom) years from 2001 to 2004 (2001–2005 for the United Kingdom), the second of which consists of firms present in their country's top 100 companies in at least one, but fewer than all, of the years under study. It is then possible to examine the growth in board diversity in these sub-samples and to examine their relative contribution to the overall growth in board diversity by weighting the rise in each sub-sample by the proportion of the total board seats in top 100 companies. This analysis reveals that both changing behaviour and sectoral shift have played an important role in generating higher rates of board diversity. In the United Kingdom, of the overall growth of 4.1% in the rate of female board representation, 3.1% is attributable to the changing behaviour of firms that were present in the FTSE 100 in each of the 5 years analysed, while 1% was attributable to those companies not present in every year. In Norway, of the overall growth of 6.6% in the rate of female board representation between 2001 and 2004, 5.9% is attributable to the firms always present in the top 100, and 0.7% is attributable to firm-level turbulence. These figures are encouraging in that they suggest that the rises in board diversity seen in both countries are largely attributable to the changing behaviour of companies that are increasing the diversity of their boards over time.

Table 4 begins to address issues concerned with the processes by which board diversity has increased in Norway and the United Kingdom over the period 2001–2004. Specifically, it reports two sets of correlation coefficients between the rate of female board representation and firm and board size, measured by market capitalisation and the total numbers of directors, respectively. The first set, reported in the first numerical row, compares the correlations between the current level of board diversity and the current levels of firm and board size in the United Kingdom and Norway. To control for the possible influence of sectoral shift, we restrict the analysis to those companies for which complete data are always available (i.e. those always in their country's top 100). The findings suggest that there are strong, statistically significant, positive correlations between gender diversity and both firm and board size for Norwegian companies whereas the corresponding effects are entirely absent for UK companies. Board diversity is strongly associated with larger companies and larger boards in Norway, a fact that might go some way towards explaining the variation between countries in the sectoral composition of board diversity attributes. In Norway, the larger companies, such as Norsk Hydro, Statoil and Telnor, dominate the corporate landscape and often have historical ties with the Norwegian government, which has a longstanding commitment to effective diversity practices. In addition, the Norwegian stock exchange is a shallower index than the FTSE and, consequently, there is a sharper distinction between larger and smaller companies within the 100 leading companies in Norway than there is in the United Kingdom. The second panel of Table 4 examines the correlations between year-on-year changes in board diversity and year-on-year changes in board and firm size. Most strikingly, the findings indicate the presence of significant and negative correlations between changing diversity and changing board size in each country. This suggests that as boards grow, they tend to become less, not more, diverse and that the rise in the rate of female board representation has come about through the substitution of women for men within existing board roles rather than the simple addition of female directors to boards.

A final step in our analysis examines the process of increasing board diversity through an exploration of the evolving pattern of the ages of female directors and the degree to which female directors identified in our database hold multiple directorships in the leading companies in their country. To the extent that age reveals something about the experience of directors and the average number of directorships held by female directors indicates how thinly a given pool of female directors is spread across the boards of leading companies in each country, this may tell us something about how increases in diversity are being achieved. Looking at the average age of female directors, there is a clear difference between the countries, with the average age of female FTSE 100 directors being approximately 54 in 2004 and the average age of female directors of leading Norwegian companies being roughly 47. However, the fact that these figures are very similar at 54 and 46 in 2001 indicates that the process of expanding the numbers of female directors has not resulted in a significant fall in their average age in either country. Of course, one possible explanation of this phenomenon is that average age remains constant because the pool of directors itself remains constant and that growth in the degree of female board representation has been achieved by increasing the number of boards upon which the same pool of female directors sit. Encouragingly, this does not appear to be the case. There has been little or no growth in the average number of boards that a given female director sits on in either country over the last 4 or 5 years. Most importantly the number of different female directors sitting on top 100 boards doubled between 2001 and 2004 in Norway, and grew by more than 61% in the United Kingdom. Hence it appears that a drive for greater female representation on corporate boards is successfully increasing the pool of female board directors in both countries.

Discussion and conclusion

In this paper, we have examined the evolving gender diversity of the boards of directors of leading Norwegian and British companies on a longitudinal basis. The period covered by the study covers the run-up to proposed affirmative action legislation in Norway and, as such, affords an insight into corporate actions in this emerging institutional context. Our findings demonstrate that, while board diversity has grown substantially in both countries in recent years, it has done so considerably more rapidly in Norway than in the United Kingdom. Our analysis highlights the sectoral variation between the countries in the pattern and growth of board diversity and suggests that the vast majority of the overall growth in board diversity is the result of changing firm behaviour rather than a sectoral shift in the United Kingdom or Norwegian economies. We also show that as diversity has increased, there has been no fall in how experienced female directors are, or a corresponding rise in the number of boards that female directors sit on, suggesting that the rapid growth in board diversity has been achieved without any fall in the quality of female directors.

Our analysis demonstrates that the threat of affirmative action programmes in Norway has considerably accelerated the growth in female board representation relative to the United Kingdom. Moreover, our analysis, although exploratory, detects no 'negative' consequences of this initiative that may arise in the shape of the appointment of inexperienced women or a rapid growth in the numbers of appointments held by a given group of female directors. Our study, then, appears to show that affirmative action programmes may have the potential to generate a radical growth in female representation in the boardroom. A more widespread adoption of such programmes would cement the position of women in the boardroom and within wider society and, absent evidence of harmful effects, could form the basis of good governance practice throughout western economies.

The analysis undertaken suffers from a number of limitations that could serve as the basis for future work. First, our study focuses on only two national contexts: those of Norway and the United Kingdom. The importance of cross-country variations that we have highlighted suggests that future work that explores diversity in a larger number of more diverse institutional and cultural contexts might shed further light on the relative importance of legal, economic, social and cultural influences on the pattern of board diversity. Second, our analysis of the correlates of board diversity could be extended to make use of multiple regression techniques to study the drivers of board diversity. Third, while we show that the rapid growth in board diversity has been achieved without a significant degree of growth in the number of boards that individual female directors sit on or a fall in their experience levels, further analysis could explore this in more detail by exploring the educational backgrounds of female directors and comparing them with their male contemporaries.

Notes

1. The publication of the 'Female FTSE Index' by researchers at Cranfield University raises the profile of board diversity and exerts pressure to consider diversity issues at board level by highlighting success stories and describing all-male boards as an 'anachronism'.
2. Because a new government was formed after the elections in 2005, there is now a debate concerning whether the law should be extended to private companies.

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