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## **Impact of Foreign Directors on Board Meeting Frequency**

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## ABSTRACT

We find that UK firms are increasingly having fewer board meetings mainly because of the significant increase in the proportion of foreign non-executive directors on the board. The combination of low meetings frequency and the presence of foreign non-executive directors is correlated with lower total shareholder returns and increases the agency conflicts through excess compensations of the CEO and chairman, which are not related to firm value creation. Our results suggest that a trade-off between increased board diversity coupled with reduced monitoring through fewer meetings, weakens the internal governance mechanism, reduces the advisory role benefits of foreign non-executive directors who are likely to possess international expertise, and exacerbates significantly the agency conflicts.

*Key words:* Agency conflicts; Board meetings; Compensation; Non-executive directors; Foreign directors.

JEL Classification: G3, G30, G38

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#### 1. Introduction

The 1999 annual report of Marconi PLC p. 35 noted that (our underlining):

"The non-executive Directors meet with the Chairman and Chief Executive <u>at least once</u> a year to discuss a wide range of matters affecting the Company."

While the 2000 annual report p. 36 noted that:

"The non-executive Directors meet with the Chairman and Chief Executive <u>at least twice</u> a year to discuss a wide range of matters affecting the Company..."<sup>1</sup>

How frequently should the board of directors meet, and does board diversity, particularly the presence of foreign non-executive directors, reduce this frequency and exacerbate the agency conflicts? These questions are topical, controversial, and have policy implications, yet, they are not directly covered by governance codes and the past literature. For example, the UK Combined Code on Corporate Governance (2003) provides substantial guidance for the activities and procedures of boards of directors and their committees (i.e. what they do at meetings), but does not state how often they should meet and how diverse they should be.<sup>2</sup> Even though board meetings are fundamental for directors to obtain information, participate in decision making, avoid personal liability, and perform their monitoring and advisory roles (Adams and Ferriera, 2012), previous studies use board meetings frequency mainly to proxy for strategic control (Vafeas, 1999), board workload (Linck et al., 2008) or

<sup>&</sup>lt;sup>1</sup> In 1998-2000, General Electric Company PLC, one of the twenty largest listed firms in the UK, sold its largest revenue and profit generating businesses, primarily in the defence industry, made many speculative acquisitions, adding to its existing telecom and technology businesses, and renamed itself Marconi plc. It defaulted in 2001.

<sup>&</sup>lt;sup>2</sup> Technically, this code advises that "The board should meet sufficiently regularly to discharge its duties effectively" (p 5). In contrast, in France, Vienot (1995) notes that "...where no special circumstances arise four to six [full board] meetings should be sufficient (p.18)".

board vigilance in the presence of activist shareholders (Cohn and Rajan, 2013).<sup>3</sup> For board diversity, the focus was more on gender; it is only recently that the impact of foreign directors is considered (Masulis et al., 2012).<sup>4</sup>

We contribute to the literature by documenting trends in board meetings and by assessing the impact of foreign non-executive directors on their frequency. We hand collect extensive data on board composition, demographics, remuneration, and meetings frequency, for a sample of 241 UK firms with complete data from 1999 to 2012.<sup>5</sup> We focus mainly on the impact of foreign directors which we expect to contribute to the board effectiveness through their advice, as is shown for, say, Chinese firms whose performance increases due to foreign directors' experience and knowledge transfer relating to management practices and corporate governance (Giannetti et al., 2015). However, they are likely to limit the board meeting frequency because of the relatively higher costs involved. It is also easier and cheaper to attract local directors who are more likely to have relatively more time and energy to travel cheaply to board meetings and oversee firm developments, and firms have better access to soft information about their availability (Knyazeva et al., 2013). These arguments imply that firms are likely to trade-off the costs and benefits when recruiting foreign directors.

Our main results can be summarised as follows: We find that the average number of meetings decreased significantly over our sample period, from 9.33 in 1999 to 8.33 in 2012. In

<sup>&</sup>lt;sup>3</sup>Schwartz-Ziv and Weisbach (2013) show that boards in Israel spend their time predominantly monitoring the management. Brickley and Zimmerman (2010) show advice and monitoring can be performed simultaneously in the case of capex and dividend decisions, but the monitoring role is more likely to predominate in other decisions such as executive compensation, financial reporting, and CEO retention/dismissal. Merchant and Pick (2010) suggest that an effective board meeting should involve disagreement among the directors to encourage critical thinking. Adams and Ferreira (2007) and Harris and Raviv (2008) provide the theoretical models and Boone, et al., (2007), Coles, et al., (2008), Linck, et al. (2008), and Lehn, et al., (2009) the empirical evidence.

<sup>&</sup>lt;sup>4</sup> See also Daniel, et al., (2013); Miletkov, et al., (2013); Oxelheim, et al., (2013).

<sup>&</sup>lt;sup>5</sup> We focus on UK where corporate governance is much stricter than the US. For example, compared to Masulis et al. (2012), UK firms are more likely to split the roles of their CEO and chairman, to have a higher proportion of foreign directors (27% vs. 18%), and foreign non-executive directors (73% vs.13%). Unfortunately, we are unable to identify the nationality of foreign directors, or to separate affiliated from independent directors.

the post-financial crisis period, the median meetings decreased from 9 to 8, when meetings should increase given the relatively higher level of uncertainly and complexity. We report that the proportion of non-executive directors that are foreign nationals exerts a strong negative impact on the board meeting frequency. For example, we show that, as the number of meetings increases, the mean proportion of foreign directors decreases from about 37% to 20%. Boards with no foreign non-executive directors meets 9.23 time per year, compared to 7.59 times for firms with more than 75% foreign non-executive directors. Yet boards with foreign non-executive directors are in firms with greater international operations and complexity.

Our results appear to suggest that board meeting frequency is becoming more standardised and potentially more bureaucratic, as it is less idiosyncratic to the firm, and seemingly determined as a more convenient or publicly acceptable number. The boards of directors that do not adapt their meetings to firm needs cannot be providing their non-executive directors the optimum opportunity to exercise their monitoring responsibilities. In line with these arguments, we find that, unlike Vafaes (1999), shareholder value creation is not affected by the meetings frequency, but, in line with Miletkov et al. (2013), it is negatively affected by the proportion of foreign non-executive directors. However, our key result is that the combination of meetings frequency and the proportion of non-executive directors affects positively firm value, suggesting that firms benefits from the presence of foreign directors when they meet more frequently. However, we show that this combination doesn't necessarily reduces the agency conflicts by aligning compensation and performance. We show that when the proportion of foreign non-executive directors is high and/or their meetings frequency is low, firms have significantly higher excess compensation of their CEO, independently of the firm's performance. The presence of foreign non-executive directors increases also significantly the compensation of the chairmen of the boards, but the frequency of meetings is not significant. suggesting that, inconsistent with Adams and Ferriera (2012) in the case of non-executive directors, they are not incentivised to attend board meetings.

We find a higher proportion of foreign non-executive directors in firms with complex structures as measured by size and foreign operations, but surprisingly, not risky firms with high standard deviation of ROA. However, the total compensation of the CEO and chairman in these firms is also likely to be higher, and not related to firm performance, in line with Masulis et al. (2012). We conclude that foreign non-executive directors affect meeting frequencies and do not necessarily allow, or, at best, limit or weaken the monitoring role of the board, which lapses in governing firm financial resources and in reviewing the performance of managers.

In line with previous evidence, we find that firm's operating performance influences its board meeting frequency. Consistent with Vafeas (1999), we show that more profitable firms tend to meet less frequently. We use a natural experiment to explore the possibility that board meetings and foreign non-executive directors are endogenously determined by focussing on the impact of the 2007 financial crisis. We find that, after accounting for governance and firms' fundamental factors, this crisis did not affect the board meetings frequency. However, when the reporting and disclosure requirement of meetings came into effect in 2003, the median meeting frequency has actually decreased from 9 to 8 (p = 0.00), while the proportion of foreign non-executive directors is strongly negative in both periods. We use fixed effects models to show that, after controlling for other firm specific factors, this proportion of foreign non-executive directors is negative in all our specifications.

Our study contributes to the on-going and large debate on the design and effectiveness of the board of directors. We consider that outside directors have higher information acquisition costs, are more likely to be dependent on the CEO for their information, and their incentives to monitor may be weaker (e.g., Fama and Jensen, 1983; Harris and Raviv, 2008; Kumar and Sivaramakrishnan, 2008).<sup>6</sup> In line with Masulis et al. (2012), we argue that foreign non-

<sup>&</sup>lt;sup>6</sup> Empirically, firms weigh the costs and benefits of outside directors in structuring their boards according to their monitoring and advising needs (e.g., Boone et al., 2007; Coles et al., 2008; Linck et al., 2008). Duchin et al. (2010) find that the cost of information acquisition is critical in efficient boards, as the firm's performance increases

executive directors may help companies gain more expertise, and bring new breadth and culture to local boards. However, they raise concerns as to how their geographical location, different backgrounds and, in some cases, linguistics, affect board balance and behaviour, namely its meeting frequency. We find that since foreign non-executive directors are predominant in firms with overseas operations, their advisory role is likely to be important. Nonetheless, when they lead to low board meeting frequency, the information costs become high, the board becomes less effectiveness, and the advisory benefits are wiped out. However, while Masulis et al. (2012) find that foreign non-executive directors display poor board meetings attendance, we find that they are associated with low number of meetings frequency, which may be more costly, as the CEOs may find excuses not to call a board meeting with the domestic board members, under the pretext that their foreign counterparts may not attend.

Brick and Chidambaran (2010) find a positive relationship between board meetings and firm value, and emphasise the concept that increases in meeting frequencies represent a rise in the level of monitoring (as opposed to a rise in advisory activity).<sup>7</sup> We show that foreign directors reduce board's meetings, and, thus, its monitoring role. Alam et al. (2014) report that local independent directors reduce CEO pay but weaken turnover-performance sensitivity. On the other hand, Wan (2008) shows that although local independent directors are better informed, they are less effective as monitors, possibly because of greater social dependence. We find that foreign non-executive directors lead to higher compensation, implying that local non-executive directors strengthen the boards of directors' activity in exerting control over management for the benefit of shareholders. Overall, our results support the managerial power theory of the board of directors being manipulated to the advantage of management through the presence of foreign non-executive directors.

<sup>(</sup>decreases) when outsiders are added to the board as the information acquisition costs are low (high). See Bebchuk and Weisbach (2010) Agrawal and Knoeber (2012) and Adams, et al. (2010) for reviews.

<sup>&</sup>lt;sup>7</sup> Lorsch and MacIver's (1989) survey and case-based study of US boards in the 1980s shows that boards of directors increased their meeting frequency in times of crises and major challenges.

The remainder of this paper is organised as follows. Section 2 reviews the theoretical framework of boards of directors and the determinants of meeting frequency. Section 3 presents the data and methodology. Section 4 reports the results. Conclusions are in Section 5.

#### 2. Theoretical background

"Every company should be headed by an effective board, which is collectively responsible for the success of the company" is the first line of the UK Combined Code on Corporate Governance (2003). In addition, boards are subject to a number of legal obligations, such as the requirement to file financial statements and decide on investment, financing and dividend decisions. The theoretical underpinnings highlighting the key role of the boards of directors in modern corporations have transitioned from the fiduciary role (Berle and Means, 1932), to agency conflicts (Fama and Jensen, 1983), and then to the question as to whether they serve shareholders at all (Bebchuk and Fried, 2004).

Previous studies have not fully explored how boards function, and directors commit their time and efforts, and make decisions, primarily because board meetings are confidential. The literature is broad and deep, and the empirical evidence on the effectiveness of boards is relatively mixed (John and Senbet, 1998). How boards execute their responsibilities is largely theoretical, focussing mainly to the trade-off between the board's roles as monitor and advisor (Adams and Ferreira, 2007; Adams, 2000). A significant gap in the literature is the absence of an empirical assessment of the functioning of the boards, particularly the frequency of the board meetings, and its diversity in terms of the location of the non-executive directors.

In the pre-1990s, non-executive directors could only have received information by telephone or in hard copy before or between meetings. By the 1990s, it was easier and assumable that director briefings were more continual, and perhaps digital. There is no theoretical basis to suggest that such increased communication affects the required amount of board meetings. Indeed, non-executive directors may perceive such flows of information as

requiring additional time commitment and may, accordingly, resist increased board meetings as a time management tool.<sup>8</sup> The Combined Code on Corporate Governance (2003) instructs that UK non-executive directors should receive a letter, which explicitly states that they have a contract for services for a specifically indicated number of committed days, and expected full board meeting attendance, with the implication that the board commitment is less of a flexible responsive position than a bureaucratic commitment.

The board of directors is the apex of corporate governance, and its members visibly exercise governance at board meetings. Without any guidance or instruction from external sources, the number of board meetings selected by a firm may appear to be a random event as boards chose different meeting frequencies. The pertinent question is to define the factors that influence the number of meetings. We follow Vafeas (1999), Adams (2005) and Brick and Chidambaran (2010) and identify the potential determinants that, under the agency framework, are expected to affect the board meetings' frequency. We contribute to the literature by assessing the impact of key human dimensions, such as the international composition of the board and remuneration, which the literature has to-date overlooked. We expect the frequency of board of directors meetings to be a function of the following firm specific factors, namely, remuneration, firm performance, complexity, financial distress, and corporate governance.

## A. Remuneration

Agency theory suggests that non-executive directors are expected to exert control over executive directors through the board of directors' process, or simply by being board members. The governance requirements demand much of the board in setting and monitoring remuneration, suggesting that, boards with higher paid chairmen and CEOs are expected to meet more often to review various remuneration packages. The contracting theory states that

<sup>&</sup>lt;sup>8</sup> See Adams and Ferreira (2007) for a theoretical discussion of information trading amongst executive and nonexecutive directors.

the chairmen and CEOs, when provided with higher pay packages, are encouraged to disclose more information to the non-executive directors (Hermalin and Weisbach, 2003; Adams and Ferreira, 2007). These arguments imply a positive relationship between meetings and CEO pay. Similarly, on the basis of economic theory and incentive remuneration that individuals work more for more pay, higher paid chairman is expected to have more (or demand more) meetings. While we expect a positive link between CEO remuneration and firm performance, chairmen and non-executive directors in UK are almost universally cash-fee remunerated, based mainly upon time provided to the firm (Greenbury, 1995). Overall, we expect the remuneration of the board members to be positively related to the board meeting frequency.

## B. Firm Performance

The agency, stewardship, and contracting theories suggest that board meeting frequency is correlated with challenges. Firm earnings (Hermalin and Weisbach, 2003) and market performance, or investor issues, are expected to influence boards of directors to act, and such action may increase, or decrease, their meeting frequency (Vafeas, 1999). Weakening firm dynamics may require immediate board consent or approval on key strategic issues, and non-executive directors may realize an immediate risk to their professional reputations all demanding increased full board meetings.<sup>9</sup>

However, previous studies on corporate governance and firm performance provide mixed evidence (see Bhagat and Black (2002) for board composition, and Gompers et al. (2003) for structural and legal influences). There is also a limited research on the link between board meetings and performance. Vafeas (1999) and Adams (2005) address this issue to find an inverse relationship between board meetings and prior performance. They argue that firm's performance is an important determinant of board activity, as poor prior performance increases

<sup>&</sup>lt;sup>9</sup> In the US, Gilson (1990) and Kaplan and Reishus (1990) find that directors of distressed firms were not as likely to obtain subsequent directors positions.

the need for monitoring to turn around the firm. Boards are also likely to face increased pressure to be seen as being engaged when the firm is in financial distress, as creditors require meetings of the board, or with the board.<sup>10</sup>

Overall, we expect a positive relationship between financial stress and board meeting frequency in line with agency and stewardship theories. However, our main challenge is the time frame appropriate for such an examination and the bi-polarity of the dual roles of boards. Boards may choose to meet more often in a given year to review major strategic opportunities with long-term impacts, or do they increase their meetings to react to current monitoring challenges. We use various variables to stratify across these effects.

## C. Firm Complexity

Agency and contracting theories suggest that firms with more challenging business tasks, or complex structures, have greater advisory and monitoring needs (Agrawal and Knoeber, 2001; Coles et al., 2008). Brick and Chidambaran (2010) find a positive relationship between board meetings and industry-adjusted Tobin's Q, suggesting that board advising and monitoring activity increases as the level of investment opportunities increases.<sup>11</sup> These results suggest that firms with greater scale, more diversified activities, and/or larger staff are likely to have more monitoring and advisory needs and require more board meetings.<sup>12</sup>

In addition, we expect the severity of agency problems and the need for the board's role as an advisor rather than a monitor to affect board meetings, and managers will disclose an optimal amount of information to maximise the advisory role and to minimise the monitoring

<sup>&</sup>lt;sup>10</sup> Firm stress measured by leverage is different from firm distress (or the firms experiencing declining performance) which is addressed within the firm performance variable.

<sup>&</sup>lt;sup>11</sup> However, the relationship is stronger when they use a combined variable of the number of meetings and number of non-executive directors.

<sup>&</sup>lt;sup>12</sup> Such factors may be misleading as large and international firm may have a limited business activity, while those with many employees may be in less complex activities.

role of the board.<sup>13</sup> Adams (2000) models these two roles. She argues that the better the information provided by the CEO, the higher the benefits from the board's advice, but the higher the costs from the increase in the board's monitoring. Her model predicts that the board is likely to choose to pre-commit to reduce its monitoring of managers to encourage them to share their information. Therefore, when the value of communication is high, the board will reduce its monitor intensity, and managers will opt for a large number of meetings. In contrast, when the advisory role of outside directors is not likely to be substantial, as decisions are not complex and the information is relatively easily accessible, the board of directors is likely to spend more time monitoring managers. As a result, managers will opt for a lower number of meetings. In line with agency and stewardship theories, we expect a positive relationship between board meeting frequency and firm's complexity.

## D. Corporate Governance

Contrary to the agency theory, managerial power theory suggests that executive directors may select board members to facilitate executive control, circumventing monitoring and control by non-executive directors. For example, Kaufman, et al. (2005) discuss the selection of other US CEOs as non-executive directors to enhance executive remuneration, implying lower meeting frequency to reduce the monitoring role of non-executive directors.<sup>14</sup> The agency framework suggests that shareholders' monitoring interests may be met with more diverse directors as some may provide special skills or experience, with some directors potentially offering more advisory ability, while others (e.g. accountants) will have more monitoring ability.

<sup>&</sup>lt;sup>13</sup> Jensen (1993) argues that board reacts too late and takes too long to affect major changes, as its effectiveness is limited by a lack of information provided by insiders.

<sup>&</sup>lt;sup>14</sup> Bebchuk and Fried (2004) provide extensive evidence of US CEO compensation that suggests that managers control boards for their own benefits.

Previous studies focus on specific director groups and/or types of directors, or include director characteristics as independent variables, to examine firm performance or particular board decisions. For example, Ferris et al. (2003) and Fich and Shivdasani (2006) analyse busyness or multiple directorships, but find mixed results. A growing literature is devoted to examining the evolution of modern boards, including more diversified membership (Carter et al., 2003; Agrawal and Knoeber, 2001; Singh and Vinnicombe, 2004; Farrell et al., 2005). Other studies show that board member characteristics, such as age, influence board decisions (Core et al., 1999; Yermack, 2004), while professional background may affect financial decision-making (Kroszner et al., 2001; Helland et al., 2004; Dionne et al., 2005; Borokhovich et al., 2004). However, there is little evidence on how director demographics affect board's own activities, specifically the frequency of its meetings.

Previous studies analyse board independence within the context of corporate performance (e.g., Bhagat and Black, 2002; Coles et al., 2008). Conversely, the independence of directors can also affect the frequency of board meetings. For example, Raheja (2005) argues that insiders on the board are likely to facilitate the flow of information. However, in the presence of outside independent directors, the cost of information acquisition may increase. Vafeas (1999) and Raheja (2005) suggest that, as boards become more independent, their meeting frequency increases to reflect the need to access information by other channels and the increased efforts needed for information coordination.

Managers may respond by increasing board size to lessen its monitoring. Yermack (1996) for US, and Lasfer (2006) for the UK, among others, suggest that larger boards do not or cannot monitor or control the agency problem as well as smaller boards. In general, the relationship between board size and firm value is negative, suggesting that larger boards exacerbate the agency conflicts between managers and shareholders. The Combined Code of Corporate Governance (2003) suggests that larger boards are 'unwieldy'. However, Vafeas (1999) finds a positive correlation between US board size and meeting frequency, implying a

need for increased board education efforts and providing inefficiency. Due to the unquestionably higher level of international diversity of UK boards (compared to US), we expect negative effect of board size on meeting frequency simply because of greater travel burdens on directors. Overall, in line with the previous arguments on complexity, we expect the composition of the board to affect the demand by managers for meetings. However, we expect a negative relationship between board meetings and the presence of board members that are more likely to provide advice than monitoring.

#### 3. Data and Methodology

We construct our sample by selecting companies listed on the London Stock Exchange (LSE) from 1999 to 2012 that disclose information on board meetings, composition and remuneration. We collect by hand all board data from financial statements. The accounting and market data is extracted from DataStream. We exclude investment trusts but kept the remaining financial firms, except when we use leverage in our regressions. A number of firms consistently state that their board meets within a range (e.g. 6-8 times per year), or that the board meets at least a given number of times. In these instances, we use the average of the former and added 1 to the latter consistently over the period in the belief that if a board did meet 4 or 10 times it would be seriously misleading to inform shareholders that it met materially more or less.

Our final sample includes 241 UK firms with complete data, resulting in 1716 firm-year observations. Although our sample firms represent about 10% of all firms listed on the LSE in each year, they account for around 90% of the total market capitalisation. These firms are, thus, more likely to be international, visible in the investment community, most researched by financial analysts, have access to public capital markets, and are advised by domestic and foreign banks. The vast majority of them have headquarters within London to facilitate board and shareholder meetings and have high visibility in terms of their meetings, and compensation of their board members.

Our contribution is on the presence of foreign directors on the board, measured as the percentage of foreign non-executive directors (those listed as non-British in the annual reports) to total non-executive directors. We believe that using total foreign directors may be misleading as foreign executives would be more likely to be resident in the UK and may have similar attributes to British directors. In contrast, foreign non-executive directors are likely to live abroad and to come to the UK just to attend board meeting and to provide advice to the managers, given their higher knowledge of international markets, but their knowledge of local culture, corporate governance and accounting standards is likely to be lower. Their residential distance is likely to increase the costs of attending board meetings.

To measure the impact of other corporate governance on board meeting frequency, we use board size, board independence,<sup>15</sup> and a dummy for duality of the roles of the CEO and chairman. In the UK, these roles should be split. Jensen (1993) considers that the CEO cannot perform the function of the chairman, which is to run board meetings and oversee the process of hiring, firing, evaluating, and compensating the CEO efficiently. We also include the average age of executive and non-executive directors, and the average tenure of CEO, chairman and non-executive directors. We expect board size to be negatively related to board meetings, in line with the arguments of Yermack (1996) that larger boards exacerbate the agency conflicts. Similarly, we expect board meetings to be smaller, the older and the longer the tenure of the executive and non-executive directors, to reflect the board's possible entrenchment or reduced independence. There is limited research on this issue. We note that the age of directors may signify entrenched interests, leading to a desire to circumvent monitoring efforts. Older boards will also meet less often as their monitoring role is lower (Hermalin and Weisbach, 2003).

<sup>&</sup>lt;sup>15</sup> Board independence is the ratio of the non-executive directors, excluding the chairman, over total board members. We have not utilised the Combined Code of Corporate Governance (2003) definitions of independence for non-executive directors, as these would have been inappropriate for early years when a more liberal standard was accepted (Chambers, 2005). We do not include the chairman as a non-executive director following UK corporate governance convention.

For firm fundamental factors, we use *Size*, defined as the year-end market value of equity. We use the standard deviation of ROA over each firm's sample period, as in Booth et al (2001), to measure business risk, and, thus, complexity. We use beta, computed by regressing firm's stock returns on the Financial Times 100 Index in the previous 5 years. For non-financial firms we use leverage, defined as total debt to total assets to measure financial risk. We expect a positive relationship between all these variables and board meetings' frequency.

We use firms' market-to-book, *MB*, and price-to-earnings, *PE* ratios, as proxies for growth opportunities, to account for the severity of the agency problems.<sup>16</sup> On the one hand, we expect a negative relationship between meetings' frequency and growth because in high growth firms the role of the board is more of an advisor, rather than a monitor. In high growth firms agency problems are likely to be low (Jensen, 1986) and managers are expected to require strong advice from the board because of the complexity in their decision-making. At the same time, the behaviour of managers is difficult to observe and to monitor because of their discretionary investment opportunities, and the proprietary information they hold. Thus, the board is likely to opt for a friendly relationship with the management to obtain the information needed. We expect high growth firms to have a higher number of meetings to maximize the advisory benefits. In contrast, in low growth firms, the advisory role of outside directors is not likely to be substantial as decisions are not complex and information is relatively easily accessible. In this case, the board of directors is likely to spend more time monitoring managers. From an agency perspective, low growth firms should have a high meetings frequency.

We measure firm performance using accounting rates of return, such as return on assets, and total shareholder return, defined as annual stock returns plus dividends. We use three measures of remuneration. The first is the firm's average non-executive director fee; this includes basic fees, committee fees, and attendance fees – but not advisory or consulting fees,

<sup>&</sup>lt;sup>16</sup> We find that PE and MB are not significantly correlated most likely due to historical goodwill write-off accounting and the minor representation of traditional tangible asset intensive firms compared to industrial sectors where earnings generation are based upon non-balance sheet recognised intangible assets.

if any. The second is the remuneration of the chairman, measured in line with that of the nonexecutive directors. Finally, the remuneration of the CEO includes basic salaries, options, and bonuses, as disclosed in the annual account.

We account for the year fixed effect by either using year dummies or two specific dummies. The first in *Post-2007* to account for the impact of the financial crisis. The second is *Post-2003* to capture the change in meeting disclosure regulation. In our regressions, we cluster the standard errors at the firm level to account for heteroskedasticity and serial correlation of errors (Peterson, 2009). Finally, we report the variance inflation factor (VIF) to test for multicollinearity, which may be problematic as it increases the variance of the regression coefficients, making them unstable and difficult to interpret. It measures how much the variance of the estimated regression coefficients are inflated as compared to when the predictor variables are not linearly related. Values of 1 to 5 (above 5) indicate no or moderate (strong) correlation.

## 4. Empirical Results

#### 4.1. Univariate Analysis of Board Meetings

Table 1 reports the annual and industry distributions of board meetings together with a sample of governance variables. Panel A. shows that the average (median) board meetings decreased relatively homogenously from 9.33 (10) in 1999 to 8.33 (8) in 2012. At the same time, the overall governance of our sample firms increased, as firms increased the proportion of non-executive directors from 48.8% to 60.8%, their board size decreased from 11.44 to 10.52, and the proportion of firms that do not split the roles of the CEO and the chairman (*Duality*) decreased from 4.2% to 1.5%. The proportion of foreign non-executive directors increased from 18.3% to 37.4%, and that of foreign executive directors from 15.6% to 32.1%. These changes are also observed when we look at the medians. Figure 1 portrays the annual distribution of the number of meetings and the proportion of non-executive directors, foreign non-executive directors and foreign executive directors.

Panel B reports the industry distribution of the meetings. In line with Adams and Ferreira (2012) the governance of financial firms are more likely to be affected by regulation. Walker (2009) emphasised governance at financial institutions in the UK. Consistent with these effects, financial firms, together with other utilities which are regulated, have the highest board meetings frequency. However, firms in these sectors do not necessarily have a superior internal governance systems, as the proportion of non-executive directors, split of the roles, and foreign non-executives is not the highest. The two main sectors with majority foreign non-executive directors are health care (health care equipment and services and pharmaceutical and biotech industries) and basic materials (mainly chemicals and mining firms).

## [Insert Table 1 and Figure 1 here]

Table 2 reports the descriptive statistics of the meeting frequencies, board characteristics, and the fundamental variables. We report the results for the sample as a whole, and for the pre- and post-2007 periods. The last two columns show the significance in differences in means and medians between the two periods.<sup>17</sup> We also report the expected signs of the regression coefficients and the correlation,  $\rho$ , between *Meetings* and the proxy variables.

Consistent with Fich and Shivdasani (2006), our results indicate that a typical firm has about 10 directors, 55% of whom are non-executives, and meets about 8 times a year. Surprisingly, the median number of meetings is statistically higher in the pre-2007. We find similar results when our cut-off date is 2003, when the reporting of meetings became compulsory. The correlation column indicates that the board meetings frequency is negatively related to some proxy variables that measure board entrenchment, including duality, tenure and age, but, also to the proportion of non-executive directors, profitability and growth. The correlation with size and leverage is not significant. Meeting frequency is positively related to equity beta, but negatively related to profitability (ROA), growth (MB and PE) and firm risk as

<sup>&</sup>lt;sup>17</sup> We do not report details results the pre- and post-2003 periods, in the latter period the disclosure of meetings is compulsory, but include a dummy variable in our regressions.

measured by the standard deviation of ROA. Since growth and risk reflect the firm's complexity, our results suggest that firms that are more difficult to manage do not appear to have more board meetings.

## [Insert Table 2 here]

Table 3 provides the descriptive statistics of selected explanatory variables split into board meetings frequency and proportion of foreign non-executive directors. Some results are portrayed in Figure 2. The last 2 rows of each panel show the p-values of the differences in means and medians between the first and the last group. Column (1) of Panel A. shows the frequency distribution of the annual number of board meetings. There are 35 cases where boards meet less than 4 times, increasing to 316 cases (18% of the total number of observations of 1716) where they meet 8 times, and decreasing monotonically to 82 with 13 or more meetings.

Columns (2) and (3) show that the frequency of meetings is relatively homogeneously distributed across board size and duality. However, column (4) indicates that firms with low number of meeting have relatively higher proportion of non-executive directors, but these directors are much more likely to be foreign than domestic, as shown in Column (5). Column (6) also indicates that these firms have a higher proportion of foreign (executive and non-executive) directors, but Column (7) reports a smaller proportion of women on the board, which increases from 8.5% to 18.4%, when the meeting frequency increases from less than 4 to 13+. These results provide some early indication of the determinants of meetings' frequency, particularly the negative impact of the presence of foreign directors. We find, but not report, similar results for firms that survived the whole sample period, suggesting that the impact of these variables on board meetings is not driven by the new companies that entered our sample.

The impact of tenure and age of directors across board meeting is relatively weak. However, in terms of fundamental characteristics, Columns (13), (14) and (16) show that firms with low number of meetings are relatively smaller, generate low total shareholder returns and are more risky than firms with large number of meeting. Column (13) shows that the distribution of firm value is not homogeneous across meeting. In particular, with the exception of the relatively smaller firms that appear to have 4 to 5 meetings, firms with 6 to 8 meetings are larger, but, although firms with 13+ meetings are larger than those with those that meet 4 to 5 times a year, the relationship is not linear. Column (15) provides some weak evidence on the impact of growth as measured by market-to-book ratio. Although these results are consistent with the agency theory as these firms do not need monitoring, they do not provide support for the advisory role of the board. We find relatively similar results using price-to-earnings ratio.

We also analyse, but do not report, the annual distribution of the results in Table 3. We find that the proportion of firms that held between 7 and 10 meetings increased from 45% in 1999 to more than 60% in 2003-2012, suggesting that board meeting frequency became more standardised. The proportion of firms that held more than 9 meetings decreased from 52% in 1999-2000 to 35% in 2007-2012. We find only about 26% of firms in 1999, and 12%, in the midst of the financial crisis of 2008, with 12 or more meetings. We also find that foreign directors held a mean 1.09 board seats in 1999 and 2.32 in 2012. While our results suggest that urgent meetings and information may be communicated electronically, they also imply that boards of directors may be less able to adjust their meeting schedules in times of dire need, and the presence of foreign directors appears to limit the meeting frequency.

Panel B reports the distribution of selected variables by proportion of foreign nonexecutive directors. The results indicate that firms with only domestic non-executive directors have significantly smaller boards, smaller proportion of non-executive directors and foreign executive directors, and hold relatively larger number of meetings. Interestingly, these firms are run by relatively younger directors, they are smaller, and they generate significantly higher total shareholder returns. The effects of risk (*SD ROA*) and growth (*MB*) are relatively weak. Overall, these results indicate that the distribution of foreign non-executive directors across UK companies is not random, but driven by firm's fundamental and governance characteristics.

[Insert Table 3 and Figure 2 here]

## 4.2. Multivariate Analysis of Board Meetings

Table 4 reports the regression results of the determinants of board meetings. We include industry as well as year dummies, unless when 2007 and 2003 dummies are used to capture the impact of financial crisis and disclosure regulation, respectively. The first 3 regressions based on the full sample clearly indicate that the frequency of board meetings is related to firms' fundamental factors and governance structures. They indicate that large firms or firms with large boards, and those with high risk as measured by equity beta, but not the standard deviation of ROA tend to meet more often. However, mature firms and those with duality of the roles of the CEO and the chairman, larger proportion of foreign non-executive directors, longer tenure of the CEO and the non-executive directors are much more likely to have lower number of meetings. In line with Vafeas (1999), profitability (ROA), is negative indicting that boards of financially distressed firms tend to meet more.

Equation (4) uses the stepwise method which systematically adds the most significant variable or removes the least significant variable during each step to identify a useful subset of predictors and excludes independent variables that are highly correlated. This method may not always end with the model with the highest R<sup>2</sup> value possible for a given number of explanatory variables, but the predictors are selected on the basis of their statistical impact. The results show that meeting frequency is mainly related to some agency conflicts variables. In particular, firms with weak board as measured by duality, tenure of CEO and non-executive directors (staggered board), have lower meetings frequency. The most significant variable is the proportion of foreign non-executive directors. We find, but not report similar results when we use the proportion of foreign executive and non-executive directors and the total proportion of non-executive directors. These results suggest that boards meet less when the internal governance system is weak, and when some of the non-executive directors are foreign. These results are puzzling as, normally, firms with foreign non-executive directors should meet more often to gain from the advice of foreign experts brought in to the board. The negative relationship

between meetings and growth can be related to monitoring rather than the advisory role of the board, but the negative correlation with profitability indicates that board meetings frequency increases with performance challenges, as the board may have extra meetings to approve the write-downs of assets or sales of undervalued subsidiaries which both affect reported income.

The remaining results test for robustness. Equation (5) excludes financial and utility companies. We consider that these firms are likely to be regulated, and, consequently, the determinants of their board meetings may be different from other firms. We keep telecommunications companies as in the UK this sector is competitive and not regulated. However, when we also exclude these companies we find, but not report, similar results. The exclusion of financial firms allows us also assess the impact of leverage. The results are relatively similar. Size is no longer significant. Leverage is positive and significant, while the standard deviation of ROA is not significant, suggesting that meetings are likely to respond to financial, rather than business, risk. Equations (6) and (7) report the results of the pre- and post-financial crisis, using the stepwise method for space purposes. The results are relatively similar and carry on indicating that the presence of foreign non-executive directors exerts a strong negative effect on meeting frequency. In the post-2007 period Beta and PE are not significant. Instead CEO tenure and the average age of non-executive directors become significant.

Overall, while our results indicate that boards focus more on monitoring underperformance, there is no indication that they contribute to firm's growth prospects. The negative relationship between PE and meetings suggests that, since high growth firms are less likely to have a free cash flow problem, they are not in need of monitoring. However, at the same time, they are likely to require advice, which, according to our results, they are not getting from their board. *PE* and *MB* can also proxy for firm's complexity. In this case, our results indicate that board meetings do not appear to be larger in complex firms. Overall, these findings suggest that a long-term weakening of performance and firm specific factors on board meeting frequency was replaced by the influence of governance factors, particularly the proportion of

foreign non-executive directors. Our results are consistent with Masulis et al. (2012) who report that, in the US, foreign non-executive directors display poor board meeting attendance records. We contribute to this evidence by showing that they also lead firms to have lower meetings.

#### [Insert Table 4 here]

## 4.3. Impact of meetings and foreign non-executive directors on value creation

We proceed by assessing the impact of the frequency of board meetings and foreign non-executive directors on total shareholder return, TSR, measured as excess returns plus dividend yield. The results, reported in Table 5, show that the number of meetings is not statistically significant. In contrast, the proportion of foreign non-executive directors is negative and significant, suggesting that these foreign directors appear to destroy value. Equation (4) shows that meetings frequency and the proportion of foreign non-executive directors are not significant when all the explanatory variables are accounted for. However, Equation (5) indicates that the combination of foreign directors and meetings frequency is positively related to total shareholder return. These results suggest that it is not meetings frequency or the presence of foreign non-executive directors *per se* that affects value, but the interaction between these two variables. Therefore, it appears that firms that are able to extract monitoring and advisory benefits from foreign directors generate significantly higher returns.

The remaining variables show that duality does not affect value. However, this may be due to the relatively low number of firms that do not split the roles of the CEO and the chairman. The CEO and NED tenure and the average age of the non-executive directors affect positively stock returns while the average age of executive directors is negative. Consistent with previous evidence (e.g., Yermack, 1996) board size is negatively related to returns. In terms of fundamentals, large firms with high growth opportunities generate higher returns. Interestingly, while tenure of the CEO and non-executive directors is positively related to shareholder returns, the impact of age is not homogenous. The results indicate that older non-executive directors create value, but younger CEOs appear to affect positively shareholder value creation.

#### 4.4. The determinants of FNED

As the previous sections report that foreign non-executive directors are negatively related to the frequency of board meetings and they do not necessarily create value, it is worth investigating the drivers of their presence in UK companies. The purpose of this section is to focus on this question. We run a set of regressions to explain the determinants of FNED. Table 6 reports the results. We use overseas tax to assess the extent to which the firm is committed to foreign countries, and thus may need or seek to have foreign representation in their board.<sup>18</sup> We control for size, by including firm equity value, risk using Beta, standard deviation of ROA and leverage for non-financial companies, which is not reported as it wasn't significant. Finally, we account for annual total shareholder returns, *TSR*, and growth as measured by PE, which we test for robustness using market-to-book ratio.

Equation (1) reports the results of the impact of fundamental variables on the presence of foreign non-executive directors. As expected, large firms and those with significant foreign operations are more likely to have foreign non-executive directors. These results are consistent with Knyazeva et al. (2013) who argue that firms with less visibility are less likely to attract non-local directors. However, our results indicate that the dominant contributor of the presence of these directors is the existence of foreign executive directors, suggesting that foreign executive and non-executive directors may be endogenously determined.<sup>19</sup> Our results also imply that foreign non-executive directors are more likely to be selected by the executive directors, who are themselves more likely to be foreign, rather than necessarily representing shareholders. They are, therefore, more likely to be grey rather than independent.

<sup>&</sup>lt;sup>18</sup> Unfortunately data on foreign investors is not available. We have also tried to use acquisitions of foreign companies and/or subsidiaries. We find that nearly all our companies had at least one takeover event of foreign firms during our sample period. We find same results using foreign turnover.

<sup>&</sup>lt;sup>19</sup> We do not test for the possibility that foreign executives and non-executives are endogenously determined as our focus is on the impact of foreign non-executive directors on meetings.

Interestingly, foreign non-executive directors are not necessarily present in high growth firms, but they seem to choose firms with low risk as measured by the standard deviation of ROA. We consider that high growth and high risk firms are more likely to need advice, and thus expertise of the foreign non-executive directors. At the same time, as shown in the previous section, the relationship between the presence of foreign non-executive directors and TSR is negative. Our results imply that foreign non-executive directors are less likely to monitor and to provide advice to their firms. They may be recruited mainly to accomplish the third role of non-executive directors, which is contacts with potential clients (Lasfer, 2006). However, this role is not manifested in value creation.

Equation (2) tests for the impact of board structure on the presence of foreign nonexecutive directors. The results indicate that these directors are more likely to be in firms with large boards, consistent with the predictions of the agency conflicts theory (Yermack, 1996). However, at the same time these firms have also a high proportion of non-executive directors, with low tenure but older than their counterparts in firms with no or low proportion of foreign non-executive directors. In line with the results in Equation (1), foreign executive directors appear to be the dominant reason for firms to have foreign non-executive directors.

Equation (3) reports the results based on stepwise regressions' method. The results are relatively consistent with those reported in Equations (1) and (2). However, they indicate that it is not the size of the firm *per se* that impacts the presence of foreign non-executive directors, but the size of the board. The positive effect of the *Post-2003* dummy indicates that these foreign directors are more predominant in UK companies in the post 2003 period, due probably to disclosure requirements. The impact of firm growth, as measured by PE is now positive and significant. However, when we use market-to-book, the relationship becomes weak. Equation (4) is based on a restricted sample which excludes financial and utility firms. The results are relatively similar, except that the tenure of CEO is now positive and significant. We also include leverage in this regression but it didn't come significant, suggesting that debt financing, and

thus financial risk, is not a significant drivers of foreign non-executive directors. The results are similar when we check for robustness using change in EPS, ROE, instead of TSR and when we use TD/EBITDA or long-term debt over market value of equity, as proxy for stress. Overall, our results indicate that foreign non-executive directors are not homogeneously determined, but they appear to be driven by a specific set of firm's fundamental and governance characteristics.

#### [Insert Table 6 here]

#### 4.4. Impact of meetings' frequency and foreign non-executive directors on compensation

In this section we assess the impact of meetings and foreign non-executive directors on managerial compensation. We expect low meetings frequency and the presence of foreign non-executive directors to have a positive impact on compensation if these two mechanisms are used to exacerbate the agency conflicts. Consistent with these arguments, the results, reported in Table 7, Equation (1), show a strong positive effect of the proportion of foreign non-executive directors and a negative impact of the meetings frequency on CEO compensation, suggesting that these two factors exacerbate agency conflicts. However, Equation (3) indicates that these two factors do not affect the compensation of the chairman.

To assess the joint impact of meetings and foreign non-executive directors, we define a dummy for companies with lower than median meetings frequency and with FNED, *Meetings* x *FNED*. This variable is not significant in both CEO and chairman regressions, suggesting that the impact of these two factors is more likely to be direct rather combined. Equations (2) and (4) are based on the stepwise method. In both cases, the variable *Meetings* x *FNED* is not significant. Equation (2) shows that for the CEO compensation both foreign non-executive directors and the frequency of meetings exert significant impact. In contrast, Equation (4) indicates that firms with a high proportion of foreign non-executive directors appear to have higher compensation of their chairmen.

We check for robustness by defining this dummy to represent firms with lower than median meetings frequency and higher than median proportion of foreign non-executive directors. We find, but do not report, relatively the same results. Similarly, our results did not change when we define the dependent variable as compensation relative to annual median compensation. Overall, these results suggest that firms that have more meetings, and where all the non-executive directors are locals, have lower compensation, and the managers are more likely to align their interest with that of their shareholders.

Table 7 reports a strong correlation between the compensation of the CEO and that of the non-executive directors. However, the relationship with the compensation of the chairman is weak. Moreover, consistent with Ozkan (2011), we find that the relationship between compensation of CEO and total shareholder returns is not significant, and it is negative and significant in the case of the compensation of the chairman. We also find, but not report, no relationship when we use accounting measures of performance, such as ROE and ROA, or when we exclude financial and utility companies. Corporate governance guidelines in the UK, such as Greenbury (1995), strongly stress aligning CEO compensation with performance. Our results suggest that such guidelines have not been effective at best, or heeded, at worst.

We also assess the impact of complexity and risk as reflected in firm size, growth potentials, and earnings' volatility. We recognise that size is a noisy proxy for complexity. Given that organizational complexity is a multidimensional construct, previous studies (e.g., Bushman, et al., 2004; Black, et al., 2014) use total number of subsidiaries or total number of foreign subsidiaries. Unfortunately, this data is not available. We complement our analysis by using PE to proxy for growth potentials, and this could reflect firms' complexity. In line with previous studies, the results indicate that compensation is positively related to firm's size, suggesting that in large firms, the CEO and chairman get higher compensation. The impact of PE is limited to the compensation of the CEO. The relationship is negative and significant,

implying that in mature companies, managers tend to get higher remuneration. Similar results are obtained when we use total assets as a proxy of size and market-to-book instead of PE.

We also use the standard deviation in ROA to proxy for business risk and leverage to measure financial risk when we exclude financial and utility firms. It is conceivable that since, as shown in Table 6, firms with more foreign non-executive directors are larger and have more foreign operations, they are more risky than the remaining firms. Their managers will therefore ask for higher pay to compensate for bearing greater risk. Conyon et al. (2011) find that after adjusting for the risk premium to compensate for equity incentives, U.S. CEOs total pay is not consistently higher than that for U.K. CEOs. These results are in line with Fernandes, et al., (2013) and Gao, et al., (2012). Unfortunately, we do not have data to compute risk-adjusting compensation. To overcome this limitation, we use the standard deviation of ROA to control for risk. The results indicate that this variable is not significant. We find, but do not report, similar results for leverage when we exclude financial and utility companies, and when we use firm's equity beta instead of *SD\_ROA*.

Overall, our results are consistent with more recent evidence (Guthrie et al., 2012) and suggest that, in line with the managerial power hypothesis, internal governance system is not likely to mitigate the agency conflicts. However, we extend this literature by focussing on the impact of meetings' frequency and board diversity, namely the presence of foreign non-executive directors. We find that these two factors exert complementary effects. Our results imply that managers are likely to use meetings and the proportion of foreign non-executive directors to exacerbate the agency conflicts by awarding themselves high compensation, not directly related to performance. Our findings hold even after accounting for firms' fundamentals, including risk and complexity.

[Insert Table 7 here]

#### 5. Conclusions

The role and the functioning of the board of directors has come under vast scrutiny in recent years. One argument is that boards may not matter in good times when all is working well, but they quickly rise to prominence to grasp control when management is failing and firm is in turmoil. Fundamental to this line of reasoning is frequent monitoring to know when to grasp control. Many theoretical studies argue that, while executive directors are less likely to challenge the CEO, outside directors may have weaker incentives to monitor, because of higher information acquisition costs, and their dependence on the CEO for their information (e.g., Fama and Jensen, 1983; Harris and Raviv, 2008; Kumar and Sivaramakrishnan, 2008). We expand this research on the role and practice at the board. We use our findings to further assess the value added of the board of directors focusing on the meetings frequency and the presence of foreign non-executive directors in the board.

Agency framework, corporate governance guidelines, and contracting theory suggest that firms self-determine their board meeting frequencies and structure their boards according to their monitoring and advising needs (e.g., Duchin et al., 2010). We show that board meetings and board composition are inter-related. We find evidence that board meetings are constrained by the presence of foreign non-executive directors, leading to lower shareholder returns and higher compensation of the CEO and the chairman. Boards where the majority of members are nationals appear to meet 50% more times per annum, yet boards with international majorities are more likely at firms with greater international operations and high complexity.

Sporadic anecdotal and annual report evidence implies that there are substantially more committee meetings, but the decline in the number of full board meetings indicates that time is a constraint to review the committees' work. The empirical evidence demonstrates that the time interval for full board meetings to review the committee's work has increased. On a broad level, this result is consistent with Vafeas (1999) who finds among large US firms increasing board size correlated with increased meetings, though in the UK it is the reverse that the average board

size is shrinking, but, at the same, the average meeting frequency is going down too. We contribute to the previous literature by suggesting that the decline in full board meetings is linked to the increased representation of foreign non-executive directors who may only agree to serve in fewer meetings to minimise travel. Foreign non-executive directors may also see their roles as more advisory than monitoring. However, we find their presence in more mature and low risk firms. Overall, our results highlight the need to (1) link the compensation of the non-executive directors to meeting commitments, attendance, and/or firm performance, (2) disclose board meetings minutes, or at least, the board meetings and their attendance.

Our analysis may suffer from a number of limitations. Although our sample covers a large proportion of the market value of UK listed firms it may be limited as we exclude firms that did not disclose full information. We do not have data on the split of the compensation between cash and options components of CEOs to test whether the impact of meetings and the presence of foreign non-executive directors are more pronounced for cash or other awards. The data of the agenda and minutes of the meetings is not available, making it difficult to evaluate fully the necessity of board meetings and the negative impact of foreign non-executive directors. We do not have data on specific major decisions, such as raising capital and mergers and acquisitions that may have solicited some board meetings. We are not able to gather data on ownership to assess whether large shareholders mitigate the agency conflicts inherent in management compensation, to identify the nationalities of the foreign non-executive directors, and to find out whether the presence of foreign non-executive directors is the outcome of foreign shareholding. Finally, although we used the interaction variable to assess the joint effect of board meetings and foreign non-executive directors, there may be some causality effects across the variables that might affect our results. The extent to which such factors will alter or strengthen our results is the subject of further research.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> We surveyed two firms' secretaries, one in beverage and the other in pharmaceutical. One stated that that fewer board meetings made it possible to attract the right calibre of international participants who were focused on more strategic and international concerns, noting that these are fewer but bigger issues than were discussed in the past.

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The other argued that fewer meetings reduced the travel burden on international directors, and added that in moving to bi-monthly meetings from monthly meetings, meeting time increased from one-half to full day meetings. This may be a way of further research.

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## Table 1. Annual and Industry Distribution of Meetings and Board Characteristics

The sample includes 241 UK firms from 1999 to 2012. *Meetings* is the number of full board meeting per year; *Board Size* is total board membership, *Duality* if a dummy equal to one if the chairman holds also the CEO position, *NED* is the proportion of non-executive directors, excluding the chairman, relative to total board directors, *FNED* is the ratio of foreign non-executive directors over total non-executive directors; *FD* is the proportion of foreign executive and non-executive directors in the board; *Basic materials:* chemicals, forestry and paper, industrial metals and mining, and mining. *Consumer goods:* automobile and parts, beverages, food producers, household goods and home construction, leisure and goods, personal goods and tobacco. *Consumer services:* food and drug retailers, general retailers, media, travel and leisure. *Financials:* banks, insurance, real estate and investment companies. *Health care:* health care equipment and services and pharmaceutical and biotechnology firms. *Industrials:* construction and materials, aerospace and defence, general industrials, electronic and electrical equipment, industrial engineering, industrial transportation, and support services. *Oil and Gas:* oil and gas producers and oil equipment services. *Technology:* software and computer services and technology hardware and equipment. *Telecom:* fixed line and mobile telecommunications. *Utilities:* electricity, gas, water and multi-utilities.

|                   |     | Mee   | etings | Board  | Size        | Dua           | ality NED |       |        | FNED  |        | FD    |        |
|-------------------|-----|-------|--------|--------|-------------|---------------|-----------|-------|--------|-------|--------|-------|--------|
|                   | Ν   | Mean  | Median | Mean   | Median      | Mean          | Median    | Mean  | Median | Mean  | Median | Mean  | Median |
|                   |     |       |        | Pa     | inel A. Anr | ual Distribu  | ition     |       |        |       |        |       |        |
| 1999              | 95  | 9.326 | 10.00  | 11.442 | 11.00       | 0.042         | 0.00      | 0.488 | 0.500  | 0.183 | 0.143  | 0.156 | 0.111  |
| 2000              | 112 | 9.259 | 9.00   | 11.527 | 11.00       | 0.054         | 0.00      | 0.493 | 0.500  | 0.211 | 0.167  | 0.177 | 0.111  |
| 2001              | 114 | 8.570 | 8.00   | 11.439 | 11.00       | 0.035         | 0.00      | 0.501 | 0.500  | 0.265 | 0.225  | 0.218 | 0.167  |
| 2002              | 111 | 8.459 | 8.00   | 10.937 | 11.00       | 0.027         | 0.00      | 0.505 | 0.500  | 0.289 | 0.250  | 0.232 | 0.200  |
| 2003              | 116 | 8.655 | 9.00   | 10.897 | 10.00       | 0.043         | 0.00      | 0.515 | 0.500  | 0.290 | 0.236  | 0.234 | 0.177  |
| 2004              | 196 | 8.434 | 8.00   | 10.852 | 11.00       | 0.056         | 0.00      | 0.537 | 0.538  | 0.281 | 0.211  | 0.229 | 0.182  |
| 2005              | 124 | 8.669 | 8.00   | 10.887 | 11.00       | 0.057         | 0.00      | 0.552 | 0.556  | 0.289 | 0.250  | 0.251 | 0.240  |
| 2006              | 121 | 8.926 | 9.00   | 10.678 | 10.00       | 0.025         | 0.00      | 0.565 | 0.556  | 0.284 | 0.250  | 0.237 | 0.200  |
| 2007              | 131 | 8.695 | 8.00   | 10.382 | 10.00       | 0.031         | 0.00      | 0.577 | 0.571  | 0.336 | 0.333  | 0.275 | 0.250  |
| 2008              | 135 | 8.543 | 8.00   | 10.257 | 10.00       | 0.029         | 0.00      | 0.578 | 0.571  | 0.277 | 0.250  | 0.211 | 0.222  |
| 2009              | 140 | 8.264 | 8.00   | 10.300 | 10.00       | 0.036         | 0.00      | 0.593 | 0.592  | 0.340 | 0.333  | 0.281 | 0.250  |
| 2010              | 143 | 8.790 | 8.00   | 10.154 | 10.00       | 0.021         | 0.00      | 0.605 | 0.625  | 0.363 | 0.333  | 0.304 | 0.250  |
| 2011              | 143 | 8.280 | 8.00   | 10.406 | 10.00       | 0.028         | 0.00      | 0.603 | 0.615  | 0.365 | 0.333  | 0.311 | 0.250  |
| 2012              | 135 | 8.333 | 8.00   | 10.519 | 10.00       | 0.015         | 0.00      | 0.608 | 0.625  | 0.374 | 0.333  | 0.321 | 0.250  |
|                   |     |       |        | Pa     | nel B. Indu | stry Distribu | ution     |       |        |       |        |       |        |
| Basic Material    | 132 | 7.515 | 8.00   | 10.621 | 11.00       | 0.061         | 0.00      | 0.627 | 0.636  | 0.561 | 0.600  | 0.512 | 0.500  |
| Consumer Goods    | 163 | 7.252 | 7.00   | 10.675 | 10.00       | 0.031         | 0.00      | 0.588 | 0.600  | 0.400 | 0.400  | 0.332 | 0.300  |
| Consumer Services | 354 | 8.977 | 9.00   | 10.404 | 10.00       | 0.040         | 0.00      | 0.556 | 0.556  | 0.277 | 0.200  | 0.223 | 0.167  |
| Financials        | 361 | 9.208 | 9.00   | 12.064 | 12.00       | 0.036         | 0.00      | 0.565 | 0.556  | 0.230 | 0.182  | 0.191 | 0.167  |
| Health Care       | 62  | 6.887 | 6.00   | 11.468 | 12.00       | 0.016         | 0.00      | 0.629 | 0.667  | 0.638 | 0.600  | 0.498 | 0.500  |
| Industrials       | 324 | 8.790 | 9.00   | 9.772  | 9.00        | 0.031         | 0.00      | 0.499 | 0.500  | 0.200 | 0.200  | 0.179 | 0.143  |
| Oil and Gas       | 87  | 8.885 | 9.00   | 11.678 | 11.00       | 0.012         | 0.00      | 0.577 | 0.571  | 0.439 | 0.375  | 0.345 | 0.300  |
| Technology        | 59  | 6.797 | 6.00   | 9.814  | 10.00       | 0.068         | 0.00      | 0.488 | 0.462  | 0.326 | 0.333  | 0.256 | 0.222  |
| Telecom           | 39  | 9.359 | 9.00   | 11.897 | 12.00       | 0.051         | 0.00      | 0.588 | 0.583  | 0.365 | 0.429  | 0.318 | 0.385  |
| Utilities         | 135 | 9.793 | 10.00  | 9.881  | 10.00       | 0.030         | 0.00      | 0.507 | 0.500  | 0.160 | 0.000  | 0.109 | 0.083  |

## Table 2. Description of the meetings frequency, board characteristics and fundamental variables

The table provides the descriptive statistics of the dependent and the proxy explanatory variables. The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations. Expected sign ( $E_{sign}$ ) is between board meetings and the remaining variables.  $\rho$  is the correlation of the variables with meetings. *Board Size* is total board membership, *Duality* if a dummy equal to one if the chairman holds also the CEO position, *NED* is the proportion of non-executive directors, excluding the chairman, relative to total board directors, *FNED* is the ratio of foreign non-executive directors over total non-executive directors; *FD* is the proportion of non-executive directors (NED), the chairman (Chair) and CEO were on the board; *Age* is the average number of years of NEDs or CEO; *Pay NED* is the average pay for an NED for all board services provided (excluding any advisory or consulting fees and excluding fees for non-executive chairmen); *Size* is year-end market capitalisation (in £m); *BETA* is the regression coefficient obtained by regressing each firm's stock returns against the FTSE 350 index; *TSR* is total shareholder return computed as the cumulative one year returns plus dividend yield; *ROA* is the ratio of EBIT over total assets, *MB* is year-end market value of equity to book value of equity; *PE* is price to earnings ratio; *Leverage* is total debt over total assets; *SD ROA* is standard deviation of return on assets over each firm's sample period. \*\*\*, \*\* , Significant at 0.01, 0.05 and 0.1 level, respectively.

| Variable     | Esign |                 | I      | Full Sample | e       |         | Р         | Pre-2007 (1) |        | Post-2007 (2) |        |        | p-value ( | 1)–(2) |
|--------------|-------|-----------------|--------|-------------|---------|---------|-----------|--------------|--------|---------------|--------|--------|-----------|--------|
|              |       | ρ               | Mean   | Median      | Max     | Min     | ρ         | Mean         | Median | ρ             | Mean   | Median | Mean      | Median |
| Meetings     |       | 1.000           | 8.632  | 8.000       | 28.000  | 1.000   | 1.000     | 8.722        | 9.000  | 1.000         | 8.539  | 8.000  | 0.137     | 0.008  |
| Board Size   | -     | 0.022           | 10.752 | 10.000      | 22.000  | 5.000   | 0.043     | 11.103       | 11.000 | -0.007        | 10.393 | 10.000 | 0.000     | 0.000  |
| Duality      | -     | <b>-0.043</b> * | 0.036  | 0.000       | 1.000   | 0.000   | -0.061*   | 0.046        | 0.000  | -0.029        | 0.026  | 0.000  | 0.025     | 0.472  |
| NED          | +     | -0.117***       | 0.554  | 0.556       | 0.900   | 0.222   | -0.108*** | 0.516        | 0.500  | -0.115***     | 0.592  | 0.600  | 0.000     | 0.000  |
| FNED         | -     | -0.261***       | 0.302  | 0.250       | 1.000   | 0.000   | -0.395*** | 0.262        | 0.200  | -0.151***     | 0.342  | 0.333  | 0.000     | 0.000  |
| FD           | -     | -0.258***       | 0.251  | 0.200       | 1.000   | 0.000   | -0.385*** | 0.217        | 0.167  | -0.157***     | 0.286  | 0.250  | 0.000     | 0.000  |
| WNED         | +     | 0.092***        | 0.172  | 0.167       | 1.000   | 0.000   | 0.129***  | 0.169        | 0.167  | 0.061*        | 0.176  | 0.167  | 0.284     | 0.060  |
| NED Tenure   | -     | -0.077***       | 4.232  | 4.000       | 17.000  | 0.000   | -0.050    | 4.205        | 4.000  | -0.108***     | 4.259  | 4.000  | 0.555     | 0.089  |
| Chair_Tenure | -     | -0.071***       | 4.453  | 3.500       | 50.000  | 0.000   | -0.115*** | 4.529        | 3.000  | -0.026        | 4.374  | 3.800  | 0.472     | 0.124  |
| CEO_Tenure   | -     | -0.118***       | 5.028  | 4.000       | 34.000  | 0.000   | -0.044    | 4.635        | 3.000  | -0.174***     | 5.429  | 4.000  | 0.001     | 0.000  |
| NED Age      | -     | -0.031          | 58.599 | 59.000      | 73.800  | 45.000  | -0.068*   | 58.347       | 58.700 | 0.006         | 58.856 | 59.000 | 0.001     | 0.000  |
| ED Age       | -     | -0.027          | 50.850 | 51.000      | 77.000  | 35.000  | -0.005    | 50.621       | 51.000 | -0.04         | 51.085 | 51.000 | 0.014     | 0.211  |
| NED Pay      | +     | -0.05           | 53.591 | 50.000      | 210.000 | 0.000   | -0.067    | 43.122       | 40.000 | -0.049        | 56.084 | 52.500 | 0.000     | 0.000  |
| Size (£m)    | +     | 0.031           | 10,857 | 3,667       | 155,859 | 1.000   | -0.012    | 9,447        | 3520   | 0.066*        | 12,337 | 3,810  | 0.003     | 0.000  |
| BETA         | +     | 0.068**         | 1.074  | 1.014       | 2.145   | 0.202   | 0.109***  | 1.070        | 1.007  | -0.058        | 1.087  | 1.054  | 0.488     | 0.479  |
| TSR          | +     | 0.003           | 0.061  | 0.042       | 2.448   | -1.682  | 0.010     | 0.140        | 0.108  | -0.019        | -0.020 | -0.027 | 0.000     | 0.000  |
| ROA          | +     | -0.131***       | 0.058  | 0.051       | 0.671   | -0.786  | -0.143*** | 0.053        | 0.050  | -0.120***     | 0.063  | 0.052  | 0.009     | 0.235  |
| MB           | +     | -0.061**        | 3.151  | 2.320       | 89.740  | -70.100 | -0.048    | 3.178        | 2.310  | -0.074**      | 3.123  | 2.350  | 0.874     | 0.840  |
| PE           | +     | -0.11***        | 18.384 | 14.900      | 185.067 | 0.000   | -0.171*** | 18.737       | 15.100 | -0.067*       | 18.013 | 14.428 | 0.367     | 0.000  |
| Leverage     | +     | 0.032           | 0.259  | 0.251       | 0.939   | 0.000   | 0.003     | 0.280        | 0.272  | 0.049         | 0.237  | 0.223  | 0.000     | 0.000  |
| SD ROA       | +     | -0.098***       | 0.045  | 0.032       | 0.534   | 0.001   | -0.110*** | 0.044        | 0.033  | -0.087**      | 0.046  | 0.032  | 0.287     | 0.716  |

#### Table 3. Descriptive Statistics of some Explanatory Variables by Meeting Frequency and Foreign Non-executive Directors

The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations. *Board* is total board membership; *Duality* if a dummy equal to one if the chairman holds also the CEO position, *NED* is the proportion of non-executive directors, excluding the chairman, relative to total board directors, *FNED* is the ratio of foreign non-executive directors; *FD* is the proportion of foreign executive and non-executive directors in the board; *WNED* is the proportion of non-executive directors that are women; *Tenure* is the average number of years non-executive directors (NED), the chairman (Chair) and CEO were on the board; *Age* is the average number of years of NEDs or CEO; *Pay* is total compensation; *Size* is year-end market capitalisation (in £m); *BETA* is the regression coefficient obtained by regressing each firm's stock returns against the FTSE 350 index; *TSR* is total shareholder return computed as the cumulative one year returns plus dividend yield; *ROA* is the ratio of EBIT over total assets, *MB* is year-end market value of equity to book value of equity; *SD ROA* is standard deviation of return on assets over each firm's sample period. \*\*\*, \*\*, \*\* Significant at 0.01, 0.05 and 0.1 level, respectively.

| Panel A. Distribution by Meetings Frequency Board characteristics Average Tenure Average Age Firm characteristics |          |        |         |             |             |       |       |       |               |       |       |        |        |          |              |        |
|---|----------|--------|---------|-------------|-------------|-------|-------|-------|---------------|-------|-------|--------|--------|----------|--------------|--------|
|   |          |        | ]       | Board chara | acteristics |       |       | А     | verage Tenure | 9     | Avera | ge Age |        | Firm cha | aracteristic | s      |
|   | Ν        | Board  | Duality | NED         | FNED        | FD    | WNED  | NED   | Chairman      | CEO   | NED   | ED     | Size   | TSR      | MB           | SD ROA |
| Meetings  | (1)      | (2)    | (3)     | (4)         | (5)         | (6)   | (7)   | (8)   | (9)           | (10)  | (11)  | (12)   | (13)   | (14)     | (15)         | (16)   |
| < 4   | 35       | 10.114 | 0.086   | 0.606       | 0.371       | 0.319 | 0.085 | 5.114 | 6.050         | 6.873 | 59.49 | 51.61  | 3,608  | 0.005    | 3.290        | 0.056  |
| 5   | 90       | 10.244 | 0.033   | 0.601       | 0.422       | 0.357 | 0.114 | 4.973 | 5.369         | 6.521 | 58.92 | 51.11  | 6,564  | 0.085    | 4.990        | 0.048  |
| 6   | 243      | 10.757 | 0.037   | 0.560       | 0.419       | 0.340 | 0.191 | 4.352 | 5.215         | 6.261 | 58.53 | 51.07  | 10,554 | 0.080    | 4.051        | 0.055  |
| 7   | 210      | 11.071 | 0.043   | 0.560       | 0.349       | 0.295 | 0.142 | 4.272 | 4.590         | 4.950 | 58.55 | 50.73  | 11,856 | 0.068    | 3.406        | 0.044  |
| 8   | 316      | 10.991 | 0.054   | 0.567       | 0.328       | 0.277 | 0.168 | 4.087 | 4.085         | 5.007 | 58.75 | 51.23  | 14,115 | 0.057    | 2.795        | 0.046  |
| 9   | 250      | 10.564 | 0.020   | 0.552       | 0.293       | 0.244 | 0.179 | 4.195 | 4.339         | 5.024 | 58.71 | 50.74  | 11,393 | 0.041    | 2.698        | 0.039  |
| 10  | 223      | 10.749 | 0.036   | 0.536       | 0.245       | 0.195 | 0.176 | 4.034 | 3.973         | 4.064 | 58.37 | 50.22  | 10,118 | 0.008    | 2.456        | 0.044  |
| 11  | 150      | 10.460 | 0.020   | 0.530       | 0.168       | 0.141 | 0.197 | 4.087 | 4.089         | 3.552 | 58.57 | 50.49  | 7,327  | 0.073    | 2.897        | 0.045  |
| 12  | 117      | 10.709 | 0.017   | 0.505       | 0.162       | 0.134 | 0.206 | 4.230 | 4.101         | 4.676 | 58.60 | 50.99  | 10,754 | 0.104    | 3.478        | 0.036  |
| 13+   | 82       | 11.000 | 0.037   | 0.560       | 0.200       | 0.173 | 0.184 | 4.056 | 4.386         | 5.054 | 57.98 | 50.97  | 11,610 | 0.123    | 2.413        | 0.032  |
| p-Mean>-  | 4 - 13+  | 0.140  | 0.353   | 0.075       | 0.002       | 0.005 | 0.000 | 0.043 | 0.173         | 0.122 | 0.046 | 0.654  | 0.000  | 0.030    | 0.509        | 0.006  |
| p-Median  | >4 - 13+ | 0.130  | 0.677   | 0.045       | 0.002       | 0.008 | 0.000 | 0.124 | 0.008         | 0.003 | 0.093 | 0.447  | 0.000  | 0.039    | 0.073        | 0.001  |

Panel B. Distribution by Proportion of Foreign Non-executive Directors

|                    |         |        |         | Board c | haracteristic | S     |       |       | Average Tenure |       |       | Average Age |        |       | Firm characteristics |        |  |
|--------------------|---------|--------|---------|---------|---------------|-------|-------|-------|----------------|-------|-------|-------------|--------|-------|----------------------|--------|--|
| % FNED             | Ν       | Board  | Duality | NED     | Meeting       | FD    | WNED  | NED   | Chairman       | CEO   | NED   | ED          | Size   | TSR   | MB                   | SD ROA |  |
| 0                  | 484     | 9.669  | 0.041   | 0.484   | 9.229         | 0.030 | 0.179 | 4.220 | 4.888          | 5.573 | 57.58 | 50.36       | 4,557  | 0.135 | 3.051                | 0.046  |  |
| < 20%              | 169     | 11.899 | 0.036   | 0.574   | 9.615         | 0.135 | 0.178 | 4.488 | 3.917          | 4.454 | 58.36 | 50.04       | 9,774  | 0.057 | 2.768                | 0.037  |  |
| 20% - 25%          | 252     | 10.056 | 0.040   | 0.510   | 8.909         | 0.178 | 0.178 | 4.167 | 4.291          | 4.756 | 58.27 | 50.53       | 5,561  | 0.064 | 3.352                | 0.052  |  |
| 26% - 49%          | 324     | 11.580 | 0.022   | 0.577   | 8.556         | 0.286 | 0.169 | 4.291 | 4.363          | 4.722 | 59.21 | 50.90       | 14,330 | 0.013 | 2.930                | 0.042  |  |
| 50% - 74%          | 350     | 11.166 | 0.043   | 0.614   | 7.609         | 0.465 | 0.161 | 4.202 | 4.276          | 4.872 | 59.23 | 51.52       | 15,883 | 0.028 | 3.342                | 0.044  |  |
| > 75%              | 137     | 11.423 | 0.029   | 0.647   | 7.591         | 0.681 | 0.168 | 4.009 | 4.533          | 5.428 | 60.06 | 52.36       | 23,134 | 0.002 | 3.645                | 0.045  |  |
| p-Mean>4           | - 13+   | 0.000  | 0.477   | 0.000   | 0.000         | 0.000 | 0.443 | 0.240 | 0.440          | 0.788 | 0.000 | 0.000       | 0.000  | 0.000 | 0.166                | 0.854  |  |
| <i>p-Median</i> >4 | 4 - 13+ | 0.000  | 0.517   | 0.000   | 0.000         | 0.000 | 0.486 | 0.104 | 0.908          | 0.364 | 0.000 | 0.000       | 0.000  | 0.000 | 0.005                | 0.028  |  |

## **TABLE 4 – Regression Results of the Determinants of Board Meetings**

The dependent variable is log of Board Meetings. The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations. *Duality* if a dummy equal to one if the chairman holds also the CEO position; *FNED* is the ratio of foreign non-executive directors over total non-executive directors; *Tenure* is the average number of years non-executive directors (NED), the chairman (Chair) and CEO were on the board; *Age* is the average age of NEDs or executive directors (EDs); *Board Size* is total board membership; *Size* is ln of year-end market capitalisation; *BETA* is the regression coefficient obtained by regressing each firm's stock returns against the FTSE 350 index; *ROA* is the ratio of EBIT over total assets, *PE* is price to earnings ratio; *MB* is year-end market to book value of equity; *Leverage* is total debt over total assets; *SD ROA* is standard deviation of return on assets. The penultimate and final panels are respectively the period prior to and post the Combined Code requirement for board attendance disclosure. Fin is for financial companies. \*\*\*, \*\*, \* significant at 0.01, 0.05 and 0.1 levels, respectively. VIF is the variance inflation factor to test for multi-collinearity; VIF = 1 indicates no correlation, 1 < VIF < 5 moderate correlation and VIF > 5 highly correlated.

|              | Fu            | ll Sample |      | Fu           | ll Sample |      | Fu            | ll Sample |      | Fu        | ll Sample |      | No Fi        | n and Utili | ty   | Р             | re-2006 |      | F            | ost-2007 |      |
|--------------|---------------|-----------|------|--------------|-----------|------|---------------|-----------|------|-----------|-----------|------|--------------|-------------|------|---------------|---------|------|--------------|----------|------|
|              |               | (1)       |      |              | (2)       |      |               | (3)       |      |           | (4)       |      |              | (5)         |      |               | (6)     |      |              | (7)      |      |
|              | Coef.         | t-stat    | VIF  | Coef.        | t-stat    | VIF  | Coef.         | t-stat    | VIF  | Coef.     | t-stat    | VIF  | Coef.        | t-stat      |      | Coef.         | t-stat  | VIF  | Coef.        | t-stat   | VIF  |
| Constant     | $2.060^{***}$ | 11.980    |      | 2.049***     | 12.19     |      | $2.082^{***}$ | 12.120    |      | 2.205***  | 29.960    |      | 2.031***     | 14.120      |      | 2.082         | 27.88   |      | 1.603        | 7.130    |      |
| Duality      | -0.070**      | -1.970    | 1.02 | -0.068**     | -1.900    | 1.02 | -0.072**      | -2.020    | 1.02 | -0.070**  | -1.970    | 1.01 | -0.069**     | -1.720      | 1.02 | -0.055        | -1.510  | 1.01 | -0.098       | -1.490   | 1.01 |
| FNED         | -0.337***     | -9.880    | 1.48 | -0.348***    | -10.37    | 1.44 | -0.344***     | -10.13    | 1.46 | -0.329*** | -10.05    | 1.37 | -0.330***    | -9.160      | 1.41 | -0.414***     | -13.02  | 1.15 | -0.13**      | -2.800   | 1.41 |
| Tenure Chair | -0.002        | -1.520    | 1.16 | -0.003*      | -1.680    | 1.15 | -0.003**      | -1.940    | 1.14 | -0.002    | -1.540    | 1.14 |              |             |      | -0.004**      | -2.290  | 1.12 |              |          |      |
| Tenure CEO   | -0.004**      | -2.260    | 1.19 | -0.004**     | -2.250    | 1.18 | -0.004**      | -2.490    | 1.18 | -0.003*** | -2.140    | 1.15 |              |             |      |               |         |      | -0.01***     | -4.400   | 1.08 |
| Tenure NED   | -0.014***     | -3.560    | 1.23 | -0.014***    | -3.500    | 1.23 | -0.015***     | -3.740    | 1.23 | -0.014*** | -3.740    | 1.11 | -0.010***    | -5.050      | 1.21 | -0.014***     | -3.590  | 1.07 | -0.01**      | -2.070   | 1.16 |
| Age NED      | 0.001         | 0.400     | 1.26 | 0.001        | 0.470     | 1.26 | 0.001         | 0.500     | 1.26 |           |           |      | -0.010**     | -2.220      | 1.12 |               |         |      | $0.007^{*}$  | 1.990    | 1.24 |
| Age ED       | 0.002         | 0.710     | 1.22 | 0.002        | 0.970     | 1.20 | 0.002         | 1.160     | 1.20 |           |           |      |              |             |      |               |         |      |              |          |      |
| Board Size   |               |           |      |              |           |      | $0.068^{**}$  | 1.970     | 1.33 |           |           |      | $0.004^{*}$  | 1.890       | 1.17 |               |         |      |              |          |      |
| Size         | $0.024^{***}$ | 3.040     | 1.55 | 0.025***     | 3.200     | 1.51 |               |           |      |           |           |      | $0.081^{**}$ | 2.060       | 1.23 | 0.026***      | 3.380   | 1.32 | $0.04^{***}$ | 4.060    | 1.19 |
| BETA         | 0.055**       | 2.380     | 1.53 | $0.054^{**}$ | 2.360     | 1.53 | $0.047^{**}$  | 2.040     | 1.51 | 0.025***  | 3.340     | 1.34 |              |             |      | $0.075^{***}$ | 3.420   | 1.30 |              |          |      |
| ROA          | -0.255**      | -2.500    | 1.16 | -0.217**     | -2.150    | 1.14 | -0.173*       | -1.710    | 1.13 | -0.055**  | -2.410    | 1.50 |              |             |      | -0.409***     | -3.540  | 1.05 | -0.54***     | -4.230   | 1.03 |
| PE           | -0.002***     | -3.580    | 1.32 | -0.002***    | -3.350    | 1.27 | -0.002***     | -3.250    | 1.27 | -0.249**  | -2.490    | 1.12 | -0.263**     | -2.510      | 1.04 | -0.002***     | -4.230  | 1.26 |              |          |      |
| SD_ROA       | -0.257        | -1.590    | 1.21 | -0.251       | -1.560    | 1.21 | -0.241        | -1.490    | 1.22 | -0.002*** | -3.930    | 1.23 | -0.001**     | -2.160      | 1.19 | $-0.300^{*}$  | -1.800  | 1.22 | -0.50**      | -2.190   | 1.06 |
| MB           |               |           |      |              |           |      |               |           |      | -0.256*   | -1.600    | 1.20 |              |             |      |               |         |      |              |          |      |
| Leverage     |               |           |      |              |           |      |               |           |      |           |           |      | 0.142***     | 4.780       | 1.27 |               |         |      |              |          |      |
| Post-2007    |               |           |      | 0.015        | 0.780     | 1.46 | 0.022         | 1.120     | 1.46 |           |           |      | 0.030        | 1.590       | 1.05 |               |         |      |              |          |      |
| Post-2003    |               |           |      | -0.017       | -1.010    | 1.49 | -0.014        | -0.800    | 1.50 |           |           |      |              |             |      |               |         |      |              |          |      |
| Year         | Yes           |           |      | No           |           |      | No            |           |      | Yes       |           |      | Yes          |             |      | Yes           |         |      | Yes          |          |      |
| Industry     | Yes           |           |      | Yes          |           |      | Yes           |           |      | Yes       |           |      | Yes          |             |      | Yes           |         |      | Yes          |          |      |
| Ν            | 1716          |           |      | 1716         |           |      | 1716          |           |      | 1716      |           |      | 1220         |             |      | 989           |         |      | 727          |          |      |
| $R^2$        | 0.247         |           |      | 0.246        |           |      | 0.241         |           |      | 0.235     |           |      | 0.269        |             |      | 0.285         |         |      | 0.167        |          |      |
| F            | 13.57***      |           |      | 13.57***     |           |      | 16.88***      |           |      | 16.29***  |           |      | 20.90***     |             |      | 27.59***      |         |      | 12.1***      |          |      |

## **Table 5. Meetings and Shareholder Value Creation**

The dependent variable is the total shareholder returns (TSR) defined as abnormal stock returns plus dividends. The sample includes 241 firms with complete data from 1999 to 2012 resulting in 1716 observations. *Meetings* is ln of the number of meetings per year; *FNED* is the proportion of foreign non-executive directors in the board of directors; *Duality* if a dummy equal to one if the chairman holds also the CEO position, *NED* is for non-executive directors and *ED* is for executive directors. All the regressions include industry as well as year dummies. VIF is the variance inflation factor to test for multi-collinearity; VIF = 1 indicates no correlation, 1 < VIF < 5 moderate correlation and VIF > 5 highly correlated. \*\*\*, \*\*, \* significant at 0.01, 0.05 and 0.1 levels, respectively.

|                 | Coef.    | t-stat | VIF      | Coef.        | t-stat | VIF      | Coef.    | t-stat | VIF  | Coef.     | t-stat | VIF  | Coef.     | t-stat | VIF   |
|-----------------|----------|--------|----------|--------------|--------|----------|----------|--------|------|-----------|--------|------|-----------|--------|-------|
|                 |          | (1)    |          |              | (2)    |          |          | (3)    |      |           | (4)    |      |           | (5)    |       |
| Constant        | -0.059   | -0.680 |          | -0.128**     | -1.930 |          | -0.078   | -0.890 |      | 0.592***  | 3.180  |      | 0.498***  | 3.140  |       |
| Meetings        | -0.023   | -0.820 | 1.1<br>7 |              |        |          | -0.049   | -1.700 | 1.23 | -0.027    | -0.930 | 1.27 |           |        |       |
| FNED            |          |        |          | -0.11***     | -3.310 | 1.4<br>3 | -0.076*  | -1.880 | 2.03 | -0.041    | -1.000 | 2.12 |           |        |       |
| Meetings x FNED |          |        |          |              |        |          | 0.023**  | 2.210  | 1.67 | 0.015     | 1.390  | 1.73 | 0.019**   | 2.230  | 1.160 |
| Duality         |          |        |          |              |        |          |          |        |      | -0.004    | -0.090 | 1.01 |           |        |       |
| Tenure Chair    |          |        |          |              |        |          |          |        |      | 0.003*    | 1.760  | 1.10 |           |        |       |
| Tenure CEO      |          |        |          |              |        |          |          |        |      | 0.005***  | 2.850  | 1.18 | 0.003**   | 1.810  | 1.090 |
| Tenure NED      |          |        |          |              |        |          |          |        |      | 0.008*    | 1.760  | 1.21 | 0.005***  | 2.950  | 1.100 |
| Age NED         |          |        |          |              |        |          |          |        |      | -0.010*** | -3.650 | 1.27 | 0.008**   | 1.980  | 1.170 |
| Age ED          |          |        |          |              |        |          |          |        |      | -0.001    | -0.670 | 1.21 | -0.010*** | -4.130 | 1.150 |
| Board Size      |          |        |          |              |        |          |          |        |      | -0.112**  | -2.810 | 1.63 | -0.120*** | -3.080 | 1.580 |
| Size            | 0.004    | 0.640  | 1.2<br>5 | 0.009        | 1.310  | 1.3<br>0 | 0.013*   | 1.740  | 1.35 | 0.025***  | 3.090  | 1.67 | 0.024***  | 3.230  | 1.430 |
| MB              | 0.004*** | 3.530  | 1.0<br>3 | 0.004***     | 3.580  | 1.0<br>3 | 0.004*** | 3.450  | 1.03 | 0.004***  | 3.450  | 1.03 | 0.004***  | 3.460  | 1.020 |
| $Adj R^2$       | 0.249    |        |          | 0.254        |        |          | 0.270    |        |      | 0.270     |        |      | 0.272     |        |       |
| F-Stat.         | 26.92*** |        |          | 25.07**<br>* |        |          | 23.66    |        |      | 21.1      |        |      | 34.26     |        |       |

## Table 6. The determinants of FNEDs

The dependent variable is the proportion of foreign non-executive directors (FNEDs). The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations. *Overseas Tax* is the proportion of tax paid overseas over the total tax; *TSR* is total shareholder return (dividends and capital gains) at t-1; *PE* is price to earnings ratio; *Size* is year-end market capitalisation; *SD\_ROA* is the standard deviation of ROA; *FED* is the proportion of executive directors (EDs) who are not UK based; *Board Size* is total board membership; %*NED* is the proportion of non-executive directors on the board; *Duality* is a dummy equal to one if the roles of the CEO and chairman are combined. All the regressions include industry dummies and year effect is captured by the post-2003 and post-2007 periods. Equation 4 excludes financial and utility companies. VIF is the variance inflation factor to test for multi-collinearity; VIF = 1 indicates no correlation, 1 < VIF < 5 moderate correlation and VIF > 5 highly correlated. \*\*\*, \*\* significant at 0.01, 0.05 and 0.1 levels, respectively.

|              | Coef.        | t-stat | VIF  | Coef.         | t-stat  | VIF  | Coef.         | t-stat | VIF  | Coef.         | t-stat | VIF  |
|--------------|--------------|--------|------|---------------|---------|------|---------------|--------|------|---------------|--------|------|
|              |              | (1)    |      |               | (2)     |      |               | (3)    |      |               | (4)    |      |
| Constant     | -0.227***    | -4.000 |      | -1.137***     | -10.430 |      | -0.995***     | -8.340 |      | -1.022***     | -7.370 |      |
| Overseas Tax | $0.040^{**}$ | 2.600  | 1.13 |               |         |      | $0.048^{***}$ | 3.380  | 1.12 | 0.045**       | 2.600  | 1.05 |
| TSR          | -0.084***    | -4.660 | 1.16 |               |         |      | -0.054***     | -3.220 | 1.15 | -0.054**      | -2.830 | 1.11 |
| PE           | 0.001        | 1.600  | 1.33 |               |         |      | 0.001**       | 2.340  | 1.29 | 0.002***      | 3.320  | 1.25 |
| Size         | 0.036***     | 5.720  | 1.37 |               |         |      |               |        |      |               |        |      |
| SD_ROA       | -0.256**     | -1.910 | 1.19 |               |         |      | -0.230*       | -1.850 | 1.19 | -0.428**      | -2.910 | 1.2  |
| FED          | 0.866***     | 12.620 | 1.10 | $0.789^{***}$ | 13.610  | 1.19 | $0.817^{***}$ | 12.530 | 1.14 | 0.703***      | 9.160  | 1.1  |
| Board Size   |              |        |      | 0.139***      | 6.240   | 1.26 | 0.124***      | 4.710  | 1.25 | 0.182***      | 5.560  | 1.11 |
| %NED         |              |        |      | 0.794***      | 16.160  | 1.42 | 0.697***      | 12.270 | 1.25 | $0.885^{***}$ | 14.050 | 1.14 |
| Duality      |              |        |      | -0.004        | -0.170  | 1.01 |               |        |      |               |        |      |
| Tenure Chair |              |        |      | 0.000         | 0.290   | 1.09 |               |        |      |               |        |      |
| Tenure CEO   |              |        |      | 0.002         | 1.600   | 1.17 |               |        |      | $0.006^{**}$  | 2.460  | 1.21 |
| Tenure NED   |              |        |      | -0.011***     | -3.940  | 1.19 | -0.010***     | -3.160 | 1.16 | -0.013***     | -3.160 | 1.21 |
| Age NED      |              |        |      | 0.010***      | 6.010   | 1.23 | 0.009***      | 4.810  | 1.19 | 0.006**       | 2.460  | 1.21 |
| Age ED       |              |        |      | 0.000         | 0.110   | 1.22 |               |        |      |               |        |      |
| Post-2007    | 0.021        | 1.210  | 1.48 | 0.022         | 1.640   | 1.98 |               |        |      |               |        |      |
| Post-2003    | 0.058***     | 3.790  | 1.61 | 0.004         | 0.250   | 1.92 | 0.038***      | 3.060  | 1.26 |               |        |      |
| $Adj R^2$    | 0.367        |        |      | 0.454         |         |      | 0.452         |        |      | 0.457         |        |      |
| F-Stat.      | 38.76***     |        |      | 72.42***      |         |      | 55.48***      |        |      | 47.88***      |        |      |

## Table 7. Board meetings, FNEDs, and the compensation of the chairman and CEO

The dependent variable is log of CEO Remuneration in Panel A, and log of Chairman Remuneration in Panel B. The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations. *FNED* is the proportion of foreign non-executive directors. *Meetings* is the number of meetings reported by the firms in our sample. *Meetings x FNED* is a dummy for firms with lower than median meetings frequency and foreign non-executive directors. *Size* is the log of year-end market value of equity. *Pay Chairman (CEO)* is the total annual remuneration for the chairman (chief executive officer), and *Pay NED* is the average pay for an NED for all board services provided (excluding any advisory or consulting fees and excluding fees for non-executive chairmen). *Surviovors* is a dummy equal to one for companies with data over all our sample period. *TSR* is total shareholder return (dividends and capital gains) at t-1. *MB* is the ratio of year-end market value to book value of equity. All the regressions include industry dummies. Equations (2) and (4) are based on stepwise method. VIF is the variance inflation factor to test for multi-collinearity; VIF = 1 indicates no correlation, 1 < VIF < 5 moderate correlation and VIF > 5 highly correlated. \*\*\*, \*\*, \* significant at 0.01, 0.05 and 0.1 levels, respectively.

|                 | Coef.      | t-stat    | VIF       | Coef.         | t-stat  | VIF    | Coef.       | t-stat    | VIF      | Coef.       | t-stat | VIF  |  |  |
|-----------------|------------|-----------|-----------|---------------|---------|--------|-------------|-----------|----------|-------------|--------|------|--|--|
|                 | Panel A. I | Dependent | variable: | ln(CEO total  | compens | ation) | Panel B. De | al comper | nsation) |             |        |      |  |  |
|                 |            | (1)       |           |               | (2)     |        |             | (3)       |          | (4)         |        |      |  |  |
| Constant        | 3.393***   | 8.290     |           | 3.446***      | 9.630   |        | 1.967***    | 3.550     |          | 2.245***    | 5.590  |      |  |  |
| FNED            | 0.434***   | 3.880     | 2.04      | 0.430***      | 4.770   | 1.33   | 0.188       | 1.290     | 2.1      | 0.242***    | 2.180  | 1.23 |  |  |
| Meetings        | -0.362***  | -4.420    | 1.18      | -0.329***     | -4.180  | 1.09   | 0.112       | 1.050     | 1.23     |             |        |      |  |  |
| Meetings x FNED | -0.009     | -0.310    | 1.84      |               |         |        | -0.013      | -0.340    | 1.84     |             |        |      |  |  |
| Size            | 0.136***   | 4.530     | 2.7       | 0.168***      | 6.910   | 1.79   | 0.279***    | 7.540     | 2.52     | 0.303***    | 8.980  | 2.10 |  |  |
| Pay Chairman    | 0.039      | 1.070     | 1.44      |               |         |        |             |           |          |             |        |      |  |  |
| Pay CEO         |            |           |           |               |         |        | 0.063       | 1.070     | 1.94     |             |        |      |  |  |
| Pay NED         | 0.738***   | 7.180     | 1.9       | $0.784^{***}$ | 8.200   | 1.65   | 0.166       | 1.190     | 2.1      | $0.227^{*}$ | 1.890  | 1.58 |  |  |
| Surviovors      | 0.066      | 1.250     | 1.61      |               |         |        | -0.094      | -1.390    | 1.61     | -0.102      | -1.580 | 1.46 |  |  |
| TSR             | 0.108      | 1.410     | 1.34      |               |         |        | -0.206***   | -2.110    | 1.33     | -0.254***   | -2.940 | 1.04 |  |  |
| PE              | -0.005***  | -2.320    | 1.43      | -0.003*       | -1.790  | 1.13   | -0.004      | -1.370    | 1.44     |             |        |      |  |  |
| SD_ROA          | 0.706      | 1.410     | 1.22      |               |         |        | 0.644       | 1.000     | 1.22     |             |        |      |  |  |
| <u>Post_07</u>  | 0.003      | 0.070     | 1.16      |               |         |        | -0.061      | -1.090    | 1.15     |             |        |      |  |  |
| $Adj R^2$       | 0.464      |           |           | 0.464         |         |        | 0.279       |           |          | 0.282       |        |      |  |  |
| F-Stat.         | 22.07***   |           |           | 43.22***      |         |        | 10.43***    |           |          | 29.91***    |        |      |  |  |



## Figure 1. Annual Distribution of Board Variables.

The chart illustrates the annual distribution of the number of board meetings on the right-hand scale, and, on the left hand vertical scale, the proportion of non-executive directors (%NED), foreign non-executive directors (%FNED), and foreign executive directors (%FED). The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations.



## Figure 2. Distribution of board composition by board meetings.

The chart illustrates the distribution of the mean board size on the left hand vertical scale, and on the right-hand vertical scale, the proportion of non-executive directors (%NED), foreign non-executive directors (%FNED), foreign executive directors (%FED), total shareholder returns (TSR), and the standard deviation of Return on Assets (SD ROA) by board meetings deciles. The sample includes 241 UK firms with full disclosure of meetings and other relevant data, over the period 1999 to 2012, resulting in 1716 firm-year observations.