Multiple directorships and CAC-40 natural environmental disclosures

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Abstract

Extending Cormier and Magnan’s (2003) study of French environmental reporting, this study investigates the level of natural environmental disclosures (NED) of French CAC-40 companies for the year-ending 2006. Results show that, while overall CAC-40 companies disclose 53% of Cormier and Magnan’s unweighted environmental disclosure list, it is multiple directorships that is highly significant for the NED of CAC-40 companies.

Key words:
Multiple directorships; environmental disclosures; France
1. Introduction

In recent times the emergence of a new environmental order in France (Economist 2010), and French companies’ growing influence in global affairs, especially in the Asia-Pacific region (Lum & Vaughn 2007)

makes it timely to examine Cormier and Magnan’s (2003) six broad component environmental disclosure instrument in a CAC-40 context. Cormier and Magnan’s (2003) environmental index itself contains 39 individual items which are grouped into the six broad categories labelled Expenditure and Risks, Laws and Regulations, Pollution Abatement, Sustainable Development, Land Remediation and Contamination, and Environmental Management, and has been used by Cormier, Magnan and Velthoven (2005) in a German company context.

The index’s rich, broad thematic categories are a compelling reason to use in a CAC-40 study. Sustainable development, pollution abatement, land remediation, environmental management and the reduction of environmental risks are still laudable pursuits in this era of ecological challenges, particularly in France, where the state has tried to legislate and regulate in these specific areas (NRE 2001) and where the French accounting organization is seen to be proactive in fostering responsibility in these key areas.

This paper examines the extent of natural environmental disclosures of French CAC-40 companies for the year-ending 2006, building upon Cormier and Magnan’s (2003) cost/benefit study of year-ending 1997 French firms’ reporting on environmental disclosures. It is a timely paper because France has gone through considerable change in recent years in its approach to accounting regulation, environmental regulation (French Government 2005), sustainable development (NSSD 2006), pollution abatement (ADEME 2006), land remediation (Globenet 2006) and environmental management (Economist 2010), the very themes that make up Cormier and Magnan’s environmental disclosure index. The emergence, in 2005, of a national environmental strategy (National

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4 France, for example, is one of the major external powers of the Pacific, with many of its public listed companies operating in the Asia-Pacific region (see for example, Accor 2010). France also administers the following islands in the Pacific Ocean: New Caledonia (French: Nouvelle-Calédonie), French Polynesia (French: Polynésie française), Society Islands (French: Îles de la Société or officially Archipel de la Société), Windward Islands (French: Îles du Vent), Leeward Islands (French: Îles Sous-le-Vent), Marquesas Islands (French: Îles Marquises or Archipel des Marquises or Marquises), Austral Islands (French: Îles Australes or Archipel des Australes), Îles Tuamotu-Gambier (French: Îles Tuamotu-Gambier or Archipels des Tuamotu et des Gambier or Archipel des Tuamotu-Gambier or officially la subdivision administrative des (Îles) Tuamotu-Gambier), Tuamotus (French: Îles Tuamotu or Archipel des Tuamotu), Gambier Islands (French: Îles Gambier or Archipel des Gambier), Wallis and Futuna (French: Wallis et Futuna or Wallis-et-Futuna), Wallis Island, Futuna Island, Alofi Island, and Clipperton Island (French: Île de Clipperton).

5 See Appendix One for a list of CAC-40 companies.
Strategy for Sustainable Development) and the development of French environmental roles for government agencies (Ministère de l’Ecologie et du Développement Durable (Ministry of Ecology and Sustainable Development) and Ministère des Affaires Étrangères (Ministry of Foreign Affairs) are, at least, symbols of a contemporary environmental order which French companies work under and, thus, present an interesting context in which to examine the extent and interconnectivity of CAC-40 disclosures.

This paper also looks at the effect of multiple directorships on natural environmental disclosures (NED). It responds to Cormier and Magnan’s (2003) call to extend their “specific, but perhaps limiting, conceptual framework” (p. 55) and to consider environmental disclosures from “different theoretical frameworks” (p. 55). Prior work has been conducted on the importance of multiple directorships on shareholder interests, firm values and corporate performance (Kiel & Nicholson 2005) but little research has been conducted on the effect of multiple board directorships on NED.

While many commentators have indicated the relevance of multiple directorships on shareholder interests and on firm value, there has been little published evidence on the consequences of multiple directorships on the extent of natural environmental disclosures by French companies. The empirical evidence will provide implications of the recent trends both for stakeholders and for proponents of environmental reporting. The study directly addresses issues that are currently being canvassed by professional bodies representing predominantly Australian financial stakeholders (CPA Australia 2009), French environmental accounting watchdogs (the Social and Environmental Rating Agency (ARESE), and intergovernmental Pacific organizations with an interest in environmental reporting (Secretariat of the Pacific Regional Programme - SPREP) non-financial stakeholders.

As such, the following research questions are posed:

RQ1: What is the level of NED of CAC-40 companies?
RQ2: Does multiple board directorships explain the level of NED of CAC-40 companies?

The remainder of this paper is organized as follows. Section 2 reviews environmental disclosures as a reflection of French environmental interconnections, as well as developing the study’s hypotheses. Section 3 provides a description of the study’s methodology and its empirical findings. Section 4 comments on the findings and their implications.

6 France’s current contribution on to the Pacific-based organisation is USD110,847 (which is 15.441% of total membership contributions).
2. Literature review and hypotheses development

Thomas’ (1991) contingency theory links a company’s business environment and organisational attributes to the level of annual report disclosures. This paper argues that a firm’s directors multiple directorships are an organizational attribute that may affect a listed company’s disclosure. Thomas’ (1991) contingency theory is, in turn, often linked to stakeholder theory which recognises that stakeholders have a right of account (Gray et al. 1997). There are two strains of stakeholder theory: one based on an empirical view of management where stakeholders are identified by the company according to the way each stakeholder furthers its interest and how they might be managed (Freeman 1984); and the other based on a normative view, where all stakeholders interests are seen as important (Clarkson 1995). The strength of both contingency and stakeholder theories rests in their broad economic, political and social lens, which go beyond the narrower economic concerns of theories such as contracting or agency theories. In this way, both organizational attributes and business environmental factors may be considered in developing hypotheses of the extent of human resource disclosures in listed CAC-40 companies.

According to overseas assessments, current national attitudes towards environmental issues in France are complex and mixed (Economist 2010; EORG 2002). For example, while the collective opinion towards nuclear energy is largely subdued, the mood towards underground storage of nuclear waste is sensitive (Terradaily 2006). In addition to this complexity, there is increasing pressure on French companies to increase the quantity and quality of reporting disclosures because of the increasing pressures of capital markets pressures on France (Cormier & Magnan 2003; NRE 2001). Foreign investment in France, for example, represents 42 percent of its GDP and 45 percent of the value of the CAC-40 (Embassy of the US 2006) and, thus, there may be a need for increased reporting disclosures from foreign investors. Indeed, France’s adoption, in 2005, of International Financial Reporting Standards, has not only resulted in additional information being disclosed and reported but also in information which interconnects with national French standards.

However, it is France’s regulatory milieu, including its regulations of directorships, which may offer unique insights into the interconnectivity of CAC-40 environmental disclosures because of recent events. France’s environmental policy is now based on the June 2003 publication National Sustainable Development Strategy which made a commitment that France would submit its National Strategy for Sustainable Development for ‘peer review’ by other countries (French Government 2005). This new
responsibility for French environmental matters falls on the French Ministère de l’Écologie et du Développement Durable (Ministry of Ecology and Sustainable Development) and the Ministère des Affaires Étrangères (Ministry of Foreign Affairs) and the International Institute for Environment and Development (IIED) is engaged to help develop the methodology and facilitate the process. In 2005, France also adopted an Environment Charter which recognizes the fundamental rights and duties of environmental protection and promotes the ideas of the quality of life and protection of everyone's health and the mobilization of economic and scientific capabilities to provide solutions to the ecological challenges of climate warming and biodiversity impoverishment (Prime Minister Government Portal 2005)7.

This surge of French government environmental regulation has its foundations in the government’s publication of an Environmental Code in 2000 which incorporated all legislation related to the protection of the natural environment, air and water quality, polluting industries and activities, waste and, and the protection of the landscape and urban environment. Since then, the French government also passed legislation in 2003 on technological and natural hazards (Law 2003/699 of July 30 2003) and in April 2004 to implement EU Directive 2000/60 on river basin management (Law 2004/338 of April 21 2004), although the directive does not become fully applicable until 2015.

Indeed, certain industries must pay a tax on polluting activities (taxe generale sur les activities polluantes) and is levied on waste treatment, emissions of certain substances, take-off of large aircraft at major airports, lubricants, oils and waste oils, detergents and fabric softeners, quarried materials, anti-parasite products used in agriculture and industrial activities. No products containing polychlorinated biphenyls (PCBs) or polychlorinated terphenyls (PCTs) may remain in industrial use after 2010. Collection systems are required for junked cars (Directive 2002/96) and bans are placed on sales of equipment which contain the substances of lead, mercury and cadmium (Directive 2002/95). The French government promotes waste minimization and recycling through a “green point” system. The French Agency of Environment and Energy Management promotes a “Retour” logo for companies that take back products and packaging at the end of their lives. In keeping with EU commitments to the Kyoto Protocol and Copenhagen Sustainable Meeting Protocol on global warming, many French businesses in the energy sector or industries with in-house power-generating capacity try to limit their carbon-dioxide emissions.

7 Other key agencies and institutions that enforce or set environmental policies are the Coastline Conservation Agency, the French Environmental Health Safety Agency, the National Institute for the Industrial Environment and Risk, and six agencies that supervise individual river basins.
Given France’s mobilization of environmental laws and regulations in recent times, this paper suggests that the broad categories constructed and used by Cormier et al. (2005), Cormier and Magnan (1999; 2003) are given prominence by the prevalence of directors with multiple board appointments. French law is extremely detailed on the governing of French boards of listed companies (Medef 1995). French law imposes strict limits on the board membership of management, with a ceiling on the number of directors who may at the same time be employees of the company. Indeed, the board of directors fulfills a four-fold function: determining a company’s strategy, appointing corporate officers to implement this strategy, supervising management and ensuring information is made available to shareholders (Medef 1995). French boards traditionally use few formal procedures, have considerable power over its own membership, and focus on enhancing the company’s interest (rather than share value as in Anglo-American companies) which is:

understood as the over-riding claim of the company considered as a separate economic agent, pursuing its own objectives which are distinct from those of shareholders, creditors including the internal revenue authorities, suppliers and customers. It nonetheless represents the common interest of all of these persons, which is for the company to remain in business and prosper (Medef 1995, p. 7).

There are, of course, many commentators who criticize firms for appointing directors who hold directorships in many companies (Fich & Shivdasani 2006; Yermack 2006; Core, Haolhausen and Larcker 1999; Council of Institutional Investors 1998). Directors with multiple board appointments are seen to be incapable of effectively monitoring the management of the firm (Shivdasani & Yermack 1999) because of insufficient time and attention to discharge their responsibilities (Lipton & Lorsch 1992)

However, following Fama and Jensen (1983), Ferris, Jagannathan and Pritchard (2003) found no evidence that multiple directors shirk their responsibilities to serve on board committees. Indeed Fama and Jensen (1983) found multiple appointments create incentives for directors to develop sound monitoring reputation. Booth and Deli (1995) found multiple directorships allow firms to develop relationships with customers and suppliers.

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8 Article of L93 of the Code des Sociétés (code of company law) limits the number of directors holding a contract of employment with the company to a third of board members, and article L115 limits the number of directeurs généraux to five
9 The board can co-op members and propose their appointment by shareholders’ meetings.
10 Freshfields Bruckhaus Deringer (2010) note the need for increased representation of women on the board of directors of listed companies.
Multiple directorships (also termed interlocking directorships or holding multiple board seats) are critical important to company stakeholders because of the impact individual directors and boards may have on a company’s operations (Schnake & Williams 2008; Ahan, Jiraporn & Kim 2008) and ultimately its environmental disclosures (Deegan and Rankin 1996) and environmental performance (Clarkson, Li, Richardson & Vasvari 2007). Excessive workloads of directors, given the number of other boards they sit on, may limit the time they need to carry out their controlling, counselling, monitoring and strategizing duties (Lipton & Lorsch 1992; Fich & Shivdasani 2006).

However, through multiple directorships, directors pick up skills, contacts, reputation (Faman & Jensen 1983), experience and access to funds (Pfeffer & Salancik 1978) Zahra and Pearce, 1989; Johnson, Daily and Ellstrand, 1996; Nicholson and Kiel 2004), which gives entities access to funds (Zahra and Pearce 1989), external stakeholder support (Zahra and Pearce 1989), suppliers (Booth & Deli 1995) and communication channels (Pfeffer & Salancik 1978). Multiple directorship also improve an entity’s solvency and economic performance (Dooley 1969; Pfeffer 1972, Pennings 1980, Stokman, Zieglin & Scott 1985; Mizruchi & Stearns, 1988; Gilson 1990), innovation (Haunschild & Beckman 1998) and corporate governance.

In a NED context, the following hypothesis is thus posed:

\[ H_1 : \text{There is a positive relationship between the number of external appointments held by corporate directors and the level of NED of the CAC-40 French-listed firms} \]

3. Methodology

CAC-40 takes its name from Paris Bourse's early automation system Cotation Assistée en Continu (Continuous Assisted Quotation) and is the first French stock market index, a benchmark index for Euronext Paris. The index represents a capitalization-weighted measure of the 40 most significant values among the 100 highest market capitalizations on the Paris Bourse (Euronext 2006). Similar to how the S&P 500 is a subset of the S&P 3000, the CAC-40 is a subset of the larger Societe des Bourses Francaises 250 (SBF 250) (Street Authority 2006). Inclusion is based on size and liquidity criteria (Air Liquide Annual Report 2005, p. 274). CAC-40 base value of 1,000 was set on 31 December 1987. As of 1 December 2003, the index has become a free float weighted index. The CAC-40 Index is determined by a committee of experts from Euronext. To belong to this index, three conditions must be fulfilled: shares must be liquid, the company has to have sufficient market capitalization, and there needs to be a certain volume of shares. If one of these conditions is not met, a firm
may be withdrawn from the index. Thus, at the time of the study, one firm was withdrawn from the index. The CAC-40 Index represents the most important market capitalizations. For the purposes of this study, the sample consists of 39 CAC company annual reports and separate social and environmental reports, representing a selected sample of the highest market capitalised companies operating in France for the year ending 2006. The study did not select non-CAC company annual reports and stand-alone environmental reports and unlike the studies of Cormier et al. (2005) and Cormier and Magnan (2003), it included financial, as well as non-financial, French companies, rather than just non-financial companies. All company annual reports and separate social and environmental reports were gleaned from the internet. Information was obtained from Diane, a French database.

CAC-40 companies’ voluntary NED, as reflected in their annual and environmental reports, is operationalised using NED - Dependent Variables Comprehensive (DVC) – which is coded using a modified version of Cormier and Magnan’s (2003) and Cormier, et al.’s (2005) environmental disclosure instrument (see Appendix 1) which for the purposes of this study comprises six categories: Environmental Expenditures and Risks, Laws and Regulations, Pollution Abatement, Sustainable Development, Land Remediation and Contamination, and Environmental Management. Each of these broad categories possesses individual components. For example, Laws and Regulations is made up of Litigation (present and potential) on environment; Fines (environmental); Orders to conform (environmental); Corrective actions (environmental); Incidents (environmental) and Future legislation or regulation requirements (environment).

Individual components of the dependent variable are scored dichotomously: ‘one’ for item disclosed by the CAC-40 companies; ‘zero’ for non-disclosure (Cormier & Magnan 1999; 2003; Cormier et al. 2005). Disclosure indices may be classified into weighted or unweighted indices (Cooke 1991). The weighted disclosure index, given a higher score to some items relative to others based on the perceived importance of those particular items (Cooke 1991). In an unweighted index, each disclosure item is deemed equally important and therefore each item is awarded the same score when it is disclosed (Cooke 1991; Meek et al. 1995). Unweighted disclosure indices have often been used in past disclosure studies (see for example Cooke 1991; Hossain et al. 1995; Cahaya et al. 2008). An unweighted technique is considered to be far more relevant, and less subjective, than a weighted technique (Cooke 1991; Craig & Diga, 1998). Consistent with the past literature, this study adopts an unweighted technique for scoring each disclosure item.
4. Results

Descriptive results of the NED percentage scores for individual disclosure components are shown in Table 1. The highest scoring broad categories appear to fall under the broad categories of *Pollution Abatement* and *Environmental Management*. Within the broad disclosure category (BDC) of *Pollution Abatement*, all individual disclosure components exceed 50% except *Noise and Odours* (43.59%). *Control, Installations, Facilities or Processes Described* (84.62%) are the most disclosed item within the *Pollution Abatement* category. Within the broad category *Environmental Management*, all individual disclosure components except *Awards* (20.51%) are greater than 64%. *Environmental Management System* (84.62%) and *Environmental Policies* (82.05%) are the two most disclosed individual categories under *Environmental Management*.

Table 1 Number and Percentage of Sampled Companies Disclosing Each Individual Item

<table>
<thead>
<tr>
<th>BDC</th>
<th>No</th>
<th>Individual Disclosure Components</th>
<th>CAC 40</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>E&amp;R</td>
<td>1</td>
<td>Past and current expenditures for pollution control equipment and facilities</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Past and current operating costs of pollution control and facilities</td>
<td>18</td>
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<tr>
<td></td>
<td>3</td>
<td>Future estimates of expenditure for pollution control equipment and facilities</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Future estimates of operating costs for pollution control equipment and</td>
<td>5</td>
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<tr>
<td></td>
<td>5</td>
<td>Financing for pollution control equipment or facilities;</td>
<td>20</td>
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<tr>
<td></td>
<td>6</td>
<td>Environmental debt</td>
<td>0</td>
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<tr>
<td></td>
<td>7</td>
<td>Risk provision on environment</td>
<td>6</td>
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<tr>
<td></td>
<td>8</td>
<td>Provision for charge on environment</td>
<td>8</td>
</tr>
<tr>
<td>L&amp;R</td>
<td>9</td>
<td>Litigation (present and potential) on environment</td>
<td>5</td>
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<tr>
<td></td>
<td>10</td>
<td>Fines (environmental)</td>
<td>2</td>
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<tr>
<td></td>
<td>11</td>
<td>Orders to conform (environmental)</td>
<td>5</td>
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<tr>
<td></td>
<td>12</td>
<td>Corrective actions (environmental)</td>
<td>14</td>
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<td></td>
<td>13</td>
<td>Incidents (environmental)</td>
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<tr>
<td></td>
<td>14</td>
<td>Future legislation or regulation requirements (environment)</td>
<td>13</td>
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<tr>
<td>PA</td>
<td>15</td>
<td>Air emission information</td>
<td>29</td>
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<td></td>
<td>16</td>
<td>Water discharge information</td>
<td>27</td>
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<td></td>
<td>17</td>
<td>Solid waste disposal information</td>
<td>29</td>
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<tr>
<td></td>
<td>18</td>
<td>Control, installations, facilities or processes described</td>
<td>33</td>
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<tr>
<td></td>
<td>19</td>
<td>Compliance status of facilities</td>
<td>31</td>
</tr>
<tr>
<td>BDC</td>
<td>No</td>
<td>Individual Disclosure Components</td>
<td>CAC 40</td>
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<td>Number</td>
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<td>(environment)</td>
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<tr>
<td>SD</td>
<td>20</td>
<td>Noise and odours</td>
<td>17</td>
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<td></td>
<td>21</td>
<td>Conservation of natural resources</td>
<td>30</td>
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<td></td>
<td>22</td>
<td>Recycling</td>
<td>28</td>
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<td></td>
<td>23</td>
<td>Life cycle information</td>
<td>25</td>
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<tr>
<td>LRC</td>
<td>24</td>
<td>Sites (environment)</td>
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<tr>
<td></td>
<td>25</td>
<td>Efforts of remediation (present and future)</td>
<td>26</td>
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<tr>
<td></td>
<td>26</td>
<td>Cost/potential liability (provisions for site remediation)</td>
<td>7</td>
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<tr>
<td></td>
<td>27</td>
<td>Spills (number)</td>
<td>6</td>
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<tr>
<td></td>
<td>28</td>
<td>Spills (nature)</td>
<td>15</td>
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<tr>
<td></td>
<td>29</td>
<td>Spills (efforts to reduce)</td>
<td>18</td>
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<td>30</td>
<td>Spills Liabilities (actual and potential)</td>
<td>12</td>
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<tr>
<td>EM</td>
<td>31</td>
<td>Environmental policies or company concern for environment</td>
<td>32</td>
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<tr>
<td></td>
<td>32</td>
<td>Environmental management system</td>
<td>33</td>
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<td></td>
<td>33</td>
<td>Environmental auditing</td>
<td>31</td>
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<tr>
<td></td>
<td>34</td>
<td>Goals and targets (environment)</td>
<td>29</td>
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<tr>
<td></td>
<td>35</td>
<td>Awards (environment)</td>
<td>8</td>
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<tr>
<td></td>
<td>36</td>
<td>Department or office for pollution control</td>
<td>27</td>
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<td></td>
<td>37</td>
<td>ISO 14000</td>
<td>25</td>
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<td></td>
<td>38</td>
<td>Participation in elaboration of environmental standards</td>
<td>28</td>
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<tr>
<td></td>
<td>39</td>
<td>Joint projects with other firms on environmental management</td>
<td>27</td>
</tr>
<tr>
<td>Overall mean</td>
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</tbody>
</table>

Key: BDC is broad disclosure category; E&R is Environmental Expenditures and Risks; L&R is Laws and Regulations; PA is Pollution Abatement; SD is Sustainable Development Disclosures; LRC is Land Remediation Contamination; EM is Environmental Management.

On the other hand, relatively low NED scores appear under the broad categories of Laws & Regulations, Land Remediation & Contamination and Environmental Expenditures & Risks. Under Laws & Regulations, all individual component NED scores are under 36%. For the broad category Land Remediation & Contamination, five out of seven categories fall below 50%. Moreover, for Environmental Expenditures & Risks, six out eight categories are below 50%.

Table 1 shows that the overall mean disclosure score was 53%. Table 2 below depicts the distribution of NED scores for the 39 CAC-40 companies. Table 2 shows 14 out of the 39 CAC-40 companies (about 36% of companies) had disclosure scores of less than the overall mean of 53% (below 21 out of 39 disclosure items). Two companies had a 100% disclosures score (39 out of 39 disclosure items).
Table 2: Distribution of Disclosure Score Mean DVC

<table>
<thead>
<tr>
<th>Mean DVC (out of 39)</th>
<th>CAC-40 (number)</th>
<th>CAC-40 (%)</th>
</tr>
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<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>2.56%</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>5.13%</td>
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<td>10</td>
<td>3</td>
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<td>11</td>
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<td>7.69%</td>
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<td>18</td>
<td>1</td>
<td>2.56%</td>
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<tr>
<td>19</td>
<td>2</td>
<td>5.13%</td>
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<tr>
<td>20</td>
<td>1</td>
<td>2.56%</td>
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<tr>
<td>21</td>
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<td>7.69%</td>
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<tr>
<td>38</td>
<td>1</td>
<td>2.56%</td>
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<tr>
<td>39</td>
<td>2</td>
<td>5.12%</td>
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<tr>
<td></td>
<td>39</td>
<td>100%</td>
</tr>
</tbody>
</table>

The results of the single regression, in Table 3, show that the independent variable for multiple directorships of board members is significant for NED. However, the R-score is low (0.021).

Table 3: Single Regression Results CAC-40

<table>
<thead>
<tr>
<th>CAC-40</th>
<th>Single regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
<td>R</td>
</tr>
<tr>
<td>Multiple directorships of board members</td>
<td>0.021</td>
</tr>
</tbody>
</table>

** Statistically significant
5. Conclusion

In terms of the first research question, this paper finds an overall mean of NED of 53%. This level is consistent with the results found by Cormier and Magnan (2005) for German listed companies over the 1992-1998. Also consistent with Cormier and Magnan (2005) are the relative low scores for the broad categories of Laws & Regulations, Land Remediation & Contamination and Environmental Expenditures & Risks, and relatively higher scores for the broad categories of Pollution Abatement and Environmental Management.

The CAC-40 components of Pollution Abatement and Sustainable Development were scored relatively highly by CAC-40 companies suggesting directors with links with many companies are keenly attuned to monitor and appreciate these global environmental matters. This is in accord with Fama and Jensen (1983) who found multiple appointments create incentives for directors to develop sound reputation through monitoring.

In terms of the second research question, multiple directorships of board members is significant for environmental disclosures. Thus, the paper’s key hypothesis is accepted. Consistent with contingency theory and stakeholder theory, multiple directorships has allowed board directors to engage with a large number of other company directors who oversee environmental disclosures and environmental performance. It appears increased environmental disclosures is contingent upon directors exposure to skills, contacts, reputation, experience, governance and stakeholders viewpoints through multiple board directorships. Although the statistical results are based on a low R-score, they are useful in the context of utilising a simple regression for a generalised explanation of natural environmental disclosure patterns. Further study might consider the use of more independent variables though multiple regression and their interaction effects; with multiple directorships for environmental disclosure. Further research might also consider multiple directorships in terms of environmental disclosures outside the CAC-40 domain.

References


Council of Institutional Investors 1998, Core policies, positions and explanatory notes, Washington DC.

CPA Australia 2009, Valuing sustainability reporting: perspectives from the international investment community, viewed 14 December 2010,


Kiel, GC and Nicholson, GJ 2005, Multiple Directorships and Corporate Performance in Australian Listed Companies, 8th International Conference on Corporate Governance and Board Leadership, 11-13 October, Henley Management College.


Appendix 1: List of CAC-40 Companies

Accor
Air Liquide
Alstom
AXA
BOUYGUES
Carrefour
Dexia
EDF
France Telecom
Group Danone
Lafarge
LVMH
Pernod Ricard
PSA Peugeot Citroen
Saint Gobain
Schneider Electric
STMicroelectronics
Total
Vallourec
VINCI

Air France – KLM
Alcatel-Lucent
Arcelor Mittal
BNP Paribas
Capgemini
Credit Agricole
EADS
Essilor
Gaz de France
L’Oreal
Largardere
Michelin
PPR
Renault
Sanofi-Aventis
Societe Generale
Suez
Unibail-Rodamco
Veolia Environnement
Vivendi

Appendix 2: Environmental Disclosures Scores

Dependent Variables Comprehensive Unweighted (DVC)

Environmental Expenditures and Risks (DVB1)
Past and current expenditures for pollution control equipment and facilities
Past and current operating costs of pollution control and facilities
Future estimates of expenditure for pollution control equipment and facilities
Future estimates of operating costs for pollution control equipment and facilities
Financing for pollution control equipment or facilities;
Environmental debt
Risk provision on environment
Provision for charge on environment

Laws and Regulation (DVB2)
Litigation (present and potential)
Fines
Orders to conform
Corrective actions
Incidents
Future legislation or regulation requirements

**Pollution Abatement (DVB3)**
Air emission information
Water discharge information
Solid waste disposal information
Control, installations, facilities or processes described
Compliance status of facilities (environment)
Noise and odours

**Sustainable Development Disclosures (DVB4)**
Conservation of natural resources
Recycling
Life cycle information

**Land Remediation and Contamination (DVB5)**
Sites (environment)
Efforts of remediation (present and future)
Cost/potential liability (provisions for site remediation)
Spills (number)
Spills (nature)
Spills (efforts to reduce)
Spills Liabilities (actual and potential)

**Environmental Management (DVB6)**
Environmental policies or company concern for the environment
Environmental management system
Environmental auditing
Goals and targets (environment)
Awards (environment)
Department or office for pollution control
ISO 14000
Participation in elaboration of environmental standards
Joint projects with other firms on environmental management