

Northumbria Research Link

Citation: Martin, Lynn, Warren-Smith, Izzy, Scott, Jonathan and Roper, Stephen (2008) Boards of directors and gender diversity in UK companies. *Gender in Management*, 23 (3). pp. 194-208. ISSN 1754-2413

Published by: Emerald

URL: <http://dx.doi.org/10.1108/17542410810866944>
<<http://dx.doi.org/10.1108/17542410810866944>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/29974/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



**Northumbria
University**
NEWCASTLE



UniversityLibrary

Boards of directors and Gender Diversity in UK Companies

Professor Lynn M Martin

Formerly Birmingham City University

Currently Manchester Metropolitan University, l.martin@mmu.ac.uk

Dr Izzy Warren-Smith

Harper Adams University College, Newport, Shropshire, TF10 8NB, UK

Tel: +44 (0) 1952 815368 Email: iwarrensmith@harper-adams.ac.uk

Dr Jonathan M. Scott

Formerly Aston Business School

Currently Teesside University Business School j.scott@tees.ac.uk

Professor Stephen Roper

Warwick Business School, University of Warwick, Coventry, CV4 7AL, UK

Tel: +44 (0) 24 7652 4306 Email: Stephen.Roper@wbs.ac.uk

ABSTRACT

Purpose – This paper is an exploratory quantitative study to provide the first overview of the incidence of female directors in UK companies, mapped against types of firms. It provides a unique quantitative perspective on the types of companies with boards on which female directors serve.

Methodology/approach – A quantitative analysis of a newly constructed database based on data for all UK companies (using Companies House FAME data) was carried out to explore overall data for board membership related to gender, resulting in a new typology to describe firms with female directors.

Findings – The data supports earlier partial studies suggesting male dominance continues at senior levels. Although female directors represented 1 in 4 directors in UK firms, most companies remain male dominated. Only around 1 in 10 businesses in the UK are run by a majority female board, i.e., women are in the minority on most company boards. Where companies are run by single sex boards, there are fewer all female firms than all male firms and fewer female majority firms than male majority. These levels of membership can, however, be mapped against a typology to aid exploration of the roles being played by women at a senior level. However, board composition by gender varies with size and sector. Women directors are generally found in smaller firms and only 1 in 226 of larger firms have a majority of female directors. The service sector remains the main focus for female firms, both business services and other services.

Research limitations/implications – The study suggests that at the rate of progress achieved over the 2003-2005 period, it will be the year 2225 before gender balance in company directorships is achieved in the UK. The study was based on Companies House data, where gender is a self-reported variable; therefore, considerable work had to be done to identify the gender of directors in order to build the database. This is a limitation for others trying to assess female board membership. The study did not attempt to explain why these levels of female participation are observed – this is a necessary second step following this first analysis of the incidence of women on boards.

Originality/value – The data provides the first comprehensive picture of the senior positions of women across UK businesses as it relates to their positions on the boards of companies. It provides initial baseline data which indicates the current position and will provide a benchmark for future studies of progress towards achieving greater gender balance in the boardroom. The typology which emerged also enables wider interpretation of female leadership, including the role of women on boards with majority female membership – the 49,000 plus ‘matriarchies’ and the significant and interesting group of 9000 plus ‘sisterhood’ companies, wholly owned and led by women, both of which represent an interesting potential focus for future research.

Keywords Gender, Directors, leadership

Boards of directors and Gender Diversity in UK Companies

Introduction

This paper is based on an exploratory study to establish the levels of female participation on the boards of companies in the United Kingdom. The research aims underpinning the study were to

- (a) address the lack of disaggregated data available for researchers when exploring company structures by gender
- (b) establish baseline data for female participation at board level across all companies in the United Kingdom
- (c) capture data and map it against a typology or model, if appropriate, to aid other researchers and policymakers working in this field.
- (d) identify the role of women in established companies – an under-researched area in female enterprise compared with business start up phases

To explore female board membership levels in UK limited companies, a new database was constructed using Companies House data, to provide an overview of the gender of directors. Based on information for all UK firms, this data provides a comprehensive picture of the proportion of women on the boards of UK companies. The analysis also led to an exploration of performance mapped to board gender diversity but the discussion of the content and findings are the subject of another paper.

By constructing this new database and exploring it in terms of gender participation on boards, the study aimed to provide a new and unique overview of the gender diversity of UK companies at board level, which would increase understanding of the current situation related to UK board diversity. The study, therefore, also contributes to better understanding of progress towards greater gender balance in the boardroom and provides an initial benchmark for subsequent research.

Reviewing previous work in this area: the data gap underlying policymaking

This paper addresses two distinct research gaps with regard to women's enterprise; firstly, the lack of studies into established companies owned and managed by women and secondly, the lack of disaggregated data reflecting diversity. Although there is a growing body of research into female entrepreneurship, this is still at a very early stage where *established* firms are concerned (Carter, 2000). The focus is more often on the start up process, while issues faced by those women running companies through various post-start up stages of the business life cycle have so far gone largely unconsidered. Few studies explore how female-run firms develop and grow or how women operate as small business owners and managers to the business exit stage (Martin, 2001; Catley and Hamilton, 1998). Carter *et al* (2001, p. 22) comment that, despite the increased research interest, the research area of female entrepreneurship remains seriously under-developed due to a lack of cumulative knowledge and a failure to adequately conceptualise and build explanatory theories. This paper begins to address this issue by confirming the status quo for women's enterprise in established firms, via the Companies House database, which includes limited companies only after their first 18 months of operation.

In addition to the lack of focus on established firms, there is also a widely reported lack of disaggregated data reflecting diversity in the United Kingdom (Prowess, 2007). To address part of this issue related to gender, a quantitative approach has been adopted, using data from the UK Companies House database. In this way, it is hoped to contribute to the knowledge base for formulating appropriate policy in this area so that targeted and tailored support mechanisms can be developed (see also Prowess, 2004). This is important as to date the quantitative evidence base and rationale for such policy initiatives remains weak, with, for example, 'relatively few studies of gender and business performance ... most shy away from direct examination of quantitative performance measures, preferring instead to engage in ... qualitative assessments of success' (Carter *et al*, 2001, pp. 36-37).

In addition, Bilimoria (2000: 27) bemoans the lack of ‘systematic and rigorous empirical documentation of women’s boardroom contributions’. Gender parity on company boards is important in terms of economic performance and social equality. The business or economic case for improving the representation of women on company boards has been made before (e.g. Bilimoria, 2000; Burke, 2000b; Carter *et al*, 2003). The social case, as well as improving equality of representation on boards, might include, as reported in Fielden and Davidson (2005), that women are more likely to start businesses with ethical or social objectives (see also Warren-Smith, 2007; and Warren-Smith and Jackson, 2004) and have gender balanced workforces.

Our aim here is to contribute to the basis for policy making in this area by examining – for the whole UK business population – the gender-diversity of their boards of directors. In terms of the UK context, it could be argued that it is simply the global phenomenon of “male domination” (Bourdieu, 1998), rather than any specific UK cultural trend, which restricts women’s ‘corporate ascent’. However, the rationale for examining the incidence of women directors on UK company boards is that, in so doing, the knowledge base for policy to support women’s enterprise and managerial development can be more effectively established and enhanced. It is difficult to map change or potential improvements in the position of women on company boards without having an evidence base as an initial measure; this study aims to provide such a baseline. By doing so, the study addresses the issue highlighted in the Strategic Framework for Women’s Enterprise (Small Business Service 2003, pp. 26-27), that, “There is a lack of baseline information with regard to women in business in the UK. ... The lack of reliable data has been a major problem in understanding women-owned businesses and has hindered the development of evidence-based policy in the area” (see also Carter *et al*, 2001, pp. 36-37; Bilimoria and Wheeler 2000: 27). Additionally there is a clear ‘need to build theory’ (Burke and Mattis, 2000: 5) on this area, which is one of our future aspirations particularly in terms of both ‘sisterhoods’ and the gender diversity/performance relationship.

The evidence presented here may be seen to complement the groundbreaking work of Singh, Vinnicombe and colleagues, which has examined the position of women directors in the changing group of FTSE 100 companies (Vinnicombe *et al.*, 2000; Singh *et al.*, 2001; Singh and Vinnicombe, 2003, 2004, 2005), since it places their findings within a wider context of all UK firms. This is, by its nature, a quantitative analysis to provide a descriptive review of the numbers of female directors and where they serve – the types of companies, size, sector and structure. It is necessarily beyond this first step to provide detailed analysis of relationships and causality, or to identify the nature of the experience of these female directors, as these are beyond the scope of this study and are an aim of future research.

The remainder of the paper is organised as follows. The next section on data and methods describes the development of the database on which this study is based. The findings are then split between a general picture of the position of women directors in UK boards both in cross-sectional and developmental terms and a specific section focusing on ‘matriarchies and on ‘sisterhood’ firms, i.e. those with majority female or all female teams of directors. These firms are a focus both because they are of specific interest in terms of female entrepreneurship and the business leadership agenda but also because they offer a potential focus for important and useful future research. The final section draws out some of the main conclusions and suggests some directions for future development.

Data and Methods

Data was extracted from the FAME – version D (Financial Analysis Made Easy) database which provides electronic access to UK Companies House data. FAME covers both quoted and unquoted companies, and includes both the annual accounting returns made by firms as well as consolidated information on firms’ directors derived from their Annual Returns. The data used here relates to all firms with registered operations in Great Britain with two or more directors. In 2005, there were 564,010 such firms in Great Britain and a total of 1.952m individual named directors on the boards of these firms.

The focus of our analysis was to understand the way in which female business leadership was evidenced by the board membership of women in UK companies. In terms of the gender of directors, FAME provides a gender indicator in around 70 per cent of cases. For the remaining 30 per cent of directors, steps were taken to attempt to identify gender. These included searching and mapping gender against:

- salutory titles (e.g. Mrs, Ms etc.) recorded in company documentation,
- gendered name lists for first names and
- review of first names by a group of students from a range of cultural backgrounds to provide a checklist of names from other cultures, against which those directors with unknown gender could be mapped.

These approaches helped to classify around two-thirds of directors for whom the FAME database provided no gender indicator; however, around 2.5 per cent of directors remained unassigned by gender even after these processes. Hence, in 2005, of the 1.95m directors in GB firms, 71.4 per cent (1.394m) were male, 26.0 per cent (0.508m) were female and 2.5 per cent (0.049m) were unassigned by gender. Expressed as a proportion of those with certain gender, this implies that 73.3 per cent of directors were males and 26.7 per cent were females. Using this data on directors' gender along with FAME information on the date at which directors were appointed and, where relevant, stepped down, it was possible to identify the number of male and female directors with certain gender in each year. This was then used to measure gender diversity, i.e. the percentage of company directors of certain gender which were women, along with board size.

Board Gender Diversity in UK Business Leadership

Our discussion in this section is based on the notion of board gender diversity, i.e. the percentage of the board of directors of a firm who are female. In Table 1, for example, we profile the number of firms in the UK in 2004 – the latest year for which complete information is available on the whole population of firms – for different quartiles of the distribution of board gender diversity. Of the 455,300 firms in our database in this year: 220,000 had less than 25 per cent women directors, 194,000 had 25 to 50 per cent women directors; 26,800 had 50 to 75 per cent women directors and 14,400 had more than 75 per cent women directors (Table 1). This counters some earlier suggestions that the gender

gap in the U.K. may be narrowing (Birley, 1996), as extrapolating the data would suggest that at the rate of progress achieved over the 2003-2005 period, it will be the year 2225 before gender balance in company directorships is achieved in the UK

Take in Table 1

In terms of firm size, we find that 86.6 per cent of all firms are 'small' but this rises to 97.1 per cent of firms with board gender diversity of more than 75 per cent. Among firms with board gender diversity of less than 25 per cent a smaller 78.7 per cent of firms are in the 'small' category. In other words, the percentage of women directors tends to be largest in smaller firms.

This is perhaps most starkly illustrated by comparing the number of 'large' firms (i.e. those with assets of more than £11.4m) which have less than 25% board gender diversity and more than 75% board gender diversity – 22,600 in the first case and around 100 in the second case. More generally, however, even for smaller firms the numbers of firms in the upper and lower quartiles of the distribution of the percentage of women directors tell a relatively stark story: 173,000 UK firms have less than 25 per cent board gender diversity with only 14,000 having board gender diversity of more than 75 per cent. In other words, for each 'small' company in the upper quartile of the distribution of board gender diversity we find 12.4 in the lower quartile; among 'large' firms this ratio rises to around 226:1.

In terms of sector, firms with high proportions of female directors were very much concentrated in service sector businesses. Of the 14,400 firms with more than 75 per cent board gender diversity, around 600 were in manufacturing but 5,200 were in business services with a further 4,800 in the other services category (Table 1). This meant, for example, that while manufacturing accounted for around 10.6 per cent of all firms it accounted for only 4.4 per cent of firms with board gender diversity of more than 75 per cent (Table 1).

In summary, examining the database for 2004, the findings which emerge reflect earlier findings such as those of Singh and Vinnicombe in terms of the low numbers of women directors in these firms. In their study of the FTSE 1000, the proportion of women directors in the top 100 firms increased from 5.8 per cent in 2000, but it was still only 10.5 per cent by 2005 (Singh and Vinnicombe, 2005). Across the UK, firms with a predominantly male leadership are found in much greater numbers than those with predominantly female leadership – i.e., by around 10:1 overall - with this distinction being much more stark among larger firms. In addition, businesses with a female majority at board level were concentrated in the business and other services sectors and notably under-represented in the manufacturing and financial services sector. The latter sector is particularly interesting as it is here – perhaps somewhat unexpectedly – that there is greatest sectoral disparity between the proportion of firms in the top and bottom quartiles of the distribution of board gender diversity (50:1).

In general terms, then, there is continued evidence that the boards of companies in the UK remain male-dominated (62.8% of all firms) with this disparity remaining greatest in larger firms. There are apparent implications here for gender in business leadership which would need follow up research to explore and quantify. Overall, our figures suggest that for every firm with a female majority on the board of directors there are ten firms with a male majority but among larger firms this 10:1 ratio rises to a ratio of 226:1. One other contrast is worth identifying, here, before considering other issues. So far our analysis has been focussed at the firm level; however, if the group of UK directors are examined as individuals, there were around 28 per cent of directors who were female, a slight rise from 27.8 per cent in 2002 (Figure 1). Hence, although approximately 1 in 4 directors are female, only 1:10 firms are female-owned. The implication is that the vast majority of female company directors remain in firms where they have minority status.

Mapping board diversity against numbers of directors

The main focus of interest here is women directors in UK firms. To provide a first step in the analysis, the possible types of business were defined, using the numbers of directors listed per company and their gender. A descriptive classification is suggested, differentiating between six types of companies in terms of the composition of their team of directors (Table 1), with the types describing the gender proportions at board level.

1. **Mom and Pop companies** – firms with only two directors, one man and one woman. Of those firms classified by gender, 24.4% were mom and pop firms.
2. **Sisterhoods** – firms in which the whole group of directors are female – regardless of number. Of those firms classified by gender, 2.0% were sisterhoods.
3. **Brotherhoods** – firms in which the whole group of directors are male, again regardless of the size of the group of directors. Of those firms classified by gender, 35.2% were brotherhood firms.
4. **Matriarchies** – firms with three or more directors in which the number of female directors is greater than that of male directors. Of those firms classified by gender, 10.2% were matriarchies.
5. **Patriarchies** - firms with three or more directors in which the number of male directors is greater than that of female directors. Of those firms classified by gender, 27.6% were patriarchies

There remained a very small group of unclassified companies where no details of director's gender was available – this represented 0.6% of all firms.

Given the effects of the unclassified companies on proportions attributed, Table 2 defines percentages for companies where gender has been identified. Here women-dominated businesses (sisterhoods and matriarchies) make up the smaller proportions of firms while “mom and pop” businesses occur most frequently. This is not to suggest that either gender dominates the “mom and pop” business given the emerging body of literature on the unattributed role of women in family firms (Janjuha-Jivraj, 2005).

Take in table 2

Once this classification was derived, further analysis occurred, using more disaggregated information to provide further insights in terms of the characteristics within each group. Analysis was structured around a number of dimensions including geography, firm size and sector, performance and growth, but this paper focuses firstly on size and sector.

TAKE IN FIGURE 1

Characteristics of companies with greater female representation at board level

As previous research has suggested, female led firms are primarily small organisations and are found more often in the service sector.

Size of firms with greater female representation at board level

When the two groups of UK firms led by women are compared (Table 3), there is a prevalence of smaller organisations in both groups, but this is more so for sisterhoods where only 2.3% were medium-sized or large organisations, than for matriarchies where 7.3% were medium-sized or large organisations. The preponderance of smaller companies may possibly be due to the relative age of women-led firms since female entrepreneurship is a comparatively recent phenomenon and these firms may, therefore, be not as long established than male-led firms (Carter et al, 2001; Marlow and Strange, 1994; Rosa et al, 1996)

Take in table 3

Sector of firms with greater female representation at board level

The two groups of female led firms show similar proportions in terms of sectors. Seventy five percent of sisterhoods belong to the “Services” sector compared to 69% of matriarchies. Within this, the sector with the largest group of sisterhoods is business services, while matriarchies are more often found in the ‘other services’ category. Table 4 shows the relative proportions of sisterhoods and matriarchies for those companies where the sector is known. Of the other sectors wholesale and retail, manufacturing and construction are in the same relative positions for each group in terms of numbers of companies and, although there are some differences beyond this, the numbers of companies involved are small.

The Sisterhoods

A group of firms of special interest from the perspective of women’s entrepreneurship and business leadership are those where the team of directors is composed entirely of females. (In terms of the previous section this equates to having 100 per cent gender diversity). These firms we call ‘sisterhoods’ (see, for example, Martin *et al*, 2005). Our database analysis suggests that there were 9400 such firms in the UK in 2004 – the last year for which we have complete data. Reflecting the overall pattern reviewed earlier, these firms were disproportionately concentrated in the ‘small’ business size category and in the business services and other services sectors. In terms of business size, 98 per cent of sisterhoods had assets less than £2.8m in 2004 compared to 86.6 per cent of all firms. Conversely, only 0.6 per cent of sisterhoods had assets greater than £11.4m compared to 5.7 per cent of all firms. In terms of sector, 38.6 per cent of sisterhoods were in the business services sector compared to 34.3 per cent of all firms with 27.2 per cent of sisterhoods in other services compared to 19.4 per cent of all firms. Offsetting these differences only 4.9 per cent of sisterhoods were in manufacturing compared to 10.6 per cent of all firms (Table 4).

TAKE IN TABLE 4

This profile, of course, reflects longstanding concerns that women owned and led businesses tend to cluster in the service sectors and to be smaller than those run by men. Interestingly, however, these are exactly the areas of the UK and international economy which have grown most rapidly over recent years and seem likely to continue to grow in the future. Service sector growth, for example, has been one of the key factors in the economic development of western economies over recent years, while writers such as Audretsch (2002) have stressed the disproportionate contribution of smaller firms to job growth and economic dynamism. Both trends are likely to be of disproportionate benefit to female owned enterprises – the sisterhoods – in the future.

Discussion

Our analysis suggests that there continue to be disparities between men and women on UK company boards. Key points are that, first, female directors account for around 1:4 directors in UK firms but only around 1:10 businesses in the UK have a majority female board membership. The disparity suggests that most cases women are in the minority on the vast majority of company boards. The implications for female leadership here need to be balanced against the realities experienced by women in senior roles. The role of women in ‘mom and pop’ firms, for instance, may be seen as a balanced position, with one male and one female board member. However, there are some suggestions that women’s roles have a more important effect on business practice or performance than the records suggest (Massey and Lewis, 2006; Gillis-Donovan and Moynihan-Bradt, 1990). Also, where women are in the majority, does this necessarily imply that they lead and dominate these boards? Is there potentially a ‘feminisation’ of board practice, linked to the suggested difference in male/female management and leadership styles or to the lack of ambition sometimes attributed to female entrepreneurs? More work would need to be done here to explore both the roles of those on such boards and whether there are power and authority issues for women on boards.

Size of organisations is an indicator of lower proportions of women on boards. The preponderance of small firms when female majority firms are considered, i.e., for matriarchies and sisterhoods, is one indication of this, as is the disparity between the board gender diversity of firms being greatest for larger firms – with only 1:226 firms in this category having a majority of female directors.

Another key issue to emerge from this analysis is the rate of increase of female directors. The overall proportion of female directors in the UK has grown in recent years but at a particularly slow rate. At the rate of progress achieved over the 2003-2005 period it will be the year 2225 before gender balance in company directorships is achieved in the UK! The evidence here on the representation of women on company boards is not wholly new, but the larger sample does provide further rigour and robustness to build on the evidence of other smaller scale studies – and those studies based on the UK's largest companies, the FTSE (Vinnicombe *et al.*, 2000; Singh *et al.*, 2001; Singh and Vinnicombe, 2003, 2004, 2005). These findings agree with studies elsewhere in the world that confirm similar trends, for example in Canada (Burke, 2000a) and the United States (Mattis, 2000).

Finally, there are two significant and interesting groups of companies where women are in the majority on company boards. These are established firms, many of which are small firms in the service sector, but they have so far not been identified as a body of companies either to research or as a group to support through the business life cycle, growth, business exit etc. For both policymakers and researchers, they provide new insights into how women can achieve senior roles in companies and the effects of doing so. The 9400 sisterhoods wholly owned and led by women, show team entrepreneurship with a gender focus, as do the 42000 matriarchies. Although disproportionately in business services and other services, these firms exist in all sectors with a focus on smaller companies. These firms represent an interesting potential focus for future research.

While based on the experiences of a very large group of UK firms, our analysis to date has a number of significant limitations. First, our study is limited in terms of its ability to reflect the full richness of Horowitz's (2005) integrative model of team performance. Here, the key focus is to establish the levels of gender diversity on UK boards of limited companies. This is, in itself, an important and detailed analysis but at this stage it does not include the other elements of bio-demographic diversity on boards (e.g. age of directors, ethnic diversity, disability, sexuality). These aspects were outside the range of the study but would provide useful data, again to provide baseline data to enable measurement of progress towards improved levels of diversity on company boards. Also, without comprehensive data on skills or occupations, it is difficult to reflect job-related diversity in terms of directors' functional expertise, education or organisational tenure (although see Burke 1997 who provides analysis of such characteristics).

In addition, although our analysis includes board size mapped against structure, size and sector, the study omits other possible moderating effects on female roles. These might include, for instance, the frequency and duration of board meetings – i.e., the nature and importance of board activity in the individual firm – and also dominance, power and influence – the nature of the female 'voice' on the board (see also De Andres et al., 2005). There may also be useful data on the effects of gender – if any – on the management style of boards. Do all female boards differ from all male boards in how decisions are made, their vision and ambitions for the company's future? The work on traits of female/male entrepreneurs might suggest this. These last areas, however, were outside the scope of our initial quantitative survey. As indicated in the introduction to this paper, our data derives an overview of the current proportions of women on UK boards but, by its nature, does not offer explanations for the relationships observed.

In carrying out the study, although new insights have been gained and a clear set of data and indicators have been provided for others to follow, more questions than answers have emerged as a result. Much useful work remains to be done in understanding the causal links for current levels of board gender-diversity and the effects of gender diversity on board performance, behaviour and approach. The two groups of firms showing clear

female majorities in the boardroom – matriarchies and sisterhoods – also offer new scope for research in related areas, such as team entrepreneurship, while the role of family membership across these different types of firms in the descriptive typology also has potential for those working in the study and support of family firms. Perhaps the most important aspect, however, is related to the governmental ambition to raise the numbers of women in business and to achieve gender parity on boards. Despite the rhetoric and various attempts to encourage diversity, the study suggests that at the rate of progress achieved over the 2003-2005 period, it will be the year 2225 before gender balance in company directorships is achieved in the UK. If progress is to be maintained and increased, this suggests that new routes will need to be found to support gender diversity at these senior levels. This also suggests that work needs to be done to encourage other forms of diversity in the boardroom; however, the same exercise may also be required for other definitions of diversity, as there is a similar lack of disaggregated data for ethnicity, disability and sexuality related to company boards.

References

- Audretsch, D. (2002), “The dynamic role of small firms: Evidence from the U.S.”, *Small Business Economics*, Vol. 18, pp. 13-40.
- Baker T, Aldrich HE and Liou N (1997), Invisible entrepreneurs: The neglect of women business owners by mass media and scholarly journals in the United States, *Entrepreneurship and Regional Development*, 9(3): 221-238.
- Barkham, R., Gudgin, G., Hart, M. and Hanvey, E. (1996), *The Determinants of Small Firm Growth - An Inter-Regional Study in the UK: 1986-90*, Jessica Kingsley, London.
- Bilimoria, D. (2000), “Building the business case for women corporate directors”, in Burke, R. and Mattis, M. (Eds), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer Academic, Netherlands, pp. 25–40.

Bilimoria, D. and Wheeler, J. (2000), "Women corporate directors: Current research and future directions", in Davidson, M. and Burke, R. (Eds.), *Women in Management: Current Issues, Volume II*, London, Sage, pp. 138–163.

Bird, B. J., (1989), *Entrepreneurial Behavior*, Glenview, Illinois, Scott Foresman.

Bourdieu, P. (1998), *La Domination Masculine*, Editions du Seuil, Paris.

Burke, R.J. (1997), "Women on corporate boards of directors: A needed resource", *Journal of Business Ethics*, Vol. 16, pp. 909-915.

Burke, R.J. (2000a), "Women on Canadian boards of directors: Still a long way to go", in Burke, R.J. and Mattis, M.C. (Eds.), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer Academic, Netherlands, pp. 97-110.

Burke, R.J. (2000b) "Women on corporate boards of directors: Understanding the context", in Burke, R.J. and Mattis, M.C. (Eds.), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer Academic, Netherlands, pp.179-196.

Burke, R.J. and Mattis, M.C. (2000), "Women corporate boards of directors: Where do we go from here?" in Burke, R.J. and Mattis, M.C. (Eds.), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer Academic, Netherlands, pp. 3-10.

Carter, D.A., Simkins, B.J. and Simpson, W.G. (2003), "Corporate governance, board diversity and firm value", *Financial Review*, Vol. 38, pp. 33-53.

Carter, S., Anderson, S. and Shaw, E. (2001), *Women's business Ownership – A Review of the Academic, Popular and Internet Literature*, Small Business Service, Sheffield, August 21

De Andres, P., Azofra, V. and Lopez, F. (2005), “Corporate boards in OECD countries: Size, effectiveness, functioning and effectiveness”, *Corporate Governance*, Vol. 13 No. 2, pp. 197-209.

Fielden, S.L. and Davidson, M.J. (2005), “The way forward for women business owners”, in Fielden, S.L. and Davidson, M.J. (Eds.), *International Handbook of Women and Small Business Entrepreneurship*, Edward Elgar, Cheltenham, pp. 264-272.

Gillis-Donovan, J. and Moynihan-Bradt, C. (1990), “The power of invisible women in the family business”, *Family Business Review*, Vol. 3 No.2, pp.153-67.

Hambrick, D., Cho, T. and Chen, M. (2002), “Influence of top management team heterogeneity on firms’ competitive moves”, *Science Quarterly*, Vol. 41, pp. 659–685.

Horowitz, S.K. (2005), “The compositional impact of team diversity on performance: Theoretical considerations”, *Human Resource Development Review*, Vol. 4 No. 2, pp. 219-245.

Kamm J.B., Nurick A.J., (1993), “The Stages of Team Venture Formation: A Decision-making Model”, *Entrepreneurship Theory & Practice*, 17(2), pp. 17–27.

Knight, D., Pearce, C.L., Smith, K.G., Olian, J.D., Sims, H.P., Smith, K.A. and Flood, P. (1999), “Top management team diversity, group process, and strategic consensus”, *Strategic Management Journal*, Vol. 20, pp. 445–465.

Marlow S. and Strange A., (1994) *The Effect of Labour Market Discrimination on Women s Expectations of Self Employment*. Small and Medium Enterprise Centre, Working Paper No 10, Warwick Business School.

Martin, L.M., Warren-Smith, I., Roper, S. and Scott, J.M. (2005), “Entrepreneurship in the West Midlands – Exploring typologies, identifying evidence for policy making”, paper presented at Institute of Small Business & Entrepreneurship conference, Blackpool, November.

Massey, C. and Lewis, K. (2006), “The invisible women: behind the scenes in New Zealand SMEs”, paper presented at International Council for Small Business ICSB 51st World Conference, June.

Mattis, M. C. (2000), “Women Corporate Directors in the United States”, in Burke, R.J. and Mattis, M.C. (Eds.), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer Academic, Netherlands, pp. 43– 56.

Nemeth, C. (1996), “Making work groups more effective: The value of minority dissent”, in West, M.A. (Ed.), *Handbook of Work Group Psychology*, London, John Wiley & Sons Ltd, pp. 125-141.

Prowess (2004), *Show Us the Money – the State of Women’s Enterprise Support 2004*, Prowess, Norwich.

Roper, S. (2006), “Gender diversity amongst company directors and business growth”, paper presented at Institute of Small Business & Entrepreneurship conference, Cardiff, November.

Rueff M., Aldrich H.E., and Carter N.M., (2003), “The structure of founding teams: homophily, strong ties and isolation among U.S entrepreneurs”, *American Sociological Review*, Vol. 68, pp. 195-222.

Singh, V., Vinnicombe, S. and Johnson, P. (2001), “Women directors on top UK boards”, *Corporate Governance*, Vol. 9 No. 3, pp. 206-216.

Singh, V. and Vinnicombe, S. (2003), “The 2002 female FTSE index and women directors”, *Women in Management Review*, Vol. 18 No.7, pp.349-58

Singh, V. and Vinnicombe, S. (2004), “Why so few women directors in top UK boardrooms? Evidence and theoretical explanations”, *Corporate Governance*, Vol. 12 No. 4, pp. 479-488.

Singh, V. and Vinnicombe, S. (2005), *The Female FTSE Report 2005 – New Look Women Directors Add Value to Corporate Boards*, Cranfield University, Cranfield.

Small Business Service (2003), *A Strategic Framework for Women’s Enterprise*, Small Business Service: Sheffield.

Storey, D.S. (1994), *Understanding the Small Business Sector*, Routledge, London.

Vinnicombe, S., Singh, V. and Sturges, J. (2000) “Making it to the top in Britain”, in Burke, R.J. and Mattis, M.C. (Eds.), *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer Academic, Netherlands, pp. 75-96.

Wiersma, M. and Bantel, K. (1992), “Top management team demography and corporate strategic change”, *Academy of Management Journal*, Vol. 35, pp. 91-121.

Corresponding author

Lynn Martin can be contacted at lynn.martin@bcu.ac.uk

Table 1: Descriptive Data 2004: By Gender Diversity

	Number of companies					Percentage of Women Directors				
	Less than 25 %	25% to 50%	50% to 75%	More than 75%	All Firms	Less than 25 %	25% to 50%	50% to 75%	More than 75%	All Firms
	000s	000s	000s	000s	000s	%	%	%	%	%
Firm Size										
Small (assets < £2.8m)	174.0	186.8	25.4	14.0	400.1	78.7	93.4	94.3	97.1	86.6
Medium (assets<11.4m)	24.7	9.2	1.2	0.3	35.3	11.2	4.6	4.3	2.1	7.6
Large (assets>£11.4m)	22.4	4.0	0.4	0.1	26.8	10.1	2.0	1.4	0.9	5.8
Total	221.0	199.9	27.0	14.4	462.3	100.0	100.0	100.0	100.0	100.0
Sector										
Primary	3.6	4.3	0.5	0.2	8.7	1.7	2.3	2.1	1.2	2.0
Manufacturing	28.2	18.4	1.6	0.6	48.8	13.4	9.8	6.2	4.6	11.2
Energy and Water	0.5	0.1	0.0	0.0	0.6	0.2	0.1	0.0	0.0	0.1
Construction	16.9	16.8	1.1	0.4	35.3	8.1	9.0	4.2	3.3	8.1
Wholesale, retail	26.2	26.1	2.6	1.4	56.3	12.5	14.0	10.2	10.6	12.9
Hotels, restaurants	4.4	4.4	0.6	0.4	9.8	2.1	2.3	2.3	3.1	2.3
Transport, communications	7.9	5.9	0.6	0.3	14.7	3.8	3.2	2.2	2.2	3.4
Financial services	10.0	3.7	0.4	0.2	14.3	4.8	2.0	1.6	1.5	3.3
Business services	75.8	70.3	7.7	5.1	158.9	36.1	37.6	30.3	37.8	36.4
Other services	36.3	37.0	10.4	4.8	88.5	17.3	19.8	40.8	35.8	20.3
Total	209.9	187.0	25.5	13.5	436.0	100.0	100.0	100.0	100.0	100.0

Notes: Figures related to UK limited firms with two or more directors trading in 2004 and established prior to end-1999. Sectors are defined as follows: primary SIC 1-14; manufacturing SIC 15-37; energy and water SIC 40-44; construction, SIC 45; wholesale, retail SIC 50; hotels and restaurants, SIC 55; transport and communications, SIC 60-64; financial services, SIC 65-67; business services, SIC 40-74; other services SIC 75-94.

Table 2 : Composition of population of firms by Ownership Typology

Company Type	Number of firms	Percentage
Brotherhood	170.2	35.2
Patriarchy	133.5	27.6
Mom and pop	117.8	24.4
Matriarchy	49.4	10.2
Sisterhood	9.4	2.0
Unclassified	2.8	0.6
All firms	483.1	100.0

Notes: Figures related to UK limited firms with two or more directors trading in 2004 and established prior to end-1999.

Table 3: Comparing Firm Size for female majority firms

		Firm Size			
		Small (assets <£2.8m)	Medium (assets <£11.4m)	Large (assets >£11.4m)	All
Sisterhood	No.	8410	151	49	8610
	%	97.7	1.8	0.6	100.0
Matriarchy	No.	43123	2403	870	46396
	%	92.9	5.2	1.9	100.0
All Firms	No.	413465	35603	27130	476198
	%	86.8	7.5	5.7	100.0

Notes: Figures related to UK limited firms with two or more directors trading in 2004 and established prior to end-1999. Not all firms can be categorised by size.

Table 4 - Comparing female led firms by sector, ranked		
	Sisterhoods (n=8163)	Matriarchies (n=43,358)
Other services	35.98%	39.44%
Business services	38.96%	29.33%
Wholesale, retail	10.40%	10.62%
Manufacturing	4.66%	7.24%
Construction	2.72%	4.84%
Hotels, restaurants	2.65%	2.34%
Transport, communications	2.06%	2.34%
Primary	1.05%	2.17%
Financial services	1.53%	1.66%
Energy and Water	0.00%	0.03%

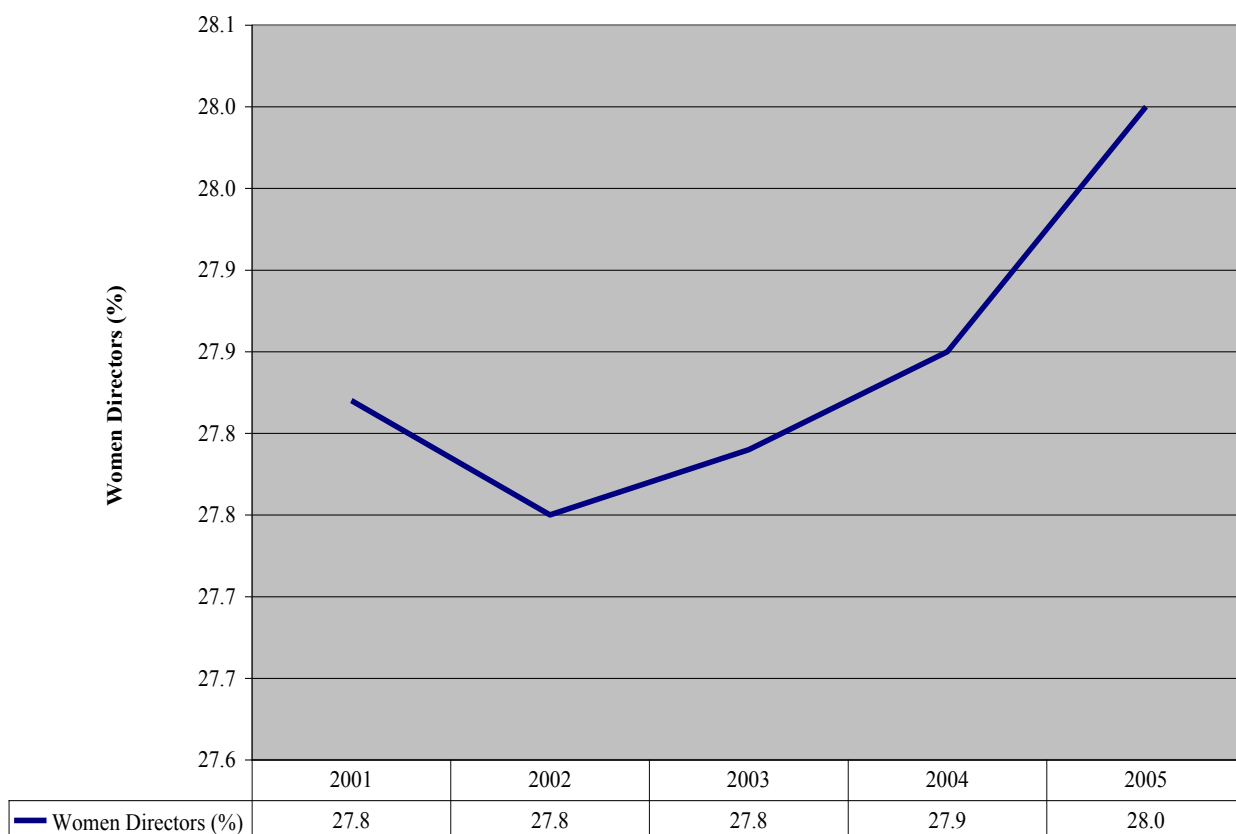
Notes: Figures related to UK limited firms with two or more directors trading in 2004 and established prior to end-1999.

Table 5: UK Sisterhoods in 2004: By Size and Sector
(Number of firms)

	Firm Size			All Firms
	Small (assets <£2.8m)	Medium (assets<£11.4m)	Large (assets>£11.4m)	
Primary	83	3	0	86
Manufacturing	367	10	3	380
Energy and Water	0	0	0	0
Construction	216	5	1	222
Wholesale, retail	832	16	1	849
Hotels, restaurants	210	5	1	216
Transport, communications	162	3	3	168
Financial services	116	6	3	125
Business services	3070	80	30	3180
Other services	2915	17	5	2937
All Firms	7971	145	47	8163

Notes: Figures related to UK limited firms with two or more directors trading in 2004 and established prior to end-1999. Not all sisterhoods can be classified by size and sector. Sectors are defined as follows: primary SIC 1-14; manufacturing SIC 15-37; energy and water SIC 40-44; construction, SIC 45; wholesale, retail SIC 50; hotels and restaurants, SIC 55; transport and communications, SIC 60-64; financial services, SIC 65-67; business services, SIC 40-74; other services SIC 75-94.

Figure 1: Women Directors in UK Firms (% of total)



Notes: Figures relate to UK firms with two or more directors established prior to end-1999. Source: Authors' Company Accounts Database