



Corporate Governance, Degree of Multi-nationality, and Corporate Social Responsibility Disclosure: Evidence from the UK

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Abstract: This paper explores the relationship between both corporate governance and degree of multi-nationality and corporate social responsibility disclosure (CSD). In common with previous studies, both corporate size and type of activities are included as control variables in the study. The paper extends previous studies on CSD in two ways: first, it examines the effect of both corporate governance and multi-nationality which have received little attention in previous studies; and second, it uses information from both annual reports and stand-alone reports. The empirical results show that governance mechanisms are associated with both the quantity and quality of social disclosure while the degree of multinational activities appears not to be related to the level of CSD. Furthermore, governance mechanisms appear to be more related to social disclosure in annual reports than in stand-alone reports. This result supports the theoretical view that corporate governance considerations should be extended to all stakeholders.

Keywords: Corporate Social Responsibility, Corporate Governance, UK.

1. Introduction

Corporate social responsibility disclosure (CSD), which is a voluntary activity in most cases, has been the subject of much research concerning the factors that have influenced its level over the past three decades. These studies have been primarily concerned with the impact of corporate characteristics and media coverage on CSD. In line with legitimacy theory, previous studies have revealed an interest in the idea of public pressure on company disclosure. The general argument from these studies is that companies with certain characteristics (in particular, large companies with environmentally sensitive activities) and those subject to higher levels of media coverage are more likely to face social scrutiny concerning their social responsibilities, and consequently they are more likely to provide more CSD. In this context, the degree of multinational activities has attracted little attention as a corporate characteristic that could influence the level of CSD. Furthermore, the idea of how companies respond to public pressure in

social responsibility and what factors determine the response of companies have also been the focus of little research. Arguably corporate governance mechanisms can play an important role in determining how companies respond to public interest in social responsibility and can consequently influence the level of CSD.

I argue that multi-nationality (along with other corporate characteristics) determines the degree to which the public are concerned with the social responsibilities of companies, and corporate governance mechanisms play an important role in determining how companies respond to this pressure. Therefore, it can be argued that both multi-nationality and governance practices are important determinants of CSD. With regard to multi-nationality, it appears that multinational companies face greater social pressure due to their geographic coverage. Rosenzweig & Singh, (1991) have argued that multinational companies are affected by a variety of forces, some of which are specific to the host country and others are global in nature. They face simultaneous pressure



from local and multinational environments. In the multinational environment, companies are faced with potentially divergent home-country, host-country and international pressures that affect their self-regulation strategies (Muller, 2006:189). Furthermore, operating in multinational environments requires companies to consider national differences in customer needs, which are influenced by the culture of a country (Branco & Rodrigues, 2008: 688).

Brennan & Solomon, 2008, argue that the theoretical framework of corporate governance, which is based on agency theory, should be expanded to include corporate accountability to non-shareholding stakeholder groups. Research has examined the impact of corporate governance mechanisms on various dimensions of corporate disclosure, including: disclosure quality; disclosure timing; internet disclosure; and voluntary disclosure. An examination of the impact of corporate governance factors on CSD is required given the current interest in using corporate governance as a means to improve disclosure transparency, and the evidence from empirical studies that link corporate governance factors with voluntary disclosure (Gul & Leung, 2004; Ajinkya, et al, 2005). The paper is structured as follows. The second section reviews the literature related to determinants of CSD, while third section explains the theoretical background and hypotheses. The last two sections present the methodology and the empirical results.

2. Review of literature on CSD determinants

Researchers who have focused on studying the impact of corporate characteristics on CSD have produced consistent results indicating that both size and industry type are significantly related to levels of CSD, while profitability is not significantly related (Patten, 1991; Hackston & Milne, 1996; Brammer & Pavelin, 2004; and Reverte, 2008, Gao, et al, 2005, Hossain, et al, 2006, Ho & Taylor, 2007). In addition, a number of studies have examined the impact of media pressure on CSD (Adler & Milne, 1997; Brown & Deegan, 1998, Patten, 2002; Deegan, et al, 2002; Cormier & Magnan, 2003; Brammer & Pavelin, 2004, 2006).

In contrast to the considerable level of research into corporate characteristics both multinationality and corporate governance have received little attention. Toms, et al, 2007 and Toms, 2008, state that although a large body of literature exists on the determinants of CSD, there is a little research on the relationship between international activity and CSD. They examine the impact of number of foreign countries, political risk in foreign countries, and environmental risk in foreign countries on CSD on a sample of multinational companies from environmentally sensitive industries. The empirical results show that both political and environmental risks in countries in which the companies operate are associated with CSD, while the number of countries is not. The limitations of these studies are: a high concentration on environmentally sensitive industries (oil, gas, and chemicals) when examining social disclosure; the small sample size; and the confusion between determinants on a country level and on a company level. Branco and Rodrigues, 2008, show non-significant association between multi-nationality, measured by the ratio of foreign sales, and CSD in both annual reports and web sites by Portuguese listed companies. Stanny and Ely, 2008, indicate significant association between foreign sales and environmental disclosure about the effects of climate change based on a sample of S&P 500 companies.

In relation to research on corporate governance, Halme and Huse, 1997, examine the relationship between environmental disclosure and corporate governance variables, type of industry, and country variables in four European countries (Finland, Norway, Spain, and Sweden). The empirical results show no association between both ownership concentration and the number of board members with environmental disclosure, while type of industry appears to be the most important factor in explaining environmental disclosure. Haniffa and Cooke, 2005 examine the impact of culture and corporate governance mechanisms on social reporting in Malaysian companies. The results show disclosure is significantly associated with culture, multiple directorships, and foreign ownership, while non-executive directors are negatively associated with CSD. Ghazali, 2007,



examines the influence of ownership structure on CSD. The empirical findings, based on a sample of 86 Malaysian companies, indicates that two ownership variables—director ownership and government ownership—are significant influences on CSD in annual reports, while ownership concentration is not associated with the level of CSD. In the UK, Brammer and Pavelin, 2006, examine the influence of corporate ownership and board composition (along with other variables) on environmental disclosure. They distinguish between decisions to make voluntary environmental disclosure and decisions concerning the quality of such disclosure. The results show that there is a significant negative relationship between the size of the largest shareholdings in a company and the level of disclosure, while there is no significant relationship between the number of non-executives directors and disclosure. Brammer and Pavelin, 2008, examine factors influencing the quality of environmental disclosure. The empirical results, based on a sample of 447 companies, show that corporate size is significantly associated with the quality of corporate environmental disclosure. Both studies focus on environmental disclosure but did not measure the quantity of disclosure. In addition, they do not present a theoretical justification for the variables used, including the governance variables.

A number of limitations can be found in the research concerning CSD. In addition to a concentration on environmental disclosure, the majority of studies concentrate on measuring the quantity of CSD, while a few studies take into account the quality of CSD (Cormier, et al, 2005, Brammer & Pavelin, 2006, and 2008). A second limitation is the concentration on annual reports as a means of CSD. Although annual reports are considered to be the most important disclosure documents, the growing trend towards CSD has been matched by an increasing volume of stand-alone corporate responsibility reports¹. Despite this growing

trend towards producing stand-alone reports, previous research ignored these disclosures. It is necessary to analyse stand-alone reports as well as annual reports to gain a complete picture of the level of CSD of a company.

Given that little attention has been given to the impact of both corporate governance and degree of multi-nationality on the level of CSD, this paper explores this relationship, and complements previous studies by concentrating on the quantity and quality of social disclosure in both annual and stand-alone reports.

3. Conceptual development and hypothesis

According to a number of researchers such as Toms et al. (2007); Toms, (2008) and Reverte, (2009) legitimacy theory appears to provide a strong theoretical framework for explaining the level of CSD. According to legitimacy theory, CSD is aimed at legitimising company behaviour by providing information intended to influence stakeholders' and eventually society's perceptions about the company (Krivogorsky, 2006). Legitimacy theory suggests that differences in the extent of CSD are a systematic function of differences in public policy pressure facing individual companies (Patten, 2002). We argue that using CSD as a tool to deal with social pressure depends on two factors: the amount of pressure applied to the company; and how companies respond to this pressure. Concerning the first factor, the amount of pressure is related to the company characteristics highlighted by previous research, and also the degree of multinational activities. How a company responds to the pressure is related to its governance, as well-governed companies react positively to social pressure.

3.1. Multi-nationality

According to Tulder and Kolk, (2001), the international operations of a company have a substantial impact on the formulation and implementation of its ethical principles such as codes of conduct. Newson and Deegan, (2002) argue that, based on legitimacy theory, companies respond to the expectations of the public, and for multinational corporations this is not restricted to the home country but is

1. According to KPMG's triennial surveys (initiated in 1993) CSR reports have been steadily rising since 1993 and has increased substantially in the past three years. In 2005, 52% of G250 (global 250 companies) and 33% of N100 (national 100 companies in 16 countries) companies issued separate corporate responsibility reports, compared with 45% and 28% respectively in 2002 and 35% and 24% respectively in 1999 [50; 51].



global. Depoers (2000) argues that operating in a number of geographical areas including other countries increases the amount of information controlled by a company. Moreover, companies are induced to comply with the usual disclosure practices in countries in which they operate. Riahi-Belkaoui (2001) argues that there are two reasons why we might expect a positive association between disclosure and multi-nationality:

- a) The capital-need hypothesis, which means that much of the impetus for voluntary disclosure by multinational companies surrounds the need to raise capital at the lowest possible cost. The pressure for information associated with global competition for capital manifests itself in the supplementary voluntary disclosures that multinational companies have been found to make.
- b) The multiple listing hypotheses, which means that multinational companies are generally listed on more than one stock exchange. The companies with multiple listing are more likely to have a greater number of shareholders which increases monitoring costs. One method to reduce shareholders' monitoring costs and alleviate the moral hazard problem is through disclosure in corporate annual reports. The literature provides mixed results on the relationship between multi-nationality and disclosure. Webb et al. (2008) indicate a positive association, while Gelb et al. (2008) indicate a negative association between the two variables. The literature concerning CSD reveals little focus on the impact of multi-nationality on CSD, compared with other corporate characteristics. Toms et al. (2007) and Toms (2008) find no relationship between the number of foreign countries in which a company operates and the level of CSD. Also, Branco and Rodrigues (2008) find no relationship between the ratio of foreign sales and CSD. However, Stanny and Ely (2008) find an association between them.

In summary it can be argued that, due to their geographical spread, multinational companies

are more likely to face greater social pressure because this arises each of the host societies in which the company operates. Consequently, the company should increase the level of CSD as a tool to mitigate this pressure and legitimatise its activities. As a result, the following hypotheses are examined:

H_{1a}: The quantity of CSD is positively related to the degree of multinational activities.

H_{1b}: The quality of CSD is positively related to the degree of multinational activities.

3.2. Corporate Governance

The theoretical roots of corporate governance are derived from agency theory. This theoretical framework results in governance practices adopting a shareholder-oriented approach. Hill and Jones (1992) argue that agency theory considerations should be applied not only to shareholders but also to all stakeholders (a stakeholder-agency theory). As a result, analysis of corporate governance has been extended from the traditional shareholder-oriented approach towards a more stakeholder-oriented approach (Brennan & Solomon, 2008: 890). We argue that corporate governance mechanisms could play an important role in how companies respond to societal pressure concerning their social and environmental responsibilities and consequently the level of CSD as a tool to offset this pressure. Ho and Wong (2001) highlight that there are two competing viewpoints on the impact of corporate governance on CSD. The first is that more governance mechanisms will improve the internal control and consequently increase the level of disclosure to reduce information asymmetry. The second is that additional governance mechanisms will lead to greater monitoring and therefore the need for disclosure as a form of monitoring will decrease.

According to Bahgat and Bolton (2008) the board of directors is an important determinant of corporate governance. Halme and Huse (1997) argue that the role of the board may be linked to the companies' focus on the environment; environment groups and corporate activists ask the board of directors to make their companies behave in a socially acceptable



manner as the board can operate as 'superego' for their companies. The degree to which the board will affect CSD may also depend on the characteristics of this corporate governance mechanism. Thus, the characteristics of the board can be seen as an indicator of corporate governance.

3.2.1. Board size

There is a theoretical debate surrounding the size of the board of directors; while some researchers argue that a larger board promotes more effective decision-making and enhances information-processing capabilities, others argue that a larger board leads to less participation between members and increases the opportunity for manipulation on the part of corporate management (Ho & Williams, 2003: 475). According to John and Senbet (1998), while the board's monitoring capacities increase in relation to the board size (number of members on the board), the incremental costs of poorer communication that are often associated with large groups may offset this benefit. Halme and Huse (1997) argue that in a large board, there is a higher probability of a broader range of stakeholders, which indicates that a higher level of environmental attention can be expected. In addition, there is no consistent evidence to suggest a relationship between corporate size and voluntary disclosure (Cheng & Courtenay, 2006). I argue that increasing the number of directors on the board could provide better communication with the community, and consequently a greater probability that companies will react positively to social pressure. Therefore, the following hypotheses are examined:

H_{2a}: The quantity of CSD is positively associated with the size of board of directors.

H_{2b}: The quality of CSD is positively associated with the size of board of directors.

3.2.2. Board composition: non-executive directors

Non-executive directors are considered a governance mechanism that enhances the board's capacity to ameliorate agency conflicts between owners and managers.

These conflicts may occur in the decision to voluntarily disclose information in annual reports (Barako et al., 2006: 111). Chen (2006) indicates that in the US non-executive directors are shown to play a more important role in monitoring managers than executive board directors. Anderson and Reeb (2004) argue that independent directors can defend the minority shareholders by protecting their rights against large-shareholders' opportunism; independent directors play an important role in balancing the interests of competing shareholders and act as an influential governance mechanism in protecting outside shareholders from large shareholders' expropriation. According to Chen and Jaggi (2000) the inclusion of non-executive directors means that a corporate board will become more responsive to investors and will improve the company's compliance with disclosure requirements, which in turn will improve the comprehensiveness and quality of disclosure. Research provides mixed evidence on the relationship between disclosure and the independence of the board of directors. For example, Beasley (1996), Chen and Jaggi (2000) and Xiao et al. (2004) find a positive association between disclosure and the independence of the board while Eng and Mak (2003) and Gul and Leung (2004) find a negative relationship.

Rose (2007) argues that new regulations requiring more independent directors are a major step in improving corporate ethics and social responsibility. I argue that the presence of non-executive directors on the board is a tool to link the company with various stakeholders and the community as a whole, and therefore they represent one of the factors that drive the company to deal with the community's concern about social responsibility. Thus, the increasing percentage of non-executives directors on the board will encourage companies to react positively to social pressure, and consequently to increase the level of CSD. The hypotheses examined are:

H3a: the quantity of CSD is positively related to the percentage of non-executive directors.

H3b: the quality of CSD is positively related to the percentage of non-executive directors.



3.2.3. The presence of a corporate responsibility committee

The existence of a corporate responsibility committee (CRC) as part of the board is a sign of the company's interest in social responsibility. This reflects the company's desire to perform its activities in line with the social responsibility guidelines and rules. We argue that the presence of the CRC, as one of the board's committees, is one of the factors that drive companies to positively react to social pressure concerning the company's social responsibility and, consequently, to increase the level of CSD.

H_{4a} : the quantity of CSD is positively related to the presence of CRC as one of the board's committees.

H_{4b} : the quality of CSD is positively related to the presence of CRC as one of the board's committees.

3.2.4. Corporate ownership

Agency theory supports the argument that ownership diffusion is positively related to corporate disclosure. The more diffuse the ownership, the greater the corporate disclosure because this helps owners to monitor the behaviour of management. When ownership is less diffuse, less monitoring is required. A negative relationship between block ownership and disclosure is reported in previous studies (Mitchell et al., 1995; Schadewitz & Blevins, 1998 and Kelton & Yang, 2008). This implies that a higher percentage of substantial shareholder ownership leads to less need for monitoring and transparent disclosure. Reverte (2008) argues that companies with widely distributed shares are more likely to improve their financial reporting policy by using CSD; on the other hand, companies with concentrated ownership are less motivated to disclose additional information on their corporate social responsibility (CSR). It can be argued that higher ownership diffusion encourages management to positively react to social pressure through increasing the level of CSD to maintain owners' satisfaction, and consequently there is a negative association between CSD and block ownership.

H_{5a} : the quantity of CSD is negatively associated with the block ownership

H_{5b} : the quality of CSD is negatively associated with the block ownership

4. Methodology

4.1 The Sample and Social Disclosure Index

The sample contains both FTSE 100 and FTSE 250 companies over two years, 2005 and 2006. Due to problems in obtaining annual reports for some companies, the final number of companies is 317 companies in 2005 and 327 companies in 2006. To measure social disclosure in annual reports a disclosure index² based on previous research is built (Gray, et al, 1995 b; Hackston & Milne, 1996; Hall, 2002; Newson & Deegan, 2002; Williams, 1999; Williams & Pei, 1999; Deegan, et al, 2002). This index uses a sample of annual reports for 20 UK companies and is modified to be more relevant to UK reporting practice.

4.2 The Measurement of CSD

The quantity and quality of CSD is measured through two types of documents: annual reports and stand-alone reports.

1) Measurement of quantity of CSD.

a) Annual reports:

Measurement the quantity of CSD in annual reports is a controversial matter; some studies use number of pages and others use number of sentences as a measure. We will measure the quantity of CSD in two ways: number of pages³ and number of sentences.

b) Stand-alone reports:

The quantity of disclosure is measured as the total number of report pages.

c) Total quantity of CSD:

2. Appendix 1 presents the social disclosure index.

3. The number of social disclosure pages is measured by using two methods:

The percentage of social disclosure lines to total lines in pages. This method is used if the lines of pages are of a similar font.

Using A4 paper divided into 100 parts (4 columns and 25 rows). This method is used if the lines of pages are of different fonts or social disclosure in a page contains non-narrative disclosure such as charts or graphs.



This variable is measured by the total number of CSD pages in both annual and stand-alone reports.

2) Measurement of quality of CSD.

a) Annual reports:

The literature uses various ranking systems to measure quality of CSD. Using a ranking system consisting of many points reduces the reliability of measurement. To obtain a more reliable ranking system, we argue that disclosure quality depends on whether this disclosure provides specific information or just general statements. The quality of CSD in annual reports is measured using a 2-point scale system to assess the quality of social disclosure in annual reports as follows:⁴

- 1 if disclosure is quantity based, graphs, or narrative disclosure which reports the policies and activities of a company concerning its social responsibility, OR
- 0 otherwise. The total score is ascertained by evaluating each sentence of social disclosure according to this rating, then the average score (total score / number of sentences) is calculated.

b) Stand-alone reports:

We use an indicator for the quality of a stand-alone report based on two points: first, whether this report is prepared based on guidelines such as GRI or AAA; and second, whether this report is audited by independent auditor.⁵ The quality of stand-

alone reports will be measured according to the following rating:

1 if the stand-alone report is audited, and 0 otherwise.

1 if the stand-alone report is prepared according to guidelines and 0 otherwise.

c. Total disclosure quality:

Disclosure score in annual report + disclosure score for a stand-alone report.

To measure reliability in disclosure measurement (quantity and quality), the annual reports for 56 companies that were randomly selected from the sample are reviewed by two independent persons.⁶ Then the intercoder reliability is measured by a number of reliability measures, including percent agreement, Scott's Pi, Cohen's Kappa, and Krippendorff's alpha. These measures indicate a high degree of agreement between the two coders. Thereafter the differences between the results are discussed to identify the reasons behind these differences. In addition, the categories of CSD index—environment (env), community (com), employees (emp), product (pro), customer (cus), ethical (eth), and other (oth)—are examined for internal consistency using Cronbach's coefficient alpha to assess the internal consistency of disclosure. Cronbach's coefficient alpha takes on a minimum value of zero and a maximum value of one, and as a general rule, an alpha of 0.7 or more is acceptable. The Cronbach's coefficient alpha for the seven categories in the disclosure index is 0.71 and 0.69 in 2005 and 2006 respectively. This result is considered acceptable as compared to alpha 0.64 in Botosan (1997), and 0.51 in Gul and Leung (2004). Also, the correlation analysis between broad categories is performed; the correlation coefficients between disclosure categories show that the categories of CSD are correlated. In addition, we examine the correlation between total disclosure for the same companies (292 companies) in 2005 and 2006, and the result shows a high significant correlation between the level of disclosure in the two years (α 0.798 and Sig 0.000).

4. This rating score is similar to that used in study by Cormier et al. (2005) which uses the rating based on scores of one to three: three for items described in quantitative terms; two when an item is described specifically; and one for an item discussed in general.

5. Credible data can be viewed as a central part of corporate responsibility, and more stakeholders are demanding CSR reports that truly represent what the companies have achieved and what they will achieve in the future. As a result third party assurance of CSR reports appeared at the beginning of 1990s (Park & Brorson, 2005: 1096). The independent assurance must be shown to add value and the growing demands for more robust disclosure require a significant innovation in assurance standards (Accountability, csnetwork, 2004: 9). The absence of reporting gridlines could create a confusion which might make it difficult for readers to identify what to look for in corporate responsibility reports, and without auditing CSR reports, the companies could make exaggerated claims that may be unverifiable. This limits the usefulness of corporate responsibility reports (Idowu & Towler, 2004: 434).

6. One of them is a member of this research team and another one is independent of the team.



4.3. Independent Variables

The independent variables are corporate governance variables and degree of multi-nationality. The governance variables are: (1) board size, which is measured by the total number of directors on the board; (2) non-executive directors, which is measured by two alternative indicators, the proportion and the number of non-executive directors on the board; (3) the existence of a CRC as a board committee, which is measured as a dummy variable with value 1 if there is a committee, and value 0 otherwise; and (4) block ownership which is measured by the percentage of shares held by substantial shareholders (shareholders with 3% or more of the company shares). Concerning the multi-nationality variable, we focus on two alternative measures: the ratio of foreign sales to total sales; and the number of foreign countries in which the company has subsidiaries.

4.4. Control Variables

Previous studies report consistently that there is a significant association between both company size and type of activity on level of CSD. As a result, we control these two variables. Corporate size is measured by the logarithm of total number of employees. Previous studies provide various measures for corporate size, but there is no theoretical basis on which to select just one. The type of activity is measured as a dummy variable with value 1 if the company is an industrial company and 0 otherwise. Previous studies use a dummy variable which differentiates between high and low environmental profiles, which we consider more appropriate to the study of the environmental disclosure. In order to study complete CSD we differentiated between industrial and non-industrial companies.

4.5. The Empirical Model

To examine the impact of corporate governance and multi-nationality on CSD, we use the following regression model:

$$CSD = \beta_0 + \beta_1 DMAfc + \beta_2 BS + \beta_3 NEDp + \beta_4 CRC + \beta_5 SS + \beta_6 CSnoe + \beta_7 TA + \infty$$

Where:

CSD	Corporate social responsibility disclosure
DMAfc	Degree of multinational activities measured by number of foreign countries
BS	Board size
NEDp	Proportion of non-executive directors in the board
CRC	The presence of a corporate responsibility committee as a board committee measured as a dummy variable
SS	Percent of shares held by main shareholders
CSnoe	Corporate size measured by log. of total number of employees
TA	Type of activity measured as a dummy variable

There are six dependent variables: quantity and quality of social disclosure in annual reports (CSDars and CSDarq); quantity and quality of a stand-alone report (CSDsa and CSDsaq); and total social disclosure in both annual and a stand-alone reports (CSDT and CSDTQ). These dependent variables are measured as previously noted.

5. Results and discussion

5.1. Descriptive Statistics

Table 1 provides descriptive statistics for CSD in 2005 and 2006 and highlights similar results for both years, which indicates that there is no significant change in the disclosure policy between two years. The only observed change is the increase in the quantity of social disclosure in annual reports (CSDars), measured by the number of sentences: from 102.24 sentences in 2005 to 115.48 sentences in 2006. There is a slight decrease in the quantity of stand-alone reports (CSDsa), from 16.35 pages in 2005 to 16.14 in 2006. Also, there is a slight increase in the total quantity of disclosure in both annual and stand-alone reports (CSDT) from 19.79 pages in 2005 to 19.93 in 2006.

Concerning the disclosure quality, we note that the quality scores are very similar in 2005



and 2006; the average score for disclosure quality in annual report (CSDarq) is the same in 2005 and 2006 (0.43)⁷ which means that more than half of CSD is just general statements. There is a slight increase in both the quality score for stand-alone reports from 0.32 in 2005 to 0.34⁸ in 2006. The total disclosure quality score (CSDTQ) increased slightly from 0.74 in 2005 to 0.75⁹ in 2006, which indicates that the company’s strategy in preparing the corporate responsibility reports did not change significantly between the two years. This also indicates that there was little use of the corporate responsibility initiatives, such as GRI and AAA, by the companies. Furthermore, the majority of reports were not audited.

The results show that in 2005 there are only 7 companies (2.2%) and in 2006 only 6 companies (1.8%) that do not provide corporate responsibility disclosure in their annual reports.

Also, there are 217 companies (68.5 %) in 2005 and 221 (67.6%) in 2006 that provide a specific section for corporate responsibility disclosure in their annual reports, while 100 companies (31.5%) in 2005 and 106 (32.4%) in 2006 do not provide this section. In addition, there are 122 companies in 2005 and 128 companies in 2006 that provide a stand-alone report, while 195 companies in 2005 and 199 in 2006 do not provide such reports. Furthermore, there are 236 (71.7%) and 242 (72.0%) companies in 2005 and 2006 respectively that do not use reporting guidelines in preparing corporate responsibility reports nor do they use an independent auditor to review these reports. 34 (10.3%) and 35 (10.4%) companies in 2005 and 2006 respectively use either reporting guidelines or independent auditors, while 32 (10.6%) and 35 (10.4%) companies in 2005 and 2006 respectively use both reporting guidelines and an independent auditor.

Table 1. Descriptive Disclosure for CSD

	N	Minimum	Maximum	Mean	Std. Deviation
Part 1:2005					
CSDars	317	0	500	102.24	76.473
CSDarq	310	0	1	0.43	0.159
CSDsa	303	0	230	16.35	28.973
CSDsaq	302	0	2	0.32	0.658
CSDT	317	0	232	19.79	29.015
CSDTQ	310	0	3	0.74	0.695
Part 2:2006					
CSDars	331	0	691	115.48	89.511
CSDarq	321	0	1	0.43	0.164
CSDsa	312	0	247	16.14	27.022
CSDsaq	312	0	2	0.34	0.670
CSDT	331	0	252	19.93	27.326
CSDTQ	321	0	3	0.75	0.714

7. The score rating is between 0 and 1.
 8. The score rating is between 0 and 2.
 9. The score rating is between 0 and 3.

Table 2 provides descriptive statistics for independent variables. With regard to the degree of multi-nationality, the average percentage



of foreign sales is 0.42 in 2005 and 0.40 in 2006. In comparison Stanny and Ely (2008) found an average of foreign sales 0.23 for a sample of 500 S&P companies, which reflects the high percentage of multinational activities in the sample. The average number of foreign countries is 6.81 and 6.66 in 2005 and 2006 respectively, compared with an average number of foreign countries of 17.85 in Toms, et al, 2007 and Toms, 2008. This difference in results may be due to the fact that in both Toms' papers the sample is focused on multinational companies in certain industries. The analysis of these averages according to the type of activity (not reported) show that the average foreign sales is 0.36 and 0.33 in non-industrial companies compared to 0.53 and 0.52 in industrial companies in 2005 and 2006 respectively. The average number of foreign countries is 5.46 and 5.32 in non-industrial companies and 9.18 and 9.10 in industrial companies in 2005 and 2006 respectively. These figures highlight the large difference in the level of multinational activities between industrial and non-industrial companies in the sample.

Concerning corporate governance variables, the range of board size is between 5 and 20 in 2005 and between 3 and 18 in 2006, with roughly the same average board size; 9.58 and 9.53 in 2005 and 2006 respectively. This compares with an average of 7.7 in Singapore (Cheng & Courtenay, 2004), an average of 7.099 in South Africa (Mangena & Chamisa, 2008), an average of 10.34 in USA (Kanagaretnam, et al, 2007), and an average 9.46 in India (Sarkar & Sarkar, 2008). Thus, the board size in the sample can be considered to be large. The average of board size is similar to that found in the PIRC (Pensions and Investment Research Consultants) survey of FTSE 350 companies (1998), 9.8 directors per board. The similarity of these results shows that a large board is a traditional practice in UK companies over time. The average number of directors does not differ between industrial and non-industrial companies, as the average is 9.61 and 9.53 respectively in 2005, and 9.55 and 9.51 in 2006. The average percentage of non-executive directors is 0.62 in 2005, which increased marginally to 0.64 in 2006, while

the average percentage of independent non-executive directors increased from 0.50 in 2005 to 0.51 in 2006. These figures indicate that more than 60% of the directors on the board are non-executive directors, and more than half of the directors are independent, which reflects that majority of non-executive directors are independent. The proportion of non-executive directors is high compared to 0.72 in USA (Kelton & Yang, 2008), 0.06 in Hong Kong (Gul & Leung, 2004), 0.37 in Singapore (Cheng & Courtenay, 2004), 0.36 in Spain (Arcay & Vazquez, 2005) and 0.31 in sample of various European countries Krivogorsky, 2006). The average number of non-executive directors increased from 5.96 in 2005 to 6.02 in 2006, while the average number of independent non-executive directors increased from 4.89 in 2005 to 4.95 in 2006. These figures are similar to the 4.40 average found in Brammer and Pavelin (2006). When compared with the PIRC (1998) survey, the number of non-executive directors has increased over a four-year period from 4.83 to 5.13, reflecting an increase in the number of non-executive directors in UK companies over time. The average proportion of non-executive directors and independent non-executive directors is similar between industrial and non-industrial companies, reflecting that a high proportion of non-executive directors is common practice in different economic sectors. The majority of companies (271 and 270 in 2005 and 2006 respectively) do not have CRC as a board committee, indicating that this is not become a common practice in UK companies. An analysis of the presence of CRCs between the two types of companies in the sample reveals that these are more represented in industrial companies than in non-industrial companies. The average percentage of shares held by major shareholders in 2005 is 31.21% and 32.44% in 2006.

In relation to the control variables, the majority of companies in the sample are non-industrial companies 201 (63.4%) in 2005 and 207 (63.5%) in 2006. The average number of employees is 18685.95 and 18636.99 in 2005 and 2006 respectively, reflecting the large size of companies in the sample.



Table 2. Descriptive Statistics for Independent Variables of the Sample

	N	Min.	Max.	Mean	Std. Deviation
Part 1:2005					
DMA	301	0	1	0.42	0.351
DMAfc	296	0	61	6.81	9.046
NEDn	314	0	15	5.96	2.022
INEDn	309	0	15	4.89	1.799
BS	314	5	20	9.58	2.615
NED	314	0	1	0.62	0.147
INED	314	0	1	0.50	0.164
SS	307	3.1	92	31.21	18.094
EMPLOY	295	15	406924	18685.95	41898.131
frequencies					
	CRC			TA	
0	271(85.8)			201(63.4%)	
1	45(14.2)			116(36.6%)	
Part 2:2006					
DMA	308	0	1	0.40	0.352
DMAfc	302	0	61	6.66	9.024
NEDn	324	0	15	6.02	1.974
INEDn	313	0	15	4.95	1.788
BS	324	3	18	9.53	2.667
NED	324	0	1	0.64	0.144
INED	324	0	1	0.51	0.181
SS	318	3.35	92	32.44	17.942
EMPLOY	304	5	406924	18636.99	41898.131
frequencies					
	CRC			TA	
0	270(83.6)			207(63.5)	
1	53(16.4)			119(36.5)	

5.2. Correlation results

To test the levels of association between the different dependent and independent variables, pair-wise Pearson's correlations were performed. The correlation coefficients are reported in table 3. Concerning the degree of multi-nationality, the correlation results show that the ratio of foreign sales (DMA) is correlated only with the quantity of disclosure in annual report (CSDars), while the number of foreign countries is significantly correlated with the quantity of disclosure and

not correlated with the quality of disclosure. Concerning corporate governance variables, the results show that, in general, board size and CRC are significantly correlated with the level of CSD, with regard to the non-executive and independent non-executive directors. In addition, the number of both non-executive and independent non-executive are significantly correlated with the level of CSD (quantity and quality), while the proportion of directors is not correlated. Also, the percentage of substantial shareholdings is negatively correlated with the level of CSD (quantity and quality). It appears



that the degree of multinational activities measured by the number of foreign countries is correlated with the quantity of CSD, but it is not correlated with quality of CSD. The corporate governance variables are correlated with the quantity and quality of CSD. The results show

that consistent with previous studies, corporate size is significantly correlated with the level of CSD (quantity and quality), and, in general, the type of activities is correlated with the level of disclosure.

Table 3. The Correlation Results 5.3. Regression Results

Part 1: 2005	CSDar	CSDary	CSDsa	CSDsay	CSDt	CSDty
DMA	.160 .005	.014 .817	.003 .965	.018 .768	.015 .798	.011 .849
DMAfc	.241 .000	.021 .715	.239 .000	.115 .054	.236 .000	.098 .094
NEDn	.346 .000	.134 .019	.289 .000	.369 .000	.303 .000	.362 .000
INEDn	.333 .000	.167 .004	.314 .000	.374 .000	.328 .000	.380 .000
BS	.350 .000	.181 .001	.333 .000	.362 .000	.351 .000	.367 .000
NED	.009 .878	-.044 .446	-.010 .858	.047 .419	-.010 .859	.064 .261
INED	.007 .907	.033 .570	.025 .663	.041 .475	.026 .644	.079 .169
CRC	.269 .000	.075 .186	.261 .000	.274 .000	.280 .000	.265 .000
SS	-.196 .001	-.163 .005	-.188 .001	-.224 .000	-.203 .000	-.252 .000
CSnoe	.391 .000	.235 .000	.410 .000	.425 .000	.436 .000	.453 .000
TA	.279 .000	.045 .429	.109 .057	.160 .005	.143 .011	.158 .005

Part 2: 2006						
	CSDar	CSDary	CSDsa	CSDsay	CSDt	CSDty
	.199 .000	.072 .209	.008 .887	.038 .514	.036 .530	.052 .369
	.205 .000	.092 .113	.054 .364	.173 .003	.070 .225	.169 .003
	.343 .000	.271 .000	.326 .000	.451 .000	.349 .000	.476 .000
	.315 .000	.269 .000	.375 .000	.470 .000	.394 .000	.499 .000
	.359 .000	.262 .000	.333 .000	.417 .000	.366 .000	.446 .000
	-.041 .458	-.047 .405	.011 .849	.066 .249	-.002 .966	.065 .250
	.019 .730	.043 .443	.110 .054	.135 .017	.095 .087	.148 .008
	.290 .000	.131 .020	.293 .000	.316 .000	.322 .000	.321 .000
	-.175 .002	-.162 .004	-.327 .000	-.329 .000	-.332 .000	-.346 .000
	.459 .000	.366 .000	.455 .000	.482 .000	.493 .000	.535 .000
	.254 .000	.145 .009	.091 .110	.138 .015	.140 .011	.170 .002



To examine the impact of multi-nationality and governance practices on CSD, regression analysis was performed. Six different dependent variables were tested, each of which determines the type of regression test used. Two types of regression test are used: OLS linear regression; and Poisson regression (for count data). Regression models that examine the dependent variables CSDars, CSDarq, CSDT, and CSDTQ, are conducted using linear regression model which researchers consider to be a common method. Various regression diagnostics checks are performed to examine the assumptions of the linear regression model. The results find limited normality problem, while there is no multicollinearity problem. However, it appears that there is a problem with heteroskedasticity, this is addressed in 5.3.4.

Given that dependent variables CSDsa and CSDsaq are count data, we conduct the regression analysis using Poisson regression (Long & Freese, 2003). A likelihood ratio chi-squared statistic test (goodness of fit chi2) is conducted to examine over-dispersion, and

the results show that Poisson distribution is appropriate to examine determinants of CSDsaq, but not appropriate for dependent variable CSDsa. An alternative method for Poisson regression is negative binomial regression which is considered to be appropriate with dependent variables that have over-dispersion.

5.3.1. Panel data analysis

The advantage of panel data regression is that it takes the effect of time into account. As Cormier et al. (2005) state, if an OLS regression for one period provides a picture, panel data provide a sequence of pictures. The regression results are divided into two parts: the first for the regression results related to the analysis of the quantity of CSD (models 1, 2, and 3); and the second for the analysis of the quality of CSD (models 4, 5, and 6). Table 5 provides the results of regression models.¹⁰

10. Both fixed-effects regression and random-effects regression were performed, and the R2 values show that random-effects models provide more consistent results than fixed-effects models.

Table 4. A Likelihood Ratio Chi-squared Statistic Test

	<u>CSDsa</u>		<u>CSDsaq</u>	
	<u>2005</u>	<u>2006</u>	<u>2005</u>	<u>2006</u>
Goodness-of-fit chi2	6102.085	6497.065	175.3633	176.0631
Prob > chi2(225)	0.0000	0.0000	0.9939	0.9998

Table 5. Regression Results

	Dependent variables					
	Quantity of CSD			Quality of CSD		
	Model (1) <u>CSDars</u>	Model (2) <u>CSDsa</u>	Model (3) <u>CSDT</u>	Model (4) <u>CSDarq</u>	Model (5) <u>CSDsaq</u>	Model (6) <u>CSDTQ</u>
DMAfc	0.5848155	-0.0478234***	0.0901285	-0.0004779	-0.0140826	0.0001801
BS	6.878979***	0.0846217**	2.060443***	0.0067282**	0.1778413***	0.0570653***
NEDp	60.5404**	2.346835**	16.42942	0.0783891	1.222346	0.589057**
CRC	28.34776***	0.4278909*	12.50517***	0.0081256	0.5954816**	0.2789694***
SS	-0.4345967**	-0.0140527**	-0.262003***	-0.0007761*	-0.0182384**	-0.0059704***
CSnoe	20.0017***	0.6777792***	5.137839***	0.0347005***	0.360462**	0.1508155***
TA	26.31723***	0.5851371*	3.201955	0.0137117	0.3636059	0.105425
No. of observations	553	530	553	551	529	551



	Dependent variables					
	Quantity of CSD			Quality of CSD		
	Model (1) CSDars	Model (2) CSDsa	Model (3) CSDT	Model (4) CSDarq	Model (5) CSDsaq	Model (6) CSDTQ
R ² :within	0.0483		0.0001	0.0003		0.0010
Between	0.2956		0.3002	0.1358		0.3344
Overall	0.2553		0.2495	0.1255		0.3119
Wald chi ² (7)	139.93	56.71	118.61	45.74	61.90	131.49
Prob > chi ²	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Log likelihood		-1466.9014			-324.95533	
model	Random-effects GLS regression	Random-effects negative binomial regression	Random-effects GLS regression	Random-effects GLS regression	Random-effects Poisson regression	Random-effects GLS regression

(* Significant at 0.1 level, ** significant at 0.05 level, *** significant at 0.01 level)

In general, the results indicate that multi-nationality is not associated with CSD, while governance practices tend to be associated with the level of CSD. The degree of multinational activities (DMAfc) appears not to be associated with CSD with the exception of an unexpected negative association with the quantity of disclosure in stand-alone reports (CSDsaq). With regard to governance variables, board size (BS), corporate responsibility committee (CRC) and substantial shareholders (SS) seem to be associated with CSD, with the exception of non-association between CRC and CSDarq. The proportion of non-executive directors (NEDp) is associated with quantity of disclosure in both annual and stand-alone reports, while it is not associated with quality of disclosure.

5.3.2. Discussion

The results provide evidence that the degree of multinational activities is not associated with level (quantity and quality) of CSD, reflecting that geographical spread has no impact on both the quantity and quality of social disclosure. An unexpected negative association between DMAfc and CSDsa was found. This weak association (coef. -0.0478234) reflects that increasing the number of countries in which a company operate leads to a decrease in the quantity of CSD in stand-alone reports. The non-association between the degree of multinational

activities and the quantity of disclosure in annual reports is consistent with the findings of Branco and Rodrigues (2008), which indicate the absence of a relationship between multinationality and CSD in annual reports, but it is not consistent with Stanny and Ely (2008). In the UK context, this result is consistent with the findings of Toms et al. (2007) and Toms (2008). The absence of a relationship between multi-nationality and CSD may be due to the probability that the geographical dispersion, in most cases, is in developing countries in which there is little concern with the social responsibility of a company. Therefore, it can be argued that multinational companies face more social pressure in home countries than they face in host countries. The regression results provide evidence to reject the first hypothesis, which posits an association between DMAfc and CSD, as there is no clear relation between DMAfc and quantity or quality of social disclosure. It appears that the impact of multinationality on CSD is consistent between various disclosure variables, as there is no association between DMAfc and neither quantity nor quality of CSD in both annual and stand-alone reports.

With regard to corporate governance variables, the regression results show that, in general, there is an association between corporate governance and the level of CSD, as the majority of governance variables (BS, CRC,



and SS) are significantly associated with CSD; however, the variable of non-executive directors is not associated. The results provide evidence of a positive association between board size and level (quantity and quality) of CSD. This result reflects that increasing the number of directors on the board positively influences CSD policy. The positive association between BS and quantity of CSD in annual reports highlights that increasing the number of directors on the board is associated with greater quantity of CSD in annual reports. This result is in contrast to the result of Halme and Huse (1997), which indicates the absence of a relationship between board size and environmental disclosure in annual reports. The positive association between BS and quality of CSD highlights that increasing the number of directors on the board influences the type of social and environmental information in annual reports, and encourages the use of both reporting guidelines in preparing corporate responsibility reports and independent auditors. In addition, the results show that the association of BS with CSDars is stronger than the association with other dependent variables (coef 6.878979), indicating that boards are more interested in using annual reports as a main corporate document. The association of board size with total quantity of disclosure is stronger than the association with total quality of disclosure (coef. 2.060443, and 0.0570653 for CSDT and CSDTQ respectively), highlighting that the board of directors is more concerned with the quantity of disclosure than with its quality.

The overall results provide evidence to support hypothesis H2, which posits an association between board size and CSD, as there is an association between board size and both quantity and quality of CSD. This finding supports the theoretical view that board size has an impact on corporate disclosure policy. The result can be interpreted in the context of legitimacy theory as increasing number of directors on the board provides a greater opportunity for the presence of members who are more interested in CSR, and/or provide better communication between company and the community. Consequently, companies with a higher number of directors on the board are

more likely to react positively to social pressure by using tools such as increasing the quantity of social and environmental information.

The mixed results concerning proportion of non-executive directors (BEDp), reveals that NEDp tends to be associated with the quantity of CSD (with the exception of non-association between NEDp and CSDT), while it appears not to be associated with the quality of CSD (with the exception of an association with CSDTQ). This result could indicate that companies with a high proportion of non-executive directors are more likely to provide a large quantity of CSD. The positive association between NEDp and quantity of CSD in annual reports is not consistent with the findings of Prado-Lorenzo et al. (2009), and, in the UK, Brammer and Pavelin (2006), which both indicate no relationship between the number of non-executive directors and environmental disclosure. This difference in results may be due to the focus of the previous studies solely on environmental disclosure and/or the use a different indicator to measure the variable (number of non-executive directors). The non-association between NEDp and quality of CSD is consistent with Brammer and Pavelin (2008) who found no association between number of non-executive directors and the quality of environmental disclosure. The coefficients values show that NEDp is more closely associated with the quantity of disclosure in annual reports than the quantity in stand-alone reports (coef. 60.5404 and 2.346835 for CSDars and CSDsa respectively).

The overall results provide limited support for hypothesis 3a, which states there is an association between NED and quantity of CSD, while the results provide evidence to reject hypothesis 3b which posited a positive association between NEDp and quality of CSD. This result can be understood in the context of legitimacy theory as increasing the proportion of non-executive directors on the board gives more probability that companies respond positively to social pressure and consequently provide more social and environmental information. This finding supports the view that non-executive directors in companies play a bridging role between the activity of the company and the concerns of the community.



The presence of a CRC tends to be associated with the quantity of CSD, with the exception of non-association between CRC and CSDarq. This result highlights the positive influence of the presence of CRC as a board committee on CSD. CRC has a strong positive association with quantity of disclosure in annual reports (coef. 28.34776), indicating a high degree of influence by the presence of CRC on the quantity of disclosure in annual reports. This result is not consistent, to large extent, with the study of Cowen et al. (1987),¹¹ which indicates that the presence of CRC is related with one type of social disclosure. CRC is not associated with quality of CSD in annual report highlighting the lack of focus of the committee on the quality of disclosure compared with its quantity. It appears that CRC is associated with the quality of CSD in stand-alone reports, indicating that the presence of CRC as a board committee plays an important role in preparing corporate responsibility reports. It appears that CRC is interested in using reporting guidelines (such as GRI and AAA) and using independent auditors to review these reports. Also, CRC is significantly associated with CSDsa, CSDsaq, CSDT, and CSDTQ, and the association with the quantity of disclosure is stronger than association with its quality. It is notable that the presence of a CRC has a strong effect on the level of CSD. The overall results support hypothesis 4, which posits a positive association between CRC and CSD, as the results show that there is an association between CRC and both quantity and quality of CSD.

With regard to corporate ownership diffusion, there is a negative association between substantial shareholders and the level of CSD. The result indicates that companies with less block shareholders are more likely to provide high levels of CSD, indicating a positive association between ownership diffusion and CSD. This result is not consistent with the findings of Halme and Huse (1997), Ghazoli (2007), and Reverte (2008), who find non-association between block shareholders and CSD. In addition, the negative association between SS and quality of CSD is not

consistent with the findings of Brammer and Pavelin(2008). The results of study show that ownership diffusion is more closely associated both with the quantity rather than the quality of disclosure, and the quantity of disclosure in annual reports than the quantity of disclosure in stand-alone reports. In relation to hypothesis 5, which posits a negative relationship between substantial shareholders and the level of CSD, the overall results provide evidence to support this hypothesis.

Regarding the control variables (corporate size and type of activity), the regression results are consistent with previous studies, as both corporate size and type of activity appear to be significantly associated with the quantity of CSD in annual reports. Hackston and Milne (1996) argue that the interaction between size and type of activity suggests that relative size alone is not a sufficient indicator for the quantity of disclosure. In addition, corporate size appears to be significantly associated with other dependent variables, reflecting a strong association between corporate size and corporate disclosure policy as suggested in mainstream literature. However, type of activity appears not to be associated with other dependent variables highlighting that the impact of type of activity on CSD is clearer with annual reports than with stand-alone reports, and clearer with quantity than quality of CSD.

5.3.3. Sensitivity analysis (alternative measures)

Three additional sensitivity analyses are performed using alternative measures for a number of independent variables in different regression models. Sensitivity analysis results (available from the authors) provide consistent results, to a large extent, with reported regression results, giving more evidence on the non-association between multi-nationality and CSD and the association between governance mechanisms and CSD. (1) Using a ratio of foreign sales as indicator of degree of multi-nationality, in line with study of Stanny and Ely (2008), show the degree of multinational activities appears to be negatively associated with CSDT, CSDsaq, and CSTQ. This weak negative association with these dependent

11. This study examines the presence of corporate responsibility committees in the company as a whole not purely as a board committee.



variables confirms the non-association between multi-nationality and CSD, which is consistent with reported regression results. (2) Using number (not proportion) of non-executive directors in line with the studies of Brammer and Pavelin (2006, and 2008), reveals that the number of non-executive directors is associated with level of CSD, with the exception of a non-association with CSDsa. While the proportion of non-executive directors appears to be associated with only the quantity of disclosure, the number of non-executive directors appears to be associated with both quantity and quality of disclosure. This result appears to confirm the association between non-executive directors and CSD. (3) Using proportion of independent non-executive directors as an alternative to the proportion of total non-executive directors. Beasley (1996) indicates that the traditional distinction between executive (internal) directors and non-executive (external) directors fails to account for the actual and potential conflicts of interests between non-executive directors and the companies. Therefore, non-executive directors are commonly classified into two categories: independent non-executive directors (a non-executive director who has no affiliation with the company other than the affiliation from being on the board of directors), and grey non-executive directors (a non-executive director who has some non-board affiliation with the company). The results reveal that independent non-executive directors are more associated with CSD than total non-executive directors. The results reveal a significant association between independent non-executive directors and the level of CSD, with the exception of non-association with CSDsaq.

5.3.4. Robustness

A robustness check is performed using robust regression which is considered to be useful in dealing with the heteroskedasticity problem in linear regression models. Robust regression is an option in regression analysis in Stata programme. As noted in linear regression diagnostics, the problem of heteroskedasticity might be extant. Four regression models (1, 3, 4,

and 6) are performed using the robust option.¹² Robust regression results (not reported) are largely consistent with reported regression results, with the exception of a significant association between NEDp and CSDT, which highlights an association between non-executive directors and CSD. In general, the robust regression results show little difference from the regression results indicating that the heteroskedasticity problem on the original regression results is limited.

6. Conclusions

The purpose of this paper is to examine the relationship between both the degree of multinational activities and corporate governance variables and CSD in both annual and stand-alone reports and total CSD. The overall results appear to provide evidence that governance mechanisms are associated with the level of CSD, while the degree of multinational activities appears not to be associated with it. Generally, it appears that the impact of different variables on CSD is consistent between various variables that represent CSD, as the degree of multi-nationality has no association with both the quantity and quality of CSD in both annual and stand-alone reports. Also, governance variables tend to be associated with the level of CSD as a whole, with the exception of non-association between NEDp and quality of CSD.

This association between corporate governance and CSD support the theoretical view that agency theory considerations are applied not only to shareholders but to all stakeholders (a stakeholder-agency theory). The considerations of corporate governance have started to extend coverage from the traditional shareholder-oriented approach towards a more stakeholder-oriented approach (Brennan & Solomon, 2008: 890). Also, it appears that corporate governance is more closely associated with CSD in annual reports than in stand-alone reports and is associated with the quantity rather than the quality of disclosure. Therefore, it can be argued that companies still concentrate on annual reports as a means to disclose their social and environmental activities to their

12. Stata command is `xtreg CSDars PRO CSnoe TA DMAfc BS NEDp CRC SS MP, vce(robust)`.



stakeholders. In addition, it appears that companies in responding to social pressure concentrate on increasing the quantity of social and environmental information without paying close attention to the quality of this information.

The non-association between number of foreign countries and CSD support the view of Toms et al. (2007) and Toms (2008) that the level of CSD in multinational corporations depends on the political and environmental risk in the countries in which they operate rather than the number of foreign countries in which they operate.

Disclosure measurement indicates a high level of CSD in UK companies. It appears that annual reports are still the main means for CSD, as the results show that less than 2.5% of companies do not provide any social disclosure in their annual reports, while more than half companies do not issue corporate responsibility reports.

Although the sample companies appear to consistently follow good governance practices, CRC are not commonly found in the UK. It appears that independent non-executive directors are more closely associated with CSD than total non-executive directors, and CRC has a strong impact on CSD.

Corporate size appears to be strongly associated with various disclosure variables, which is consistent with the mainstream literature. Type of activity appears to be associated only with quantity of CSD in annual reports (again consistent with the literature) reflecting that type of activity has no impact on CSD policy. Therefore, it appears that the impact of corporate size is stronger than impact of type of activity on corporate disclosure policy.

These results suggest implications for future studies that need to examine corporate governance variables and multi-nationality in different economies (developed and developing countries), in addition to examining other variables such as institutional investors and degree of competition.

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Appendix 1 : social disclosure categories

• 1- Environment

- Pollution control
- Compliance with pollution laws and regulations
- Prevention or repair environmental damage
- Conservation of natural resources,
- Using recycled materials
- Efficiently using materials resources in the manufacturing process
- Supporting anti-litter campaigns
- Receiving award
- Preventing waste
- Designing facilities harmonious with the environment
- Contributions to beautify the environment
- Restoring historical buildings/structures
- Undertaking environmental studies
- Wildlife conservation
- Conservation of energy
- Utilizing waste materials for energy production
- Disclosing increased energy efficiency of products
- Research aimed at improving energy efficiency of products
- Receiving awards

• 2- Community development

- Donations
- Summer or part-time employment of students
- Sponsoring public health projects
- Aiding medical research
- Sponsoring educational conferences,
- Funding scholarship programmes or activities
- Supporting national pride/government sponsored campaigns
- Other special community related activities,

• 3- Employee

- Employee health and safety
- Employment of minorities or women
- Employee training



- Employee assistance/benefits
- Employee remuneration
- Employee profiles
- Employee share purchase schemes
- Employee morale
- Industrial relations
- Other

- **4- Products**
 - Product development (research and development)
 - Product safety
 - Product quality

- **5- Customers**
 - Customer satisfaction

- 6- Ethical**

- **7- Health, Safety, and Others**
 - General health and safety information that cannot be attributed to specific category
 - (Corporate objectives/policies; general disclosure of corporate objectives /policies relating to the social responsibility of the company to the various segments of society
 - Report about the presence of corporate social responsibility committee and its members and activities,
 - Other; disclosing /reporting to groups in society other than shareholders and employees. e.g. Consumers, any other information that relates to the social responsibility of the company).

Information about awards received by the company concerning its social responsibility, or the presence of the company in one, or more, social indexes.