



Ellwood, S. M., & Garcia-Lacalle, J. (2017). New development: Women with altitude—exploring the influence of female presence and leadership on boards of directors. *Public Money and Management*. DOI: 10.1080/09540962.2017.1323430

Version created as part of publication process; publisher's layout; not normally made publicly available

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[10.1080/09540962.2017.1323430](https://doi.org/10.1080/09540962.2017.1323430)

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# New development: Women with altitude—exploring the influence of female presence and leadership on boards of directors

Sheila Ellwood and Javier Garcia-Lacalle

*This article reports on a study examining the influence of women on the boards of directors of NHS foundation trusts in England in the light of a recent UK government inquiry into women in senior positions. A high female presence among executive and non-executive directorships did not result in significant differences either in financial return or service quality. However, female chairs or chief executives resulted in significant reductions in negative social outcomes, such as lower clinical negligence costs, without harming financial management. The findings have important implications for gender diversity and gender targets on the boards of directors in business and other sectors.*

**Keywords:** Board of directors; corporate governance; gender diversity; NHS foundation trusts; women chief executives.

A recent UK government inquiry, the Women and Equalities Committee investigation into women in senior positions, questioned why there are so few women at the top. The committee chair, Maria Miller, commented:

*Women get the best degrees from the best universities and have done for almost two decades. Despite already making up half of graduate intake in many major companies only a handful of women get through to be appointed to the top executive director positions (Women and Equalities Committee website, 6 April 2017).*

This article reports on the findings from a recent study of women on the boards of directors of National Health Service (NHS) foundation trusts (FTs) in England (Ellwood and Garcia-Lacalle, 2015) in the context of the government inquiry and progress since the Davies Review in 2010.

## The Davies Review

In August 2010, Lord Davies was tasked by the government to lead a review into how obstacles can be removed to allow more women to reach board level positions. Following a wide consultation, Lord Davies published his recommendations in February 2011. The review recommended that UK-listed companies in the FTSE 100 should be aiming for a

minimum of 25% female board member representation by 2015. It also recommended that FTSE 350 companies should be setting their own challenging targets. Lord Davies called on chairpersons to announce these goals within six months of his report (Davies, 2011). The *5 Year Summary* reported on progress (Davies, 2015):

*There are more women on FTSE 350 boards than ever before, with the representation of women more than doubling since 2011—now at 26.1% on FTSE 100 boards and 19.6% on FTSE 250 boards. We have also seen a dramatic reduction in the number of all-male boards. There were 152 in 2011. Today there are no all-male boards in the FTSE 100 and only 15 in the FTSE 250.*

The progress on the Davies Review is set out in table 1. In the *5 Year Summary* of the review, in October 2015, a five-step approach was proposed: a voluntary approach; with a target of 33% for female representation with more chairs to cover all listed companies; a focus on the *executive* layer; steered by an independent body with momentum maintained. In February 2016, the Department for Business, Innovation & Skills announced that Sir Philip Hampton, chair of GlaxoSmithKline, would lead an independent review on increasing representation of women

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**Table 1. Women on boards of FTSE 100 companies.**

	February 2011	October 2015
Women on boards	135 (12.5%)	286 (26.1%)
Women non-executive directors (NEDs)	117 (15.6%)	260 (31.4%)
Women executive directors	18 (5.5%)	26 (9.6%)
Number of women chairmen	2	3
Number of women chief executives	5	5
Total directorships	1,076	1,097

Source: Davies (2015).

in the executive level of FTSE 350 companies. Dame Helen Alexander would be the deputy chair of the review. The Hampton–Alexander Review considered the voluntary business-led approach to be working and no need for quotas, despite legislative quotas being a common approach in leading European and Scandinavian countries: Norway, France, Finland, Belgium, The Netherlands and, most recently, Germany.

#### Women on boards and research studies

Boards hire and fire the chief executive and are responsible for ensuring value creation: shareholder value in FTSE companies and public value when running public sector organizations. Board effectiveness is enhanced by independence (as promoted by the Cadbury Report, 1992) and this is improved by gender diversity. Several studies from management consultancy firms suggest improvements stem from using the whole talent pool and gaining diverse perspectives; boards would be more responsive to customers and stakeholders (Catalyst, 2007; McKinsey, 2007; Credit Suisse, 2012). It is evident from many countries' boardroom gender policies that policy-makers see female presence on boards as important, but how these female 'superheroes' perform is difficult to determine (Adams, 2015). Published work frequently has data limitations and lacks causal inferences. For example, performance can causally affect board diversity if women choose to join boards of better-performing firms or if better-performing firms choose to have more female directors. In what areas do women influence board performance? Will the ways in which female directors are different from male directors change over time and as presence increases?

There have been few research studies undertaken where women have a substantial presence on boards of directors and fewer still where women are in the most senior positions (see table 2).

#### The research study of boards of directors in NHS FTs

We examined the influence of presence and position of women on the boards of directors of

NHS FTs. NHS FTs provide a context where there is substantial female presence and where women frequently occupy one of the most senior positions. NHS FTs provide healthcare services, and were set up to have greater freedom from government to decide their strategy and the way health services are run. FTs have a board of directors (executives and non-executives) and operate according to a corporate governance code (Ellwood and Garcia-Lacalle, 2016). However, unlike most corporate boards where there is only one or a small minority of women, one third of voting members of NHS boards are women and one third are chaired by a woman. More specifically, during our three-year study period\*:

- All FTs have a female board member and, on average, over a third (36%) of directors are female. While there are no all-male boards in the FTSE 100, there are 15 in the FTSE 250; and 45% of FTSE 100 companies and 61% of FTSE 350 companies have not reached the 25% target for women board members.
- In FTs, female presence is higher for executive directorships (40%) than for non-executives (32%). In the FTSE 100, less than 10% of executive directors are women and 31.4% of non-executive directors are women.
- In FTs, females occupy 29% of the chair positions and 36% of the chief executive seats. In the FTSE 100, there are three women in chair positions and five chief executives.

FTs are accountable to local communities through members and governors, parliament and to Monitor (the regulator of FTs; now 'NHS Improvement'). NHS boards are running organizations where social performance is paramount. Academic literature supports that female presence on boards affects firm's corporate social performance (Manner, 2010; Hafsi and Turgut, 2013), but these studies are undertaken within a context where women on boards and in senior positions is low (table 2). In public sector organizations, the presence of women is more substantial; it is also argued that social orientation and community representation are important therefore female presence on boards is necessary (Ibrahim and Angelidis, 1994; Boulouta, 2013).

\*The figures for FTs relate to the average in the study period 2008/09 to 2010/11 (Ellwood and Garcia Lacalle, 2015), but the figures for FTSE companies are from the *Women on Boards: 5 Year Summary* (Davies, 2015), which shows a considerable improvement over the 2011 position.

**Table 2. Empirical studies of gender diversity on boards.**

Country	Study	Gender diversity
USA	Bliss and Potter (2002)	11% female managers
	Carter <i>et al.</i> (2003)	Mean 1.09 women on boards 9.6% female directors
	Farrell and Hersch (2005)	Mean 1 woman on boards 8.6% female directors
	Adams and Ferreira (2009)	8.5% female directors 39% of firms with no female director
	Bear <i>et al.</i> (2010)	9.6% female directors
	Carter <i>et al.</i> (2010)	Mean 1.3 women on boards 11.6% female directors
	Manner (2010)	3% female CEOs
	Jurkus <i>et al.</i> (2011)	11.7% female directors
	Gul <i>et al.</i> (2011)	Mean 1 woman on boards 9.4% female directors 35% of firms with no female director
	Hafsi and Turgut (2013)	1.7% female CEOs 1.3% female Chairs 15% female directors
Canada	Francoeur <i>et al.</i> (2008)	7% female directors
Spain	Campbell and Minguez-Vera (2008)	3.2% female directors 76.3% of firms with no female directors
Norway	Huse <i>et al.</i> (2009) Torchia <i>et al.</i> (2011) During legislation period requiring movement to 40% female directors	30% female directors Mean 1.5 women on boards 26% of boards with no female director 19% of boards with 3 or more women

Our principal research questions were:

• *How do high levels of gender diversity on boards of directors affect organizational performance when social performance is paramount?*

• *How does the position of women (chair or chief executive) on the boards of directors affect organizational performance when social performance is paramount?*

We looked for support for the business case and gender beliefs and behaviour: caring and concern for others (Eagly, 1987), and moral and ethical issues (Ibrahim *et al.*, 2009). In public service providers, such as NHS FTs, responsiveness to stakeholders and stewardship is important. NHS FTs also provide an excellent case to examine the upper echelon theory put forward by Hambrick and Mason (1984). Under upper echelon theory a firm's strategic choices reflect top management, i.e. position and not merely presence is important. NHS FTs provide a rare opportunity to examine the influence of women in the most senior positions on boards of directors; earlier studies lack both the perspective of substantial female presence and women in the most senior positions.

Our principal research questions were broken down into four supporting questions:

*On gender diversity*

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

*On women in senior positions*

- Does the presence of women in the uppermost organizational positions (chair and/or chief executive) of the board influence financial performance?
- Does the presence of women in the uppermost organizational positions (chair and/or chief executive) of the board influence social performance?

We used return on assets to measure financial performance. FTs are required to make a minimum real return on assets of 3.5%, which is paid as a dividend to the Department of Health, which holds the public dividend capital of NHS FTs. Return on assets is published in the annual reports of NHS FTs:

*Return on assets: operating surplus divided by total assets less current liabilities.*

We used clinical negligence costs as a proxy for

service quality:

*Clinical negligence costs: the higher the costs, the higher the patients claims because of medical mistakes or failures.*

We used the data for NHS FTs in England for the three years to 31 March 2011 and multivariate regression techniques.

In our regression models, we included board- and organization-related characteristics that influenced the performance of organizations according to the academic literature. We included board size and board independence. *BSize* captures the number of members of the board, including the chair. *BIndependence* 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 included control variables related to FT characteristics, namely: size, leverage and complexity, which are generally accepted as affecting organizational and board performance. The size of the FT was represented using the natural logarithm of assets employed, measured as total assets less current liabilities. *Leverage* (the debt ratio) was measured as the long-term debt/total assets ratio. Complexity was 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. We are interested in the effect of gender on both financial performance and service quality. Therefore, we used two multivariate regressions to test the influence of gender diversity on FTs' performance. We 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), varied. The regression model is expressed as follows:

$$PERFORMANCE_{it} = \theta_0 + \theta_1 SIZE_{it} + \theta_2 LEVERAGE_{it} + \theta_3 NOMENTAL_{it} + \theta_4 BDSIZE_{it} + \theta_5 BDINDEPENDENCE_{it} + \theta_6 FED_{it} + \theta_7 FNED_{it} + \theta_8 FCH_{it} + \theta_9 FCE_{it} + \theta_{10} YEAR_{it}$$

The characteristics of the variables used in the study are set out in table 3.

### The findings

The results of the two regression models are shown in table 4. For the financial performance (ROA ratio), none of the independent variables that capture female presence are significant. 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 a board does not significantly affect financial performance across FTs.

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 a woman and 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 is negative and significant at the 1% level. The variable that captures that a woman chairs the organization is also negative and significant, but only at the 10% level. Therefore having a woman in any of these two preeminent positions results in lower clinical negligence costs, and the chief executive position, as expected, is the most influential.

### Interpretation and implications

By comparison with FTSE firms in the Davies

**Table 3. Characteristics of NHS foundation trusts.**

	Mean	Standard deviation
Assets (£000) SIZE	167,379	134,489
Leverage	0.15	0.23
Proportion not a mental health FT NOMENTAL	0.75	0.44
Board size (number of directors) BDSIZE	13.23	1.73
Board independence (NED/total directors)	0.48	0.06
Proportion of female executive directors FED	0.4	0.2
Proportion of female non executive directors FNED	0.32	0.16
Proportion with female chair FCH	0.28	0.48
Proportion with female chief executive FCE	0.36	0.48
Return on assets	0.03	0.08
Clinical negligence (£000)	2,615	2,234

Review: female presence on the boards of directors in the NHS is higher; more concentrated in executive roles; and more likely to include a woman in the top positions (chief executive and chair).

Research on how these boards, where there is greater female presence, perform can therefore inform expectations and policy development for more gender diversity across all sectors: public, charity and business sector. The research is particularly relevant to the scope of the 2016/17 inquiry of the Women and Equalities Committee as it considers not just the level of diversity, but also the effect of women in the most senior board positions (chief executive officer and chair). In October 2015, only five FTSE 100 companies had a female CEO (Davies Review). Currently, there are moves to increase the number of women on boards, but the relative board position has not been fully considered. The study of women on the boards of NHS FTs informs the debate:

- A high female presence among executive and non-executive directorships does not result in significant differences either in financial goals or service quality among the FTs studied. However, other studies in other sectors have found that having a critical mass of women is important for a performance effect (Torchia *et al.*, 2011). In FTs, arguably not only has a critical mass been reached, but gender diversity has reached a level where further 'gender diversity' (a higher proportion of female directors), may not achieve an additional measurable influence on performance. These results show no further effect on performance of greater female representation, but there are strong representational and opportunity reasons for requiring more women on boards.
- Women in prominent board positions (chairs and particularly chief executives) do exert a positive influence on service quality in FTs. Women in the higher echelon appear to be effective in helping boards meet the organization's service quality goals. There is no adverse effect on financial performance. Manner (2010) also showed that having a female chief executive is positively and significantly related to the level of corporate social performance engaged in by the firm. However, Manner warned about drawing conclusions from this finding because of the very small proportion of female chief executives (3%) in his sample.

**Table 4. Results of the multivariate analysis.**

	<i>Return on assets</i>		<i>Clinical negligence costs</i>	
	Std beta	Sig.	Std beta	Sig.
Female ED	0.027	0.624	0.018	0.624
FNED	0.049	0.340	-0.021	0.538
FCH	-0.001	0.987	-0.065*	0.064
FCE	-0.032	0.566	0.098**	0.007
	R <sup>2</sup> = 0.241; N = 316; F = 8.782**		R <sup>2</sup> = 0.675; N = 316; F = 57.359**	

\*Significant at 0.1; \*\*significant at 0.01.

The research study in FTs in England, where women are well represented on boards and where a woman frequently occupies one of the two most influential positions (chair and chief executive), has implications for gender targets on the boards of directors in business and other sectors. To monitor improvement in gender equality in the executive layer, the measures of female presence on the board should include:

- Number and percentage of female executive directors.
- Number and percentage of female non-executive directors.
- Female chief executive.
- Female chair.

The research in FTs indicates that, for gender diversity to be most effective, women need to be in executive positions at the top level.

However, although there is little doubt that women will influence firm and public sector organizational outcomes, we need a better understanding of what women bring to the boardroom table and how gender diversity affects outcomes. Economies do better when the full talent pool is accessed and women are able to reach their potential, but there is much to learn about the constraints women face and career progression from investigating female board representation. More research is needed.

Nevertheless, our research indicates the government should aim to ensure women are able to reach the most prominent positions on boards (not merely achieve appropriate female presence). Once a critical mass of women is reached, there is little effect of women across board performance in the NHS in England. However, there are strong representational and opportunity reasons for requiring more women on boards. Furthermore, companies are now required to meet social targets (for example environmental), as well as deliver against their own financial goals. In order to achieve

this, companies would benefit from higher numbers of women in the most senior positions: chair and, in particular, chief executive. Consideration should be given to introducing mechanisms that ensure more women are able to reach the most senior positions in both private sector and public sector organizations.

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## IMPACT

The study of female presence on the boards of NHS foundation trusts has important implications for gender targets in the public sector and the business sector. Women have impact when in top positions: the chair and, most influentially, the chief executive.