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THE INFLUENCE OF PRESENCE AND POSITION OF WOMEN ON THE BOARDS OF DIRECTORS:
THE CASE OF NHS FOUNDATION TRUSTS

Authors:

Sheila Ellwood 1
Email Sheila.ellwood@bristol.ac.uk

Javier Garcia-Lacalle 2,*
Email jlacalle@unizar.es

1 Department of Accounting and Finance, University of Bristol, 8 Woodland Road, Bristol, BS8 1TN UK

2 Department of Accounting and Finance, Universidad Zaragoza, Gran Via 2, 50005 Zaragoza, Spain
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ABSTRACT

This study examines the influence of women on the boards of directors of National Health Service Foundation Trusts (FTs) in England. FTs provide a public service where social performance is the primary objective, although financial constraints must be met. Female presence (the proportion of women) is higher for executive directors than non-executives, reflecting the high number of women employed in the sector. We find that a high female presence among executive and non-executive directorships does not result in significant differences either in financial return or service quality. When gender diversity on boards is consistently high (high level of female presence across boards), the benefits on performance of having more women on the board may not be discernible. However, female Chairs or Chief Executives result in significant reductions in negative social outcomes, such as lower clinical negligence costs, without harming financial management. The findings of this study, carried out in a context of high female presence and where a woman frequently occupies one of the two most influential board positions, Chair and Chief Executive, have implications for gender diversity and gender targets on the boards of directors in business and other sectors.

Keywords: Gender diversity; Board of Directors; Public bodies; NHS Foundation Trust; Corporate governance.

Abbreviations:

FT: Foundation Trust
NHS: National Health Service
FRC: Financial Reporting Council
THE INFLUENCE OF PRESENCE AND POSITION OF WOMEN ON THE BOARDS OF DIRECTORS.

THE CASE OF NHS FOUNDATION TRUSTS

1. Introduction

There is evidence that female presence on boards positively affects firms’ corporate social performance (e.g. Manner, 2010; Boulouta, 2013; Hafsi and Turgut, 2013). Women are considered more socially oriented than men, resulting in more effective board decision-making, particularly on aspects related to social responsibility (Ibrahim and Angelidis, 1994). Studies of gender stereotypes, (see Bouluta, 2013) associate women with traits such as empathy, caring, concern for others and being interested in relationships of importance to the community. Thus, the presence of women on the boards of directors is considered to have positive benefits in relation to their social orientation and community representation. Females increase the probability of greater diversity on boards. The Financial Reporting Council considers it is important to have a diversity of personal attributes, psychological types, backgrounds, and gender to ensure that boards of directors are not comprised of like-minded individuals and to ensure directors have the intellectual capacity to propose strategy (FRC, 2011a).

Studies about gender diversity on the boards of directors of firms usually conclude that female presence positively affects firm performance (see e.g. Carter et al, 2003; Campbell and Minguez-Vera, 2008; Francoeur et al, 2008; Jurkus et al, 2011). However, Torchia et al (2011) state that “in most corporate boards, there is only one woman or a small minority of women”. For example, Hafsi and Turgut (2013) find evidence that women contribute to better social performance, but they go on to question whether it is a board’s actual ratio of female directors that is important or the ratio relative to other boards. Thus, it is not just the gender diversity within boards what is important, but also the gender diversity relative to
other boards that may be important. They argue it is necessary to distinguish diversity among boards from diversity on boards to more fully understand board diversity and performance. According to Dezso and Ross (2012) “while scholars have advanced many arguments extolling the benefits of gender diversity in top management, rigorous systematic evidence regarding how and in what circumstances female representation in top management improves firm performance has been lacking.”

Despite the recent increase in the female presence on boards, figures from the BIS (2011) report show that, in industrialised countries, female representation on boards is usually below 10%. Only the Scandinavian countries (Finland, Norway and Sweden) show figures above 20%. The Grant Thornton (2011) report on corporate governance in the UK shows that females represent less than 10% of the board directors of FTSE 350 firms, and 40% of these boards have exclusively male representation. Only 2 of these 350 firms were chaired by a woman. Previous academic studies about the influence of female presence on the board of directors on firm performance have been mainly conducted in contexts characterised by a small number and low proportion of women on boards. Further, the influence of women occupying top organisational positions, Chairs or Chief Executives, on organisational performance has been barely studied because females infrequently occupy these positions in large companies.

Contrary to the situation in large firms, the Grant Thornton (2012) report on corporate governance in the National Health Service (NHS) entities shows that more than one third of the voting members of NHS boards are female, with a similar proportion of boards chaired by a woman. Our study is carried out in NHS Foundation Trusts (FTs), where female presence as Directors, Chairs and Chief Executives is significant and social performance is paramount. The purpose of this study is to develop understanding of the benefits on organisational performance of having high gender diversity on boards and women in high positions on the
board. We investigate these organisations considering two performance dimensions: financial performance and service quality performance. FT boards share the same principles and common purpose and are influenced by similar factors, thus the gender effect can be distinguished. This is particularly pertinent at a time when many western countries and supranational organisations, including the European Commission, are implementing policies, compulsory or not, to achieve greater female presence in key government and commercial entities, and when the NHS is promoting more female appointments at director level. The main research questions of this study are: how do high levels of gender diversity on boards of directors affect organisational performance when social performance is paramount?; and how does the position of women (Chair or Chief Executive) on the boards of directors affect organisational performance when social performance is paramount?

For the purpose of our study, we define “gender diversity” as the presence of women on boards. Women, because of their personal attributes and their ability to use them, allow the board to approach problems and formulate strategies with alternatives that boards composed only of men (or predominantly men) would not consider. Torchia et al (2011) argue that a critical mass of women directors is needed for women directors’ to create value and enhance board tasks. In line with Torchia and her colleagues, we conjecture that ‘presence’ has to be significant, either because of the proportion of women on boards or because of the hierarchical position they have (Chair or Chief Executive). Our study helps to confirm and extend existing theories and contributes to understanding about the positive influence that (more) women and the position held by women may exert on boards of directors. The wider implications of the findings include providing insights into the effect that female presence has when it reaches levels that are currently seen only as targets in other sectors.

The paper is organised as follows. Section 2 introduces FTs and their corporate governance. Section 3 reviews the literature about gender beliefs and behaviour theories
together with the literature on the influence of female presence on the boards of directors of commercial companies. These are the theoretical approaches that support our study and help to explain the results. Our research questions are proposed at the end of Section 3. Section 4 explains our research design. Section 5 presents data analyses and results. Section 6 is devoted to the discussion of our results, contribution to theory and managerial implications. Finally, in Section 7, we state the limitations of our study and areas for future research before highlighting our overall conclusions.

2. **Corporate governance and gender in NHS Foundation Trusts**

A key feature of the New Public Management reforms has been the adoption by public sector bodies of modes of organisation and governance usually associated with the private sector (Hood, 1991). In the UK, the more autonomous arrangements replace central state ownership with a new form of social ownership characterised by independent public interest organisations that are controlled and run locally (Department of Health, 2002). FTs are accountable to their local communities, and local ‘governors’ replace ‘shareholders’ in the corporate governance structure.

FTs are public sector organisations, thus, it is important to know some key differences from private sector firms, where most studies about gender diversity have been focused. FTs, and their independent regulatory agency, *Monitor*, are particularly embedded to corporate governance as developed for the private sector. FTs have boards of directors that are structured similarly to those of commercial companies. However, FTs are focused primarily on social objectives, social performance is paramount, but they must also achieve financial sustainability. We are particularly interested in how female presence influences a public service setting where organisations are primarily concerned with providing quality services to their local communities, as well as managing financial performance. Previous studies have
largely examined social objectives in organisations primarily focused on financial wealth creation.

FTs provide most of hospital and mental health services in England. The NHS, of which they are part, is funded from central taxation. The ownership finance of FTs is public dividend capital held by the government; there are no independent shareholders. Monitor, the independent regulator, oversees their planned financial performance and credit rating as well as their service objectives. The intention was that NHS trust should become FTs by 2008, but the date for achievement has been postponed by successive governments and transformation is still in progress.

FTs have a membership drawn from its local community who elect governors. Monitor’s Code of Governance for FTs (Monitor, 2010) is largely comparable to the codes adopted for UK companies. However, higher standards of conduct are required for public sector organisations than for private sector firms. In 1995, the Nolan Committee Report set out seven principles of good governance in the public sector: selflessness, integrity, objectivity, accountability, openness, honesty and leadership. Guiding principles for NHS boards are developed in The Healthy NHS Board: Principles for Good Governance (NLC, 2010), which sets out the roles of NHS boards as to: formulate strategy for the organisation; ensure accountability by being held to account for the delivery of the strategy; and to shape a positive culture to deliver services that meet the needs of patients and communities. Financial governance must be balanced with strong clinical governance. These principles should condition the decisions and relationships of all board members, irrelevant of their gender.

The governance structure of the FTs consists of members, governors and the board of directors. Figure 1 shows a typical governance structure of a FT. The membership is drawn from the local community (the public, patients and staff). The membership and the stakeholder organisations, such as universities and city councils, nominate and elect
governors. The board of (elected) governors appoints the Chair and non-executive directors who, together, appoint the Chief Executive. The latter, along with the Chair and non-executive directors, appoints the executive directors.

INSERT FIGURE 1

As presented in Figure 1, FT boards of directors are a representation of key stakeholders, namely, the public (the local community), patients, staff and other stakeholders, such as local authorities, universities, Primary Care Trusts and other closely related FTs. These key stakeholders are directly present on the board of governors and represented in the board of directors. This approach to selection of board directors provides a greater female presence on FT boards than for firms (Grant Thornton, 2012).

The interests of FT stakeholders are primarily social rather than economic. The public and patients are concerned about the access to services and their quality. Unlike shareholders, they do not have direct financial investment in the organisation. The primary professional concern of staff is to provide the best possible care to patients, although they are also concerned with financial performance because they consider this may affect their contractual conditions and service continuity. Other stakeholders, such as local authorities or universities, are concerned about service quality as the main goal of FTs. However, they are institutions that manage public resources, so they must have regard to value for money and the efficient use of resources and remain financially viable. Executive directors, professional managers, are concerned about service quality as the main organisational goal, but are aware of the importance of achieving certain financial results in order to ensure organisational survival or their own career. Monitor rates the financial and governance performance of FTs and has a power of intervention, which includes the removal of the board members for poor financial or service performance. The Government is not directly represented on the board of directors, but exerts its influence through regulation and Monitor. Inevitably, as a large
publicly funded service, the Government and Monitor are concerned about service quality and the use of the financial resources.

The healthcare sector is characterised by an increasingly large proportion of female staff. Recent data about the NHS workforce (HSICC, 2012) shows that women represent 44% of the medical staff and more than 80% of the non-medical NHS workforce. Despite differences between the part time and full time employment of males and females, studies have found little or no evidence of disadvantage or discrimination against women in their NHS careers (Taylor et al, 2009; Dacre and Shepherd, 2010).

3. Gender diversity on corporate boards. Conceptual foundations

Boards are key for organisational performance because make strategic decisions, apply governance and overseen risks. The UK Code of Corporate Governance explicitly refers to the importance of the gender composition of boards: “The search for board candidates should be conducted, and appointments made, on merit, against objective criteria and with due regard for the benefits of diversity on the board, including gender” (FRC, 2010; p13). With increased public scrutiny of boards and corporate governance, it is expected that board composition will affect corporate reputation, especially with respect to characteristics such as the diversity of the board members and its gender composition (Bear et al, 2010). The low female presence on boards, particularly considering the long record of women in achieving the highest qualifications and leadership positions in many walks of life, raises the question of whether board recruitment is, in practice, based on skills, experience and performance (BIS, 2011). This argument led the FRC to issue a consultation document about gender diversity on boards. The specific issues that this document discusses with respect to the low percentage of women directors are rooted in three concerns about board effectiveness (FRC, 2011b):
• that a lack of diversity around the board table may weaken the board by encouraging ‘group think’;

• that the low percentages of women on boards may demonstrate a failure to make full use of the talent pool; and

• that boards with no, or very limited, female membership may be weak in terms of connectivity with, or understanding of, customers and workforce and offer little encouragement to aspiration among female employees.

3.1 Gender beliefs and behaviour

In her seminal book, Eagly (1987) set out how Social Role Theory of sex differences promotes a view of “social life as fundamentally gendered, given current social arrangements” (p31). Society has shared expectations and men and women tend to do what is expected of them. Beliefs or gender roles can act both as social norms and as personal dispositions. Typical dispositions associated with females are caring and concern for others. Several studies examine gender differences regarding the role of business in society. Women business students place more weight on corporate ethical, environmental and societal responsibilities than their male counterparts (Lämsä et al, 2008). Female, compared to male students' ethical judgments are consistently higher on business moral issues (Nguyen et al, 2008). There are gender differences in professional fields (Ibrahim and Angelidis, 2009; Ibrahim et al, 2009). Females’ scores are higher for ethics and interpersonal skills and lower for conceptual aptitude, strategic thinking and leadership abilities among professional accountants (Ibrahim and Angelidis, 2009). There are also significant differences between female and male managers with respect to ethical values (Ibrahim et al, 2009).
However, other studies do not find differences between men and women on ethical attitudes or moderate the effects with other characteristics. McCabe et al (2006) results indicate that gender does not predict differences in overall ethical perceptions, although, when relationships between sex and individual ethical factors are explored, men perceive bribery as more ethical than women. In addition, Roxas and Stoneback (2004), in a study with junior and senior accounting students from 8 countries, find that, overall, men tend to be less ethical than women, but when analysing by country, this result is only valid for some countries, indicating background country-dependency of ethical attitudes. Moreover, Peterson et al (2010) find that gender accounted for less variance in ethical behaviour scores than nationality alone. Valentine and Rittenburg (2007) explore sex differences in ethical judgments and intentions to act ethically between American and Spanish business executives. These authors find no significant differences between males and females with respect to ethical judgments, although females exhibit higher intentions to act more ethically than males. This difference was observed for both U.S. and Spanish executives. Kaplan et al (2009) find that women have higher intentions to report fraudulent financial reporting using anonymous channels but not for non-anonymous reporting channels. Thus, these authors conclude that gender and what drives gender effects do not apparently manifest in every judgment or decision-making setting. Nevertheless, within a national public service setting, where ethical standards are high and female presence is common, we may observe more insight into how women contribute to performance.

3.2 A multi-theory approach to the study of gender diversity on boards of directors

Two main corporate governance theories are used in the not-for-profit and public sectors, the agency theory (e.g. Miller, 2002; Miller-Millesen, 2003; Van Puyvelde et al, 2012) and the stakeholder theory (e.g. Bouckaert and Vandenhove, 1998; Gazley et al, 2010; Connolly et al, 2013; Wellens and Jegers, 2013). The stewardship theory is seen as a
particular case of the agency theory in which the owner (principal) and the management (agents) have similar objectives, thus, minimising traditional principal-agent conflicts (Caers et al, 2006).

Connolly et al (2013) consider stakeholder theory as the obvious theory to be applied in the public and not-for-profit sectors because it is accepted that, in the absence of shareholders, other stakeholders influence managerial decisions. A stakeholder is defined as "any group or individual who can affect or is affected by an organisation's achievement" (Freeman, 1984, p46). A fundamental thesis of stakeholder-based arguments is that organisations should be managed in the interest of all their constituents (Laplume et al, 2008). Gazley et al (2010) use the stakeholder theory to model the association between board characteristics, external linkages and outcomes. These authors incorporate stakeholder diversity and gender diversity, as well as racial diversity. The board can be a tool to balance the diverse goals of stakeholders, so its composition is important to secure the different stakeholders’ interests. A stakeholder composition on public services management projects brings relatively similar mutual goals and makes generally favorable contributions to those projects (Leach et al, 2002). In FTs, the interest of the main stakeholders is related to service access and quality. Females have traits particularly suited to this sector.

Studies have highlighted (e.g. Boyd et al, 2011; Wellens and Jegers, 2013; Zona, 2013), that research about corporate governance must be approached from a multi-theoretical perspective. In addition to the stakeholder theory, the stewardship theory also helps to explaining decision-making processes and goal orientation of the boards of directors of FTs. The stewardship theory, contrary to the agency theory, proposes that stewards are motivated to act in the best interests of their principals and make decisions that are in the best interests of the overall organisation in cases where different stakeholders express competing objectives (Davis et al, 1997). Stewards’ behaviour is strongly oriented towards cooperation and is
motivated by intrinsic, rather than extrinsic, rewards (Boyd et al, 2011). The representation of stakeholders on the board of directors and the social orientation of these organisations will most likely encourage (the members of) the board to act as stewards of the interests of patients.

In the study of female presence in FTs, it is necessary to consider the stakeholder-stewardship orientation of their boards of directors. Firstly, the board must consider the legitimate interests of groups and individuals who can affect or be affected by the activities of the organisation (Cabrera-Suarez et al, 2011). Secondly, Nolan Committee principles influence all members, irrelevant of their gender, of public sector entities. Thirdly, the board acts as a steward of the interests of their ‘main agents’ (mainly citizen and patients) and intrinsic rewards, such as mission alignment and responsibility, are as important as extrinsic rewards. These characteristics might dilute the observable benefits of gender diversity on boards. As the social role theory acknowledges, men and women occupy multiple social roles which can override gender roles, hence changing their behaviour accordingly (Boulouta, 2013). In FTs, men may be imbued with a social orientation and high ethical values. Nevertheless, within public services, women have a representative role for the stakeholder groups and the wider community.

It is not merely the presence of women on the board that may influence performance, but also the position they hold on the board. Upper echelon theory, as proposed by Hambrick and Mason (1984), states that “organisational outcomes.....are viewed as reflections of the values and cognitive bases of powerful actors in the organisation” (p193). According to this theory, a firm’s strategic choices reflect the values, cognitive bases, and perceptions of the top management team (TMT) (Hambrick and Mason, 1984). According to these authors, the TMT, which generally includes the Chief Executive and senior executives who hold positions at or above the level of vice president and report directly to the Chief Executive, has a critical
influence on organisational processes and outcomes. The Chief Executive is the key figure of the management structure because, by consistently exhibiting empowering leadership, he/she can facilitate the development of team potency beliefs among members (Carmeli et al, 2011). Empowering leadership is similar to participatory leadership, which involves the development of decision procedures intended to allow other people to have some influence over the leader's decisions. Leadership is crucial in the development of proactive teams and of job satisfaction and organisational commitment (Kirkman and Rosen, 1999). Leaders can inspire employees to believe in their capabilities to successfully perform the assigned work tasks and leadership plays a major role in cultivating organisational efficacy (Carmeli et al, 2011).

As leaders of the organisation, both the Chair and the Chief Executive are key elements for its performance. They are the most powerful actors within the organisation and, to better understand organisational outcomes, it is necessary to take into account the experiences and demographic characteristics of its leaders (Hambrick & Mason, 1984). These personal attributes of the top managers will affect their interpretations of events, which also influence the choices they make (Evans and Butler, 2011). Zona (2013), in a study on innovation investment among Italian firms, finds that chief executive characteristics are critical in board performance. The findings of Waldman et al (2004) suggest that the connection between top executives and firm outcomes goes beyond demographic characteristics and also depends to a large extent on the executives’ charismatic leadership.

However, there are very few settings where women are in the uppermost positions and, hence, few empirical studies to develop the theory of how women in important board positions influence performance. Dezso and Ross (2012) argue that female representation in top management will most likely improve both the performance of the top management team itself and the motivation and commitment of women at lower managerial levels. The results
of Manner (2010) show that having a female Chief Executive is positively and significantly related to the level of corporate social performance engaged in by the firm. However, the author warns about drawing conclusions from this finding because of the very small proportion of female Chief Executives (3%) in his sample. Carpenter et al (2004) indicate that gender is a characteristic that needs more focus in upper echelon research. FTs provide an excellent scenario to advance our knowledge of gender diversity on boards as the presence of women, both as directors and in the uppermost echelons of their boards, is substantial.

3.3 Gender diversity and performance

A growing academic literature has recently been devoted to the influence of gender diversity in business and on boards of directors. This research has adopted different approaches, such as: the analysis of the gender diversity and its evolution on boards (Hillman et al, 2002; Nelson and Levesque, 2007; Peterson and Philpot, 2007; Ruigrok et al, 2007; Singh et al, 2008; Dalton and Dalton, 2010), the influence of female presence in boards on the performance and firm value (Carter et al, 2003; Campbell and Minguez-Vera, 2008; Francoeur et al, 2008; Adams and Ferreira, 2009; Carter et al, 2010), stock prices informativeness (Gul et al, 2011) and on corporate social responsibility of firms (Bear et al, 2010; Manner, 2010; Boulouta, 2013; Hafsi and Turgut, 2013). The most common conclusion of these studies is that female presence has a positive influence on firm performance. However, there are some studies that do not find ethical differences between men and women or no effect of gender diversity on corporate performance (e.g. Farrel and Hersch, 2005; Carter et al, 2010; Sun et al, 2011).

In relation to firm value and performance, studies find a positive association between these two issues and the presence of women in boards. Carter et al (2003) find a significant positive relationship between the ratio of women, and minorities, on the board and firm
value. Similarly, Campbell and Minguez-Vera (2008) conclude that gender diversity has a positive effect on firm value and that the opposite causal relationship is not significant. Companies with more women in senior management are found to be more profitable and have higher stock returns after initial public offerings than those with fewer women in the management ranks (Krishnan and Parsons, 2008). Firms operating in complex environments generate positive and significant abnormal returns when they have a high proportion of women officers, that is, the presence of women in these firms seems to explain higher returns than those expected according to their beta, size and book-to-market ratio, variables that usually explain firm returns (Francoeur et al, 2008). These authors find that firms with a high proportion of women in both their management and governance systems generate enough value to maintain normal stock-market returns. Krishnan and Parsons (2008) conclude that, although their results do not imply that hiring more women results in increased quality of reported earnings, earnings quality is positively and significantly related to relatively high gender diversity in senior management. Jurkus et al (2011) draw similar conclusions about the beneficial effects of gender diversity. Their results suggest that increasing diversity in management can be positive for firms with weak corporate governance mechanisms. These authors state that, although increasing diversity does not reduce agency costs for all firms, evidence shows that diversity is negative and significantly related to agency costs in firms in less competitive markets. Stock prices of firms with gender-diverse boards reflect more firm-specific information after controlling for corporate governance, earnings quality, institutional ownership and acquisition activity and that this relationship is stronger for firms with weak corporate governance (Gul et al, 2011). Gul et al suggest that gender-diverse boards could act as a substitute mechanism for corporate governance that would be otherwise weak. They also find that gender diversity improves the information quality of the stock price through increased public disclosure in large firms and by encouraging private information collection.
in small firms. Similarly, Adams and Ferreira (2009) find that gender diversity positively influences performance and monitoring, particularly for firms with weak governance systems, because gender-diversity boards allocate more efforts to monitoring. However, in well-governed firms, their results suggest that enforcing gender quotas in the boardroom could ultimately decrease shareholder value because greater gender diversity could lead to over-monitoring in those firms.

Other studies do not find a positive relationship between gender diversity on boards and financial performance. Bliss and Potter (2002) find that women are not more risk-averse than their male counterparts and, after controlling for potential influences, no significant performance differences in the management of mutual funds. Farrell and Hersch (2005) find that better performing firms tend to have more women on the board, but they cannot conclude that more gender diverse boards generate better firm performance. Similarly, Carter et al (2010), for a sample of major US corporations, do not find a significant relationship between the gender diversity of the board, or important board committees, and financial performance. Nonetheless, they find no evidence of any negative effect either. In addition, several studies (Konrad et al, 2008; Rodriguez-Dominguez et al, 2009; Bear et al, 2010; Torchia et al, 2011) find that the mere presence of women on boards may not be sufficient to represent a differential factor and that a ‘critical mass’ of women is needed to be an influential factor. Konrad et al (2008) conclude that, although just one woman can make a positive contribution, corporations with three or more women on their boards tend to benefit most from women’s contributions. In this situation, the presence of women directors is normalised and this allows them to speak and contribute more freely. However, Rodriguez-Dominguez et al (2009) use a different argument to justify their results. These authors argue that women might have adopted conventional behaviours and rules and ‘male’ roles in order to preserve their
positions in the corporate structure. This leads to the removal of the advantages and drawbacks derived from gender diversity.

As for corporate social performance (CSP), women provide a broad range of contributions on boards, that play a role in enhancing corporate reputation and the firm’s CSP, although this is context dependent (Bear et al, 2010). Women may contribute to board effectiveness, particularly on CSP and strategic controls (Huse et al, 2009). Other studies find that greater female presence on boards positively influences CSP (Boulouta, 2013) or contributes to better social performance (Hafsi and Turgut, 2013). Boulouta (2013) finds that, when the metric is focused on negative social practices, female presence has a significant influence on the performance metric. She explains this result with the argument that negative social practices are being perceived as higher in ‘badness’ compared to the positive ones and induce a stronger ‘empathic caring’ response from female directors.

Most of these studies have been conducted in contexts where the number of women on boards is low and it is quite infrequent that a woman is in the upper echelon of the board. Table 1 summarises, from a sample of the academic studies previously cited, the context of the analysis of female presence (gender diversity). Most studies are conducted in the US, which, according to the study of BIS (2011), in 2009 had, on average only 11.4% female board members. Only the studies of Huse et al (2009) and Torchia et al (2011) have been conducted in a context, Norwegian firms, with high female presence (around 30%) on boards.

INSERT TABLE 1

Studies in business firms indicate that women may be better at achieving social outcomes and making firms more socially responsible, whereas their ability to improve financial results is more mixed. Studies of gender diversity in public sector management found women offer notable emotional labour to an organisation, have different motivations
for work in the public sector and are “less hierarchical and more participatory” (see Jacobson et al, 2010). These differences are translated into different management styles. For city managers, women are more likely than their male counterparts to incorporate citizen input, facilitate communication and encourage citizen involvement (Fox and Schuhmann, 1999).

Empirical studies introduce into their analyses variables that explain firm performance. The size of the firm is often used as a control variable in the analysis of corporate governance and financial performance (Carter et al, 2010) and has been included by, among others, Farrell and Hersch (2005), Krishnan and Park (2005), Adams and Ferreira (2009), Carter et al (2010), Manner (2010) and Torchia et al (2011). The debt ratio (leverage) has been included, among others, by Sun et al (2011) and Gul et al (2011) as a measure of the risk of the firm, and by Campbell and Minguez-Vera (2008) as influencing firm performance. The sector, or industry, of the firm was introduced, among others, by Francoeur et al (2008), Manner (2010) and Jurkus et al (2011) as a measured of complexity and/or the risk of the firm, as different industries present different risk and complexity and are affected differently by other variables.

Two board-related characteristics are usually included in corporate governance studies: board size (see e.g. Bozec and Dia, 2007; Bennedsen et al, 2008; Cheng, 2008; Guest, 2009; Adams and Mehran, 2012) and board independence (Klein, 1998; Young, 2000; Dehaene et al, 2001; Krivogorsky, 2006; Foo and Zain, 2010). There are two main views in the literature regarding the influence of board size on firm performance (see e.g. Guest, 2009). On the one hand, larger boards positively affect firm performance because they possess greater collective information and are more likely to have more independent directors, who can provide better monitoring. On the other hand, larger boards may have problems of coordination and communication; reaching consensus may be more difficult. The possibility of the presence of free-riding directors is also higher, because the cost to any
individual director of not exercising diligence falls in proportion to board size. Bennedsen et al (2008), conclude that the ‘right’ number of directors is a trade-off between the benefits of having sufficient competencies represented and the cost of having free-riding among directors. In addition, Farrell and Hersch (2005) indicate that the effect of a larger board in unclear in terms of gender diversity, because when board size is increased, so the probability of having a woman increases, the power of any individual board member is diluted. Board independence reflects the proportion of independent directors of the board over the total number of members. A high proportion of independent, or non-executive, directors signals better governance because these directors have an interest in protecting their own reputation and avoiding potential financial loss that may result from litigation (Young, 2000).

Independent, non-executive, directors may better protect the interest of stakeholders, improving monitoring, but they are also less informed about the firm’s activities (Guest, 2009), which can result in a negative influence on the firms’ operations.

3.4 Research questions

Our study seeks to extend understanding of gender diversity on board performance in a context, the NHS, characterised by a significant presence of women on boards and where many women hold top positions. However, it is important to take into account that FTs are public sector entities that provide an essential public service. Previous research about gender diversity on corporate boards shows mixed results in terms of financial performance. Indications from gender studies are that, generally, women act more ethically than men and are more likely to have a positive influence on non-financial performance. The influence of gender also appears to be related to whether women are in prominent positions and whether the proportion of women has reached a critical mass. However, in finding gender effects, the diversity of boards may be more relevant than diversity in boards. Taking all these elements
into account, we propose two principal research question and four supporting questions, which help us to frame our contribution to the issue of ‘gender diversity on boards’.

**Principal research questions**

- How do high levels of gender diversity on boards of directors affect organisational performance when social performance is paramount?

- How does the position of women (Chair or Chief Executive) on the boards of directors affect organisational performance when social performance is paramount?

**Supporting research questions**

- 1) Do differences in female presence on boards affect financial performance when women are substantially present on boards?

- 2) Do differences in female presence on boards affect social performance when women are substantially present on boards?

- 3) Does the presence of women in the uppermost organisational positions (Chair and/or Chief Executive) of the board influence financial performance?

- 4) Does the presence of women in the uppermost organisational positions (Chair and/or Chief Executive) of the board influence social performance?

### 4. Research design

#### 4.1 Data sources

Information about the board of directors has been obtained from the annual report and financial statements of NHS FTs. We use the financial data and annual reports for three financial years, 2008/09, 2009/10 and 2010/2011, of all the FTs authorised at the beginning
of each of those years. Table 2 presents the population and sample of FT-years used in this study. The initial total number of FT-year observations is 338. 22 FT-year observations were excluded from multivariate analyses because their annual reports did not disclose information for all the variables included in our model. Therefore, we work with 93% of observations for the period, which allows us to generalise our results to the whole FT sector.

INSERT TABLE 2

4.2 Variables and measures

We are interested in the effect of gender on both financial performance and service quality. Therefore, we use two multivariate regressions to test the influence of gender diversity on FTs’ performance. FTs are public hospitals and, although profit is not their primary aim, they are required to be financially viable and pay a return to the Department of Health based on the value of their net assets, i.e., a dividend on their public dividend capital. Monitor has oversight of their financial plans to retain and build up surpluses. The first multivariate regression has return on assets (ROA), measured as operating surplus divided by total assets less current liabilities, as the dependent variable. The second multivariate regression uses clinical negligence costs (in £000) as the dependent variable. Clinical negligence costs are used as a proxy for service quality; the higher the costs, the higher the patients claims because of medical mistakes or failures. Clatworthy et al (2000) use clinical negligence costs as an example of (bad) hospital performance and assert that the inclusion of clinical risk “is a clear example of the increasingly complex role and responsibility of the directors of NHS trusts”. This measure of service quality indicates board of directors’ orientation towards the main social goal of FTs, that is, the provision of safe, quality health services. Clinical negligence costs are expressed in financial terms. This allows us to keep the same model for our regressions, because the two dependent variables are expressed as financial figures. Clinical negligence costs are obtained from the disclosure notes to the
financial statements. High clinical negligence costs are, in fact, an indicator of bad clinical performance. The literature on gender issues also suggests that gender is more closely related to the alleviation of bad social outcomes (Boulouta, 2013). The female gender traits of empathy, caring and concern for others suggest that higher female presence would improve clinical performance (reduce clinical negligence costs). Men also possess these traits, but it can be argue, as presented in Section 3, that women give them a higher priority. Clinical negligence costs are a measure of performance against a social goal and reflect the responsibility of the organisation towards its patients and users.

Our independent variables consist of characteristics of female presence and role (hierarchical position) on the board of directors and include: the presence of female executive directors (FED), the presence of female non-executive directors (FNED), and women occupying the Chair (FCH) and Chief Executive (FCE) positions. FED captures the proportion of female executive directors on the board over the total number of executive members, Chair excluded. FNED captures the proportion of female non-executive directors on the board over the total number of non-executive members, Chair excluded. For the number of executive directors on the board, we have included those executive directors reported in the annual report as board voting and non-voting members. Non-voting members can influence decisions through their presence during discussions and debates prior to the final vote of the board. FCH is a dummy variable that takes ‘1’ when the Chair is a woman and ‘0’ otherwise. FCE is a dummy variable that takes ‘1’ when the chief executive is a woman and ‘0’ otherwise. Figures have been captured from the information disclosed about board composition in the annual reports of the FTs at the end of the financial year.

In our regression models, we include board and organisation-related characteristics that influence the performance of organisations according to the academic literature, as presented in Section 3. As for board-related, we include two characteristics: board size and
board independence. *BDsize* captures the number of members of the board, including the Chair. *BDindependence* measures the independence of the board as the proportion of non-executive directors of the board over the total number of members, excluding the Chair.

In addition to board characteristics, we include control variables related to FT characteristics, namely: size, leverage and complexity, which are generally accepted as affecting organisational and board performance. The size of the FT is represented using the natural logarithm of assets employed, measured as total assets less current liabilities. *Leverage*, that is, the debt ratio, is measured as the long-term debt/total assets ratio. Clinical negligence can also be affected by these variables, in particular leverage, as the higher the level of debt, the more resources needed to pay financial costs and the fewer resources for service provision. Complexity is measured using a dummy variable, *Nomental*, which takes value ‘1’ when the FT is an acute or specialist hospital and ‘0’ when the FT is a mental health hospital. This variable is included to allocate hospitals more homogeneously according to the complexity of the services provided, and hence risk, which affects clinical negligence costs. This variable is used as a proxy for the industry or sector, usually included in private sector studies. To allocate FTs into these two groups we have used information from Monitor’s website. Dummies are used to differentiate years. All these control variables might have a different influence on each one of the two dependent variables.

We are interested in the effect of gender on both financial performance and service quality. Therefore, as stated, we use two multivariate regressions to test the influence of gender diversity on FT performance. We have kept the same independent and control variables for the two regressions and only the dependent variable, that captures one of the performance dimensions analysed (financial performance and service quality performance) varies. The regression model is expressed as follows:
\[ \text{PERFORMANCE}_{it} = \beta_0 + \beta_1 \text{SIZE}_{it} + \beta_2 \text{LEVERAGE}_{it} + \beta_3 \text{NOMENTAL}_{it} + \beta_4 \text{BDSIZE}_{it} + \beta_5 \text{BDINDEPENDENCE}_{it} + \beta_6 \text{FED}_{it} + \beta_7 \text{FNED}_{it} + \beta_8 \text{FCH}_{it} + \beta_9 \text{FCE}_{it} + \beta_{10} \text{YEAR}_{it} \]

5. Data analysis and results

Descriptive figures of dependent, independent and control variables are shown in Table 3 for our sample of FTs. Board structure appears remarkably consistent. The average FT board comprises 13 directors and almost half (48%) of directors are independent non-executive directors. The average gender balance, 40% of executive directors and 32% of nonexecutive directors, exceeds those found in the business sector.

**INSERT TABLE 3**

The gender diversity of FT boards, for the three year period, is shown in Table 4. A significant female presence on the FT boards of directors is evident. On average, each FT has more than 4 female directors, excluding the Chair, 2.6 female executive directors and 1.8 female non-executive directors.

**INSERT TABLE 4**

For the 2010/11 financial year, there were 331 female executive directors from a total of 824 executive directors, and 240 female non-executive directors from a total of 741 non-executive directors. The number of FTs with no female executive director is very low (3%), however, this more than doubles for non-executive directors, 6% for the 3 year period. About 30% of the FTs have a woman chairing the organisation and more than one third of the FTs have a woman as Chief Executive. The number of FTs with half or more female presence on boards is substantial for executive directors (34%), though noticeably lower for non-
executive directors (19%). Nevertheless, female presence is higher than in UK firms and none of the FT boards are solely composed by men.

Results of the two regression models are shown in Table 5. For the financial performance (ROA ratio), none of the independent variables that capture female presence is significant\(^1\). Therefore, from our results, the only possible assertion is that different female presence on FT boards does not significantly affect financial performance. We conjecture that, given that most boards have high female presence, variations in the number of women on the board do not significantly affect financial performance. As for the control variables, both the FT leverage and the type of hospital significantly influence financial performance. Neither the size of the board nor its independence have a significant influence on financial performance. The R\(^2\) for this regression is 0.241.

**INSERT TABLE 5**

Our results for the service quality performance, clinical negligence costs, show that female presence on boards does matter, but it is the position held by the woman not the proportion of women that matters. The proportion of female executive and non-executive directors does not significantly affect clinical negligence costs, but female presence in the two most influential board posts, Chair and Chief Executive, does make a difference. The variable that captures that a woman is the chief executive (FCE) is negative and significant at the 1% level. The variable that captures that a woman chairs the organisation (FCH) is also negative and significant, but at the 10% level. That is, having a woman in any of these two preeminent positions results in lower clinical negligence costs, the chief executive position, as expected, is the most influential. Clinical negligence costs are also related to the size and the type of hospitals, as bigger hospitals and acute and specialist hospitals (classified as Nomental hospitals), those that conduct surgical operations, have higher negligence costs. The R\(^2\) for this regression is 0.675.
The results of our analyses develop our theoretical understanding. Our results support the propositions that in a context characterised by a significant number and proportion of female directors, differences in female presence does not result in observable differences in financial performance or in the quality of healthcare provided (that is, negative answers for both questions 1 and 2). On the other hand, while the presence of a woman in the Chair and/or the Chief Executive positions does not result in differential financial performance, (that is a negative answer for question 3), a female Chair or Chief Executive does result in significantly lower clinical negligence costs, indicating better service quality or social performance (question 4). Our results suggest that ‘gender’ is still a differential factor on the board in public service organisations where social objectives are paramount. This difference does not relate to differences between boards when diversity on boards is substantial but to whether females are at the uppermost echelons of the boards. The influence is greatest when females are in the pre-eminent position of power, the Chief Executive. This differential factor is observable in the social dimension of organisational performance and does not result in different financial performance. This finding is in line with the female trait of caring identified in gender studies. Overall, the response to our main research questions, on how high levels of gender diversity and women in top positions on boards affect organisational performance when social performance is paramount, is that, once female presence on the majority of boards is significant, the influence of gender diversity is only observable when a woman occupies the Chair or Chief Executive positions where she exerts a positive influence on social performance.

6. Discussion

Our study of gender diversity examines a setting, not yet found in firms, that is a setting characterised by a high female presence and women in top positions on boards.
However, our results are also in the context of public healthcare organisations where service performance is paramount but financial constraints must be met. Devolved local bodies have adopted new public governance which translates business governance structures into more participatory, autonomous public services. Thus, boards of directors have developed through decentralisation, competition and more locally governed institutions. The adoption of corporate governance mechanisms in the public sector is not part of shareholder accountability, but is set in the context of democratic stakeholder accountability and participation. Therefore, the community and staff should be well represented in the boards of devolved local public bodies which provide key public services, such as hospitals, under new governance structures. Corporate governance mechanisms are not necessarily intended to result in high financial surpluses though sustainability is important, because the provision of quality public services is paramount. Greater local autonomy is granted to FTs in the expectation that they will be responsive to their local communities which will hold them to account.

FTs have a significant number of directors on their boards, an average of 13 members, compared with FTSE 350 firms, which average 11 and 8 directors for FTSE 100 and FTSE 250 respectively (Sealy and Vinnicombe, 2012). FT boards have to be large because of the need to fairly represent a diverse range of stakeholders. More board members favours female presence in absolute terms. In FTs, female presence is also high in relative terms. Women represent, on average, 36% of all the members on FT boards. All FTs have, at least, one woman on their board. Gender diversity is also high in UK charities, although to a lesser extent. Of the top 100 charities by income, women hold on average, 32% of the board directorships (Jarboe, 2012).

In FTs, the female presence is higher for executive directorships than for non-executives. Women have a long tradition of work in the healthcare sector and represent a
significant part of its labour force. Their presence as executive directors is a reflection of this fact. However, female presence among non-executive directors is lower, 40% of executive directors versus 32% of non-executives. Considering that, in FTs, the board is a representation of key stakeholders, female presence among internal stakeholders, particularly staff, results in a higher representation on boards. Ferlie et al (1995) found that the appointment of non-executive directors to the boards of NHS trusts, the predecessors of FTs, suggested a significant shift towards achievement orientation and away from the representation orientation that existed under health authorities.

Appointing non-executives according to their professional (business) achievements may make them emotionally remote from the issues on which they are deciding and perpetuate the dominance of male directorships apparent in the business sector. In FTs, non-executive directors are selected by the board of governors and stakeholder bodies but, nevertheless, there appears to be a continuance of the move to appointing non-executive directors according to professional skills, such as finance and audit, rather than following a representative orientation that would require more female non-executive directors. Despite the more participatory role of the board compared to business firms and the introduction of more democratic processes into board appointments through elected governors (replacing shareholders), the non-executive directors do not reflect gender diversity fully. The process may be influenced by similar factors that result in democratic representation in parliaments. In the parliament of Westminster, women represent only 22.2% of seats. The representational deficit amongst non-executive directors in FTs could be offset by governors but, although Wright et al (2012) found that in FTs governors had successfully held directors to account, there had been a failure to achieve social ownership. Rather than exercising social ownership, their evidence suggested that FT executives demonstrated a tendency
to disempower governors from staff and stakeholder constituencies. Governors functioned most effectively where their relationships were close, but not too close – ‘where they serve as owls rather than sheep or donkeys’ (Wright et al, 2012; p367).

Although the level of women on FT boards compares favourably with large firms, the presence of female non-executive directors on FT boards indicates a bias that also exists, to a lesser extent, when constituencies elect their representatives. Despite the strong social orientation of FTs, the stakeholder approach of their boards of directors and the very significant proportion of female staff, women still do not reach parity on those boards. This fact indicates that recommendations and guidance intended to achieve higher (equal) female presence on the boards of directors, particularly in firms, may not be successful in the near future.

The high number of females that occupy the Chair and the Chief Executive positions in FTs, 29% of the Chairs and 36% of the Chief Executives seats, show the powerful position that many women have in these organisations. These figures are much higher than for private sector firms. It is in the executive role where women more frequently achieve the highest position. This characteristic is also observable in the charity sector. Of the top 100 UK charities by income, 17 of the Chairs and 25 of the Chief Executives are women (Jarboe, 2012). In the charity sector, 68% of the workforce and the majority of volunteers are women. These data reinforce the argument that a long tradition of skilled women working in a sector may be a determinant factor for their presence on boards, particularly, in executive positions.

Our study about the influence of female presence on the boards of directors on performance shows that differences in the level of female presence for executive or non-executive directorships do not appear to result in significant differences either in financial sustainability or in service quality, as reflected by clinical negligence costs. The lower and
significantly different presence of women on firm boards investigated in previous academic studies translates gender diversity to differences in firm’s financial performance to be either positive or neutral. Female presence on firm boards appears to improve social outcomes. However, these results are found in contexts where female presence is usually low and there are significant gender-composition differences between boards. Two arguments can explain our results.

On the one hand, considering the ‘number of women’ on boards, Torchia et al (2011) conclude that, to be effective, the presence of women must be significant, rather than a mere presence. Most FTs have a significant presence of women on their boards, on average 4 members representing more than one third of the board. We suggest female presence cannot generate differences in performance because most boards have a high number of female directors. Not only has a critical mass been reached, but, in FTs, gender diversity has reached a level where further ‘gender diversity’, that is, a higher proportion of female directors, cannot achieve an additional measurable influence on performance. This is in line with Hafsi and Turgut (2013), who question whether “a board’s actual ratio of female directors or the ratio relative to other boards [should] be considered a measure of diversity.....the latter is probably more relevant”. Our study of boards of directors suggests that gender diversity may cease to be a ‘differential’ factor in board performance once an appropriate level of female presence is assured across boards.

On the other hand, considering the ‘role’ of the members of the board, directors are subject to great public scrutiny because public hospitals are key organisations in the welfare state. Gender differences and diversity might be diluted because of the social view that all board members share about the goals of these organisations. The stakeholder-stewardship approach to board composition enhances the focus on the interests of key stakeholders, which are mainly related to service quality aspects. Board members act as stewards of society, so
gender differences in decision making may be reduced. For firms, Rodriguez-Dominguez et al (2009) explain the lack of a significant influence of gender diversity on boards by arguing that women adopt conventional behaviours and rules and ‘male’ roles, which leads to a dilution of the advantages and drawbacks derived from gender diversity. In our context, the opposite is possible, that is, the social goal of FTs leads men on boards to adopt social-oriented behaviours and ‘female’ roles. The result would be the same, the dilution of gender differences although with different (social) consequences for organisational performance. However, our analyses of female presence in the uppermost positions of the board show that the gender factor still exists.

Our results show that women in prominent board positions do represent a positive influence on hospital service quality as reflected in clinical negligence costs. This is consistent with earlier literature on CSP and gender leadership. Clinical negligence costs are reduced when FTs have a female Chair or Chief Executive. Manner (2010), following the upper echelon theory, finds female Chief Executives are more likely to achieve business’ social goals. The Chief Executive is considered particularly important in exerting a gender difference. In a survey of sixty NHS leaders, 67% of respondents believed the Chief Executive sets an organisation’s tone; just under half (49%) think the Chair performs this key leadership role (Grant Thornton, 2013). Women Chairs and Chief Executives are observed to follow established gender values of reducing bad social outcomes. No difference is found in the financial dimension. The influence of gender diversity appears more sensitive to ‘soft issues’, such as social responsibility, although this influence may partly depend on the negative nature of the service measure used (Boulouta, 2013).
7. Limitations, further research and overall conclusions

There are limitations to our findings that require further study. Firstly, we have analysed differences between boards that have a strong female presence. Therefore, we cannot conclude that these organisations are performing better, similarly or worse than in cases where there are no women on boards. However, most academic literature has found some female presence on boards to be positive. Secondly, we have focused our study on the ‘gender’ factor, but other diversity factors, such as different backgrounds, presence of minorities and personal or psychological issues, which also affect organisational performance, have not been considered. Nonetheless, our study is restricted to boards in a relative small context, boards in England belonging to the same organisation, the National Health Service. Thus, the presence of other diversity factors is probably homogeneously distributed. Finally, the public ownership and social orientation of the boards analysed may limit the generalisation of our results across to the private sector, although they are consistent with existing academic literature and theories used in the field. This paper has only examined one important aspect of financial performance (return on assets) and one measure of service outcome (clinical negligence costs). Nevertheless, our study extends understanding of gender role and presence through business corporate governance arrangements into devolved, public services. In this setting, there are more women directors (greater female presence), more women in top jobs and, the primary goal is not financial. Women fulfil a representational role for their local communities as well as enhancing diversity in governance.

This study is restricted to one type of devolved, public service organisation (FTs providing public health services) and one country (England). Gender values and their effect may be service and country specific. The effects of substantial female presence and consistency across boards in other settings and outside the UK require further study. In Scandinavian countries there is also a high female presence on boards of directors and in the
UK, gender diversity is also high in charities. Further studies in public services and charities may add support to a performance plateau once women have climbed the cliff to achieve substantial presence. This is particularly important as targets and quotas for gender diversity are being put forward without awareness of the point at which the benefits of diversity may be fully achieved in terms of board performance. However, the benefits of a wider talent pool and greater representation of stakeholders from increased diversity would remain.

Overall, our study indicates that increasing female presence on boards, once a threshold level has been reached, does not result in differences in financial results between boards, but may be necessary for appropriate community representation and to maintain social outcomes. Women become a ‘differential factor’ in terms of social performance, measured as a reduction in poor service quality, when they hold key influential seats on boards. Female presence in the most prominent positions, Chair or Chief Executive, improves clinical (social) performance. Thus, bad performance is reduced, confirming earlier literature suggesting that females are more effective in reducing poor social outcomes. At the highest level, women do appear to make a difference when leading organisations towards their social goals.
NOTES:

1 We have conducted analyses to determine whether female membership of a board is statistically associated with the type of hospital. We have found a statistical difference between no-mental and mental hospitals for the variable FED (female executive directors). Therefore, we have conducted the regression with the dependent variable ROA (financial performance) separating the two types of hospitals. Results have shown that the influence of this variable on ROA is not statistically significant for the two samples.
REFERENCES


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http://dx.doi.org/10.1016/j.emj.2013.10.002
FIGURES AND TABLES

Figure 1: The governance structure of a Foundation Trust
Table 1. Contextual setting of a sample of empirical studies of gender diversity on boards

<table>
<thead>
<tr>
<th>STUDY</th>
<th>COUNTRY</th>
<th>GENDER DIVERSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bliss and Potter (2002)</td>
<td>U.S.</td>
<td>11% of female managers</td>
</tr>
<tr>
<td>Carter et al (2003)</td>
<td>U.S.</td>
<td>Mean 1.09 women on boards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.6% of female directors</td>
</tr>
<tr>
<td>Farrell and Hersch (2005)</td>
<td>U.S.</td>
<td>Mean 1 woman on boards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.6% of female directors</td>
</tr>
<tr>
<td>Campbell and Minguez-Vera (2008)</td>
<td>Spain</td>
<td>3.2% of female directors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76.3% of firms with no female directors</td>
</tr>
<tr>
<td>Francoeur et al (2008)</td>
<td>Canada</td>
<td>7% of female directors</td>
</tr>
<tr>
<td>Adams and Ferreira (2009)</td>
<td>U.S.</td>
<td>8.5% of female directors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39% of firms with no female director</td>
</tr>
<tr>
<td>Bear et al (2010)</td>
<td>U.S.</td>
<td>9.6% of female directors</td>
</tr>
<tr>
<td>Carter et al (2010)</td>
<td>U.S.</td>
<td>Mean 1.3 women on boards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.6% of female directors</td>
</tr>
<tr>
<td>Manner (2010)</td>
<td>U.S.</td>
<td>3% of female CEOs</td>
</tr>
<tr>
<td>Jurkus et al (2011)</td>
<td>U.S.</td>
<td>11.7% of female directors</td>
</tr>
<tr>
<td>Gul et al (2011)</td>
<td>U.S.</td>
<td>Mean 1 woman on boards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9.4% of female directors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35% of firms with no female director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.7% of female CEOs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3% of female Chairs</td>
</tr>
<tr>
<td>Torchia et al (2011)*</td>
<td>Norway</td>
<td>Mean 1.5 women on boards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26% of boards with no female director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19% of boards with 3 or more women</td>
</tr>
<tr>
<td>Hafsi and Turgut (2013)</td>
<td>U.S.</td>
<td>15% of female directors</td>
</tr>
</tbody>
</table>

* Study conducted during a transition period to comply with legislation requiring 40% of female directors on boards.
**Table 2.** The total population of FTs and our sample for analysis

<table>
<thead>
<tr>
<th>FTs authorised at the beginning of the financial year</th>
<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTs authorised during the financial year*</td>
<td>92</td>
<td>117</td>
<td>129</td>
</tr>
<tr>
<td>FT-year observations</td>
<td>92</td>
<td>117</td>
<td>129</td>
</tr>
</tbody>
</table>

* Not included because financial figures for the whole year not available
Total: 338 year-observations. 22 Excluded due to data availability

**Table 3.** Descriptive variables included in the analyses (N=316)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std.Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets (£000)</td>
<td>167,379</td>
<td>134,489</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.15</td>
<td>0.23</td>
</tr>
<tr>
<td>Nomental</td>
<td>0.75</td>
<td>0.44</td>
</tr>
<tr>
<td>BDsize</td>
<td>13.23</td>
<td>1.73</td>
</tr>
<tr>
<td>BDindependence</td>
<td>0.48</td>
<td>0.06</td>
</tr>
<tr>
<td>FED</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>FNED</td>
<td>0.32</td>
<td>0.16</td>
</tr>
<tr>
<td>FCH</td>
<td>0.28</td>
<td>0.48</td>
</tr>
<tr>
<td>FCE</td>
<td>0.36</td>
<td>0.48</td>
</tr>
<tr>
<td>ROA</td>
<td>0.03</td>
<td>0.08</td>
</tr>
<tr>
<td>Clinical negligence (£000)</td>
<td>2,615</td>
<td>2,234</td>
</tr>
</tbody>
</table>
Table 4. Descriptive figures for female presence on the boards of directors of NHS FTs

<table>
<thead>
<tr>
<th></th>
<th>Three years (N=334)</th>
<th>2010/11 (1)</th>
<th>N=128</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std.Dev</td>
<td>Min</td>
</tr>
<tr>
<td>Number of Executive Women Directors</td>
<td>2.56</td>
<td>1.37</td>
<td>0</td>
</tr>
<tr>
<td>Number of Non-executive Women Directors</td>
<td>1.84</td>
<td>0.97</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of female exec directors (FEDs)</td>
<td>0.40</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of female non-exec directors (FNEDs)</td>
<td>0.32</td>
<td>0.16</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of total female presence(2)</td>
<td>0.36</td>
<td>0.12</td>
<td>0.08</td>
</tr>
<tr>
<td>FTs with a Chair woman</td>
<td>0.29</td>
<td>0.46</td>
<td>0</td>
</tr>
<tr>
<td>FTs with a Chief Executive woman</td>
<td>0.36</td>
<td>0.48</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of FTs with no FEDs</td>
<td>0.03</td>
<td>0.18</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of FTs with no FNEDs</td>
<td>0.06</td>
<td>0.24</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of FTs with no female directors</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of FTs with a majority of FEDs (3)</td>
<td>0.34</td>
<td>0.474</td>
<td>0</td>
</tr>
<tr>
<td>Proportion of FTs with a majority of FNEDs (3)</td>
<td>0.19</td>
<td>0.4</td>
<td>0</td>
</tr>
</tbody>
</table>

4 FT-year observations have been excluded because of lack of data.

(1) This column shows for the most recent year, the financial year 2010/11, the number of women, or FTs, matching the condition over the total.

(2) including Chair

(3) 50% or more women
### Table 5. Multivariate results for financial performance and clinical negligence costs

<table>
<thead>
<tr>
<th></th>
<th><strong>Return on Assets</strong></th>
<th></th>
<th><strong>Clinical negligence costs</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Std Beta</strong></td>
<td><strong>Sig</strong></td>
<td><strong>Std Beta</strong></td>
<td><strong>Sig</strong></td>
</tr>
<tr>
<td>Size</td>
<td>0.064</td>
<td>0.322</td>
<td>0.460***</td>
<td>0.000</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.465***</td>
<td>0.000</td>
<td>0.200</td>
<td>0.579</td>
</tr>
<tr>
<td>Nomental</td>
<td>-0.108*</td>
<td>0.058</td>
<td>0.457***</td>
<td>0.000</td>
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<tr>
<td>BDsize</td>
<td>-0.061</td>
<td>0.318</td>
<td>0.055</td>
<td>0.165</td>
</tr>
<tr>
<td>BDindependence</td>
<td>-0.072</td>
<td>0.199</td>
<td>-0.100</td>
<td>0.789</td>
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<tr>
<td>FED</td>
<td>0.027</td>
<td>0.624</td>
<td>0.018</td>
<td>0.624</td>
</tr>
<tr>
<td>FNED</td>
<td>0.049</td>
<td>0.340</td>
<td>-0.021</td>
<td>0.538</td>
</tr>
<tr>
<td>FCH</td>
<td>-0.001</td>
<td>0.987</td>
<td>-0.065*</td>
<td>0.064</td>
</tr>
<tr>
<td>FCE</td>
<td>-0.032</td>
<td>0.566</td>
<td>-0.098***</td>
<td>0.007</td>
</tr>
<tr>
<td>year09/10</td>
<td>-0.156**</td>
<td>0.014</td>
<td>0.231***</td>
<td>0.000</td>
</tr>
<tr>
<td>year10/11</td>
<td>-0.042</td>
<td>0.505</td>
<td>0.285***</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**R² = 0.241**  **R² = 0.675**

N =316  N = 316

F = 8.782***  F = 57.359***

*** Significant at 0.01; ** Significant at 0.05; * Significant at 0.1