SECTION 2
BOARD PRACTICES

DIMENSION, STRUCTURE AND SKILL MIX IN EUROPEAN BOARDS: ARE THEY CONVERGING TOWARDS A COMMON MODEL OF CORPORATE GOVERNANCE?

Paola Schwize*, Vincenzo Farina**, Valeria Stefanelli**

Abstract

Using a large sample of European listed Companies and their Directors our study supports the hypothesis that European corporate governance do not yet converging towards a common model. Our results put in evidence in fact the existence of three dominant corporate governance profiles in European listed companies, different each others. The determinants of these profiles depend on the typical governance system adopted by the same companies and on country’s culture and history; as a consequence, each of them has a own attitude of the board, in terms of structure, organization and skill mix characteristics. Finally we suggest some important implications on European governance practices.

Keywords: European Corporate Governance, Board of Directors, Boards’ Roles Effectiveness

1. Introduction

Corporate governance standards, taking on an increasingly central role in all sectors of the economy, are an incentive to the definition of clear rules, with respect to relations between companies and investors. In European countries there is a still wide variety of corporate governance regimes. Over the years, individual economies developed different capital market mechanisms, legal structures, factor markets and private or public institutions to act as owners or corporate governance principals in the economy. These arrangements might vary even within the same country according to the sector. They are very often the result of institutional, political and social traditions. Despite different starting points, a trend towards convergence of corporate governance regimes has been developing in recent years. Pressures from investors and regulators have been rising on firms to adapt and adjust in order to achieve the higher standards required at international level as a result of globalization in the capital markets (Nestor and Thompson, 2000). Basic rules in corporate governance systems design are, among others:

- increase of protection of minority shareholders’ rights;
- increase of board independence by increasing the number of independent directors;
- flexible and efficient organization of boards’ activity due to the creation of committees;
- high degree of disclosure of directors’ compensation policies and structures;
separation between the positions of chairman
of the board and CEO.

Within corporate governance itself, the focus is
therefore on the proper structure and operation of the
board of directors which have been vested, over the
years, with increasingly broad and complex tasks,
ranging from legitimating to supervising the
management and setting firms’ strategies. Boards’
effectiveness in attaining its objectives must be
supported both by suitable structural and
organizational characteristics and by individual skills
and experiences of directors, according to a country’s
legal, economic and cultural circumstances.

The study aims at investigating how relevant
boards’ attributes, chosen with respect to their impact
on corporate performance (Carretta et al., 2007),
converge or diverge among large companies listed in
some relevant different European countries (UK,
France, Germany, Spain and Italy).

In particular we ask: “Is the convergence in
governance models a correct goal to aspire?” and
“How a country’s legal, economic and cultural
differences affect the effectiveness of governance
practices?”.

In this direction we perform a cluster analysis, to
find out similarities and differences in corporate
Governance models for large companies in the five
countries distinguishing, between: i) the traditional (or
Latin) system, which is typical for the Italian case and
is based on one administrative organism (“consiglio di
amministrazione”) and an external supervisory
organism (“collegio sindacale”); ii) the monistic model
(on-tier system), based on one administrative
organism (board of directors); iii) the dualistic system
(two-tier system), composed by a management board
and a separate supervisory board.

The three systems are not equally distributed in
the considered countries: in Italy, companies have the
opportunity to choose between the three systems; in
Germany, following the Aktiengesetz, limited
companies must adopt a dualistic system; in France
the Code de Commerce allows companies the choice
among a monistic system and a dualistic one; United
Kingdom adopts only a monistic system; Spanish
companies adopt a two-tier traditional system.

The paper is structured as follows:

In paragraph 2 we define our theoretical
background and posit our hypotheses. In paragraph 3,
we define data collecting procedure and describe our
sample of boards and directors. In paragraph 4, we
describe the methodology of analysis and specify
variables. Following we present results in paragraph 5.
Finally, in paragraph 6 we discuss our results and
present conclusions.

2. Theoretical background and hypotheses

European boards: towards a convergence of
structures, organization and competencies?

Although the differences in corporate
governance systems, many authors sustain that
European countries are converging towards the
Anglo-American model (Goergen et al., 2008). The
main causes of convergence are considered to be the
following (Nestor and Thompson, 2000):

- the growing integration of financial markets,
  which is accompanied by the wish of both
  investors and issuers to operate in the
  international capital market requires some degree
  of acceptance of common values and standards.
  Institutional shareholders have brought with them
  expectations about shareholder value and are
  requiring firms to establish profit targets and to
  produce competitive returns on equity.
  Institutional investors also insist that companies
  respect international norms of governance,
  particularly concerning the duties of management
  and controlling shareholders to respect demands
  of minority investors concerning transparency
  and the procedures for exercising corporate
  control, especially at the shareholders meeting;

- the growing integration at European level that
  reduces the political and historical reasons for
  national idiosyncrasies in economic organization;
  an increasing tendency of large firms to “choose”
  their regulatory environment. This, of course, is
  not due to legal eclecticism but rather to the need
to tap the most liquid and cheap sources of capital.
  By choosing, for example to list their shares in
  the NYSE, large companies from a growing
  number of jurisdictions become subject to US
  securities rules and accounting norms (Coffee,
  1998).

Other authors, however, following the theory of
path dependencies (Aoki, 1999), argue that history
has sowed considerable divergence into national
systems which are “path-dependent” and, hence,
unlikely to converge at least in the medium-term,
notwithstanding pressures from the capital markets. In
other words, the dynamics of history should not be
taken lightly when it comes to the shape of legal
norms and institutions (Bebchuk and Roe, 1998).
Following Jeffers (2005) we address our study
towards the research of path dependencies in the
development of corporate governance models in order
to assess the implications in terms of boards’
configurations, based on their structures, organization
and competencies. It is true that history has produced
a world configuration where Anglo-American
institutions and norms play a hegemonic role, but
reproducing them outside these contexts is not such
an automatic process, because the path used by each
country will necessarily influence the outcome. This
means that the evolution of corporate governance is
progressive and different for each country, according
to the following logical schema:

- country-level variables influence the definition of
corporate governance models;
- corporate governance models put different emphasis on boards’ attributes;
- boards’ attributes influence the effectiveness of boards’ roles;
- boards’ configurations diverge across various countries and corporate governance models.

Various authors (Mintz 2005; Licht et al., 2004; Zhuplev and Shein, 2004) stressed the importance of a country’s legal, economic and cultural variables, considered as a component of the business environment, to establishing the existence of some corporate governance practices and the effectiveness of a particular corporate governance model. Also the Organization for Economic Cooperation and Development (OECD, 2004) in its principles of corporate governance recognizes the need to adapt the systems to varying legal, economic and cultural circumstances. At this aim, we distinguish between the traditional (or Latin) system, which is typical for the Italian case,14 and is based on ad administrative organism (board of directors) and an external supervisory organism (“collegio sindacale”), the monistic model (on-tier system), based on one administrative organism (board of directors) and the dualistic system (two-tier system), composed by a management board and a separate supervisory board.

Furthermore, corporate governance models put a different emphasis on boards’ roles and therefore on the attributes affecting boards’ role effectiveness. In particular, concerning boards’ roles definition, various theories (managerial hegemony theory, agency theory, stewardship theory and resource dependency theory) are used as a background to this study.

In the view of managerial hegemony theory, boards act as a legal fiction, in spite of their formal governing power over management, dominated by top management. In this view, boards exist to satisfy laws’ requirements, to serve as an ally of management and, more important, to legitimize management’s strategic decisions (Pfeffer, 1972; Westphal and Zajac, 1997).

In the view of the agency theory (Jensen and Meckling, 1976; Fama and Jensen, 1983), boards of directors are requested to supervise management behaviour and to reduce the divergence of interests with shareholders (Zahra and Pearce, 1989; Johnson, Daily and Ellstrand, 1996; Kiel and Nicholson, 2003). According to this view, a board is a governance mechanism designed to mitigate the problem of conflict of interest between ownership and management. It aims to monitor the behaviour of agents, managers, compared to the addresses of the principal, the shareholders, taking the search for integrative solutions of conflicts between the two parties.

A third theory that explains the relation between the board of directors and management is the stewardship theory. This theory views the goals of managers and shareholders as similar because the formers are seen to be motivated by a need to achieve, to gain intrinsic satisfaction through their successful performance of inherently challenging work, to exercise responsibility and authority and thereby gain recognition from peers and bosses (Muth and Donaldson, 1998; Hendry and Kiel, 2004). In addition, members of the board who are managers are believed to have greater depth of knowledge, expertise, and current operating information on the corporation, thus delegation of control of the corporation to management is optimal for shareholders’ interests (Muth and Donaldson, 1998). Moreover, the resource dependency theory states that board members may contribute to strategy definition by providing access to resources on which firms depend. According to this theory, boards are a “cooptative” mechanism for a firm to form links with its external environment, to access important resources and to buffer the firm against adverse environmental change (Goodstein et al., 1994; Pearce and Zahra, 1992; Pfeffer and Salancik, 1978; Pfeffer, 1973 and 1972). At the light of stewardship and resource dependency perspectives, Carpenter and Westphal (2001, p. 639) suggest that boards serve as “a strategic consultant to top managers rather than (or in addition to) exercising independent control”.

In synthesis, according to the various theories, boards could have at least the following roles: i) legitimate management (managerial hegemony theory); ii) supervise management (agency theory); iii) supporting management and guaranteeing relevant resources (stewardship and resource dependency theories).

**Board structure and role effectiveness**

Board structure has a different impact on role effectiveness and therefore on corporate performance. In particular, the effectiveness of boards’ roles is differently related to certain board structural factors (such as board’s dimensions, composition, in terms of executive and non-executive directors, number of independent directors, CEO-chairman duality15 and diversity, here considered as the presence of female and/or international directors in boards), according to the characteristics of the business environment (Carretta et al., 2007).

Regarding board size, from one side authors assess that larger boards facilitate manager supervision and brings more human capital to advice managers (Hill, 1982; Zahra and Pearce, 1989). Coles et al. (2008) find that complex firms, which have

---

14 The Italian Civil Code allows since 2004 public limited companies to choose between the three systems.
greater advising requirements than simple firms, have larger boards.

However, boards with too many members lead to problems of coordination, control, and flexibility in decision-making. Large boards may give excessive control to the CEO, harming efficiency. Various authors (Lipton and Lorsch, 1992; Jensen, 1993; Forbes and Milliken, 1999; Golden and Zajac 2001) assess that a larger board may induce members to free-ride in their monitoring responsibility, allowing the CEO greater independence, and demonstrate that larger size determines lower performances. Yermack (1996) and Eisenberg et al. (1998) report as larger boards are associated with a lower firm performance, measured as Tobin’s Q or ROA. Bemmedsen et al. (2008) confirm the negative relationship board size-performance in small family firms. Hartarska (2005) confirms the result in ROA regressions for microfinance institutions. Adams and Mehran (2003a) present contrary evidence from banking firms in the USA and de Andres and Vallelado (2008) achieve the same result for the Spanish case. Some studies (Hermalin and Weisbach, 1991 and 2003; Jensen, 1993; Yermack, 1996; De Andres et al., 2005) demonstrate that board composed by a few number of directors can represent a competitive advantage for the company, because of a higher degree of efficiency in decision making, a better design of responsibilities, and a higher control possibility by CEO. We conclude that smaller size is linked to higher flexibility and efficiency in decision making processes.

As far as board composition is concerned, Barnhart and Rosenstein (1998), John and Senbet (1998), McKnight et al. (2005) demonstrate how board performance depends both by size and by the balance between executive and non-executive directors. The optimal proportion of inside and outside directors is linked to the relative importance of monitoring and advising needs: if the former are greater, than having more outsider director is beneficial. Wagner et al. (1998) points out how superior performances arise in presence of an equal number of executive and independent directors.

Adams and Ferreira (2007), Coles et al. (2008), Harris and Raviv (in press), indicate a trade-off between the advantages and disadvantages in the proportion of non-executive directors: inside directors add to the board information that outside directors would find difficult to gather; besides, executive directors facilitate the transfer of information between board directors and management.

On the possible advantages of a wide presence of independent directors, corporate governance literature offers no conclusive evidence. At this purpose, researches (Hermalin and Weisbach, 2003; Anderson and Reeb, 2003a; Bai et al., 2004; Choi et al. 2006) confirm how the effects of board independence on firm value are mixed. On the one hand, an independent board of directors has fewer conflicts of interest when monitoring managers. Thus, when the monitoring function is prevalent, there is a positive link between the presence of outsiders and bank value. Klein (2002), Peasnell et al. (2000) affirm that the presence of independent directors in the board appears to be an effective corporate governance mechanism to reduce the agency problem and increase earnings quality. In the same direction, Baysinger and Butler (1985), Conley et al. (1997), Barnhart and Rosenstein (1998), Beiner et al. (2006) highlight a positive relationship between outsider and performance; for instance because independents can fire inefficient CEOs (Weisbach, 1988; Hermalin and Weisbach, 1988 and 1998), or because the market has a positive reaction to the announcement of an outsider’s appointment (Rosenstein and Wyatt 1990; Brickley et al., 1994; Shivdasani and Yermack, 1999; Petra, 2007). Vassallo and Wells (2006) find that the type of governance mechanism selected by firms associated with their disclosure level and, importantly, their results suggest that the demand for independent boards varies with firms’ disclosure level.

Weisbach (1988), Hermalin and Weisbach (1988 and 1998), Byrd and Hickman (1992) demonstrate that right decisions (as the firing of non-performing managers) are linked to the number of outsider in the board. Some evidence indicates consistently that firms with more independent board members have higher quality earnings.

In China, Bai et al. (2003) also find a positive association between board independence and performance. In the case of micro finance institutions’, Steinwand (2000) recommends an internal auditor who reports directly to the board; ideally, the internal auditor provides the board with independent, objective assessments on the micro finance institutions’ operations; this should improve financial and social performance. Byrd et al. (2001) examine the effect of internal governance arrangements on the probability that firms survive the crisis of the 1980s; they find that firms which survived the crisis had a greater proportion of independent directors on the board.

On the other hand, an excessive proportion of independent directors can limit board effectiveness. Cochran et al. (1985), Dalton and Daily (1994), Yermack (1996), Bhagat and Black (1998), Muth and Donaldson (1998), Adams and Mehran (2003), Fernandes (2007) find a negative relationship between board independence and corporate performance: these studies typically refer to the fact that while independent directors increase the quality of monitoring, they may lack of sufficient knowledge on firm-specific information, leading to sub-optimal decisions. The divergence in results can be explained, following Carretta et al. (2007), considering the fact that often independent directors are appointed by companies in critical situations, as a signal to the market of a high level of disclosure and of an enhanced effectiveness of the internal control system.
On the chairman/CEO duality, researchers have suggested that it can be seen as a double-edged sword. As assessed by Kim et al. (2008), two theoretical arguments exist regarding the benefits and costs of CEO duality. Agency theory asserts that combining pivotal positions of the CEO and board chairperson weakens the balance of powers at the corporate top, emphasizing the need for effective governance to secure shareholders' welfare (Fama and Jensen, 1983); in this light, Dedman (2002), Dahya et al. (1998, 2002 and 2005) underline how this CEO duality can establish strong, unambiguous leadership. Boyd et al. (1995) confirm that CEO duality breaks the balance of powers between the CEO and the board, potentially restricting the board's effectiveness in controlling managerial initiatives and actions.

Organizational and stewardship theorists argue that CEO duality leadership might be both a structural and psychological empowerment of the CEO, thus encouraging a CEO to better serve the firm and its shareholders (Davis et al., 1997). So, Rechner and Dalton (1991), Donaldson and Davis (1991), Brickley et al. (1997), Muth and Donaldson (1991 and 1998), Dedman and Lin (2002), McKnight et al. (2005) demonstrate that when chairman and CEO positions coexist firms pay higher dividends to their shareholders. Kim et al. (2008) indicate that CEO duality is positively associated with corporate strategic behaviour (corporate diversification into unrelated industries).

On board diversity, following the resource based view several authors assume that the presence of different skills, professional profiles, and talents in the board positively influences corporate performance, since it brings new resources from the external environment into the organization (Mace, 1971; Conner and Prahalad, 1996).

Fields (2003) demonstrates that it is easier for boards to handle relations, thanks to the availability of diversified personal profiles; Adams and Ferreira (2004) underline how boards with a higher female presence are more effective, thanks to the availability of a wider pool of talents from which to recruit independent board members, thanks to the availability of a wider pool of talents from which to recruit independent directors; moreover the authors assess that boards with a higher female presence meet more often, because women would introduce a different “attendance model” and approach to the board’s activities, compared to the male members. Diversity helps boards to become representative of the real composition of the various groups of economic operators — consumers, investors, entrepreneurs, employees, professionals, etc. — in which the number of women is much higher than is currently the case in the governance bodies of the companies that target those groups (Catalyst, 2004).

On the other hand, however, there are contrasting opinions that maintain that increasing differentiation could reduce agreement in the “team” of directors (Eisenhardt et al., 1997), because it could negatively affect trust between members of different sexes (Kanter, 1977). This would be particularly dangerous in periods of competitive tension, when it is of the essence to speed up decision making and reach a consensus as promptly as possible (Bodega, 1998). In this sense, uncertainty and diversity would be negatively linked. Moreover, increasing diversity on the board would reduce the propensity of the individual members to identify with the other members and, consequently, their willingness to collaborate. This would entail the replacement of the mechanism of trust with alternative mechanisms aimed at coordinating behaviors and decisions, thus increasing organizational costs (Adams, Ferreira, 2004).

In the case of microfinance institutions, Mersland and Strom (2009) show that financial performance improves when the board has local rather than international directors and when it employs an internal board auditor. Based on these arguments, we posit our first hypothesis:

**H1: Differences in boards’ structures depend on boards’ roles effectiveness, according to the country and the model of governance (traditional, monistic, dualistic) of listed companies.**

**Board organization and role effectiveness**

Also the organization of the board has different impact on the effectiveness of its roles, depending on a country’s legal, economic and cultural circumstances affecting the model of governance (traditional, monistic, dualistic) adopted by listed companies. By organizational characteristics we mean the processes and proceedings of boards and, in detail, the presence of committees with policy-making authority, with respect to certain corporate ambitus, the frequency of formal and informal meetings, the remuneration of directors, their turnover, and the existence of advanced systems for reporting management information, are all elements capable of affecting the quality of the board and, indeed, corporate performance.

The analysis of the relationship between boards’ features and corporate performance is incomplete if we do not take into account the internal functioning of the board. In fact, as other studies note, there are several factors that can affect how boards operate. Two particularly important points are the presence of board committees and the frequency of board and committee meetings (Vafeas, 1999).

Moreover, both the Commission Recommendation (2005) and various corporate governance codes adopted by listed companies (such as, for example, the Combined Code, the Final NYSE Corporate Governance Rules, and the Italian Code) expressly provide for the creation of audit, nomination, and remuneration committees, with a view to
On the first point, Yermack (1996) verifies how the presence of such committees enhances the control on management, reducing thereby the importance of economic incentives. In the same direction, Klein (1998) proves that committees and a high quote of independent directors in them have a positive link with corporate performance. With specific reference to nomination committees Core et al. (1999) show that, in the absence of these committees, the remuneration of chief executives tends to be higher. Some authors (Jensen and Murphy 1990; Murphy and Zimmerman 1993) highlight that the nomination committee increases the effectiveness of the selection process of both directors and management, since it is more dependent on the evaluation of individual performances. Ruigrok et al. (2006) find firms with nomination committees are more likely to have a higher number of independent and foreign directors, but not more likely to have a higher number of female board members; further, they confirm that the existence of nomination committees is associated with a higher degree of nationality diversity but is not related to board educational diversity.

On the second point, when we examine the activity of a board, we find explanations both for and against a positive relation between the frequency of meetings and performance. Meetings provide board members with the chance to come together, and to discuss and exchange ideas on how they wish to monitor managers and firm strategy. Hence, the more frequent the meetings, the closer the control over managers, the more relevant the advisory role, factors that lead to a positive impact on performance (proactive boards). Furthermore, the complexity of the some business (like the financial industry case, see Vafeas, 1999) and the importance of information both increase the relevance of the board’s advisory role.

Conger et al. (1998) consider meetings as a special opportunity in which to exchange important information for the company. Morck (2004) argues that meeting between independents, non-executive chairs, senior independent directors and committees composed only by independents are mechanisms able to increase the rationality and the ethics of CG, with a positive impact on corporate performance.

By contrast, frequent meetings might also be a result of board reaction to poor performance (reactive boards). Mace (1986), Lorsch and MaclVer (1989), in fact, point out that most meetings do not translate into any concrete actions by the BoD. Therefore, any hypothesis concerning the influence of board activity on firm performance is an empirical question, possibly yielding either proactive or reactive results (Vafeas, 1999). Based on these arguments, we posit our second hypothesis:

**H2**: Differences in boards’ organization are related to boards’ roles effectiveness, according to the country and the model of governance (traditional, monistic, dualistic) of listed companies.

**Skills and experience of directors and board’s role effectiveness**

Finally, the effectiveness of boards’ role/roles is related to the skills and to the experiences of directors. In this sense to legitimize, supervise and to support management it is not enough merely to appoint more directors. Additional directors, particularly non-executives, should be endowed with the knowledge, incentives, and abilities required to monitor, discipline and advice managers, thus enabling directors to alleviate conflicts of interest between insiders and shareholders (Harris and Raviv, in press). The BoD contributes to corporate performance not only by procuring the necessary resources from the outside, but also through the professional skills and expertise present within its ranks (Provan, 1980; Mace, 1986).

First of all, with respect to the BoD’s advisory role, the multiplicity of experience, the provenance and competencies of the individual directors have been related to the improvement of the decision-making processes and, ultimately, of corporate performance (Andrews, 1983; Huse and Rindova, 2001). One of the reasons for this impact may stem from the fact that the professional skills and experience of the directors contributes to the improved implementation of the corporate strategies through enhanced decision-making, in terms of both efficiency and effectiveness (Leontiades, 1982; Norburn and Miller, 1981). Based on the cognitive theories for understanding the decision-making mechanisms of boards of directors, Forbes and Milliken (1999) maintain that the board of directors may be viewed as a “black box” within which the principal processes take place. The directors’ competencies and cultural outlook are directly related to the overall quality of the processes. In other words, the accumulation of skills translates into various ways of perceiving and implementing corporate processes.

In a similar manner, Conner and Prahalad (1996) affirm that the differences existing in terms of competencies and experience (in terms of both breadth and depth), among directors, may either facilitate or hinder the exercise of its functions by the board.

When, in fact, the environment in which a company operates features a high degree of complexity and dynamism, the breadth and depth of the skills of the individual directors play a key role, because they allow a better understanding of the competitive environment and more effective and efficient decision making. As a rule, the heterogeneity of the skills of the board members is an important
element capable of facilitating the learning processes and strategic flexibility (Westphal et al., 2000).

Secondly, with regard to the BoD’s monitoring functions, Sapienza and Gupta (1994) stress the information asymmetry that may affect performance monitoring capacities. This asymmetry could also be the result of a lack of competence by those responsible for monitoring the senior management and can translate into monitoring shortcomings. In this sense, a more limited set of skills may entail higher transaction costs, with respect to the agents’ monitoring activities.

With specific reference to outsider directors, international best practices and the literature state the fact that an outsider can be independent only if it has the necessary skills, professional expertise and sector knowledge needed to accomplish non only control functions but also strategic advisory tasks in the board (Treichler, 1995; Spencer Stuart, 2003). Best practices underline how industry-specific skills can be relevant, but must not be preeminent to avoid a duplication of role with respect to executives. Fama (1980), Fama and Jensen (1983) suggest that boards with more reputable outsider, so with a high human capital level, are better than other boards at monitoring managers more effectively because they have substantial reputation capital at stake. Based on these arguments, we posit our third hypothesis:

**H3:** Differences in directors’ skills and experiences are related to boards’ roles effectiveness, according to the country and the model of governance (traditional, monistic, dualistic) of listed companies.

### 3. Data and sample

Former studies focus, even if in a fragmented way, on those board’s characteristics that seem to be relevant as performance drivers. The attention is basically on BoD’s structure and composition and, to a lesser extent, on some organizational features. The prior literature fails to consider such issues as directors’ expertise and education and the relationship between skill mixes and corporate performances. In our study we a board representation that takes into account all the three dimensions (table 1). The variables enclosed in parenthesis were collected on the sample but were not further analyzed because they were available only for a limited part of the considered companies.

**Insert Table 1 about here**

We started our research end 2006 and updated the relevant information for 2007, if any changes occurred in corporate governance of the considered companies.

Data on each company’s corporate governance profile were extracted from Thomson ONE Banker. Missing value and data on market capitalization were extracted from DASTREAM. We also checked the relevant information on each company’s website and, if available, in specific Annual Report on Corporate Governance.

Data on each board member were collected in companies’ websites and CVs were completed with information enclosed in company’s Annual Report on Corporate Governance and acquired throughout the internet (i.e. “who’s who?”, etc.). With respect to directors’ skills it was not possible to produce a complete dataset, since much information was not available for all the more than 2,000 directors. Little information could be acquired in the Italian, French and German cases with respect to the other two. We selected therefore a limited numbers of variables that could allow us to have evidence on main differences and similarities among clusters.

In order to employ our theoretical model, we divided the sample in two subsamples: companies and board members. The latter are represented by members of BoD (or Supervisory Board in the case of dualistic systems) of the companies considered in the first subsample. We considered 150 companies and 2,278 board members.

Companies’ sample is composed of the first 30 listed companies, selected by market capitalization at 31^st^ December 2006, in 5 European countries (Italy, France, Germany, United Kingdom, Spain). In case of multinational companies, we considered the country in which the company has its registered office. Table 2 show the differences in size – expressed by average market capitalization - between the companies included in our sample.

**Insert Table 2 about here**

Graph 1 describes the distribution of the 150 companies in different size ranges. The size of the companies in the sample is homogenous in several countries, if we consider that almost the 70% of the sample is between the first and the second range.

**Insert Graph 1 about here**

The three corporate governance systems are equally represented in the sample (graph 2), given that all German companies and several French big companies adopt a dualistic system; British companies apply the monistic model and Italian and Spanish companies mostly a traditional one (with few exceptions in the Italian case).

**Insert Graph 2 about here**

Board members’ sample includes all directors of the considered 150 companies, for a total number of 2,278 members. As shown in graph 3., the distribution

---

17 The same choice has been done by the Italian Association of Listed Companies, Assonime, in its Annual Report on Corporate Governance, “An analysis of the compliance with the Italian corporate governance code (2008)”.
of the directors between the 5 countries is homogeneous. Germany has larger (Supervisory) boards and therefore a higher number of directors represented in the sample.

Insert Graph 3 about here

4. Methodology and specification of variables

We tested our hypotheses by a non-hierarchical cluster analysis. This methodology is appropriate for the aim of our study because it is an exploratory multivariate analysis procedure for classifying elements into groups or clusters with a strong similarity between members of the same cluster and a high dissimilarity between members of different clusters. Then, on the contrary the clustering with overlapping and the clustering fuzzy, in our method each objects belong only to a specific cluster.

The cluster analysis was already used in other studies on boards and corporate governance. For example, Weiner and Alexander (1993) use cluster analysis to indicate that hospital board forms adhered only partially to corporate and philanthropic governance models and they varied systematically by specific organizational and environmental conditions. Talaulicar and Werder (2008) adopt the cluster analysis to account for the similarities and differences between firms regarding their compliance with the German Corporate Governance Code. Aoki and Jackson (2007) identify by cluster analysis various patterns of linkage between Japanese corporate governance mechanisms and the firms’ organizational architectures as a non-market information system. Cluster analysis is also used by Gillan et al., (2006) to confirm that corporate governance structures differ systematically across industries and firms due to differences in the costs and benefits of the monitoring mechanisms.

Similarity and dissimilarity inside/between clusters could be measured in different way (Everitt, 1993). Every method can be characterized by the applied proximity measure for assessing the similarities or proximities between objects and hence cluster membership, as well as by the selected fusion algorithm for aggregating objects to clusters. In our study we run a non-hierarchical clustering method, using K-means cluster analysis.

In this method, the similarity inside the clusters is determined with Euclidean distance measures or proximity measures of considered variables: in the specific case, we used a K-means clustering algorithm (MacQueen, 1967; Hartigan and Wong, 1975), that produces changes in the partition moving the cases from one cluster to the other in order to minimize the Euclidean distance from the center (Hair et al. 2006).

We tested K-means clustering with SPSS cluster routine for the companies’ data base, choosing three clusters since the three expected roles of boards (Legitimization, Monitoring and Decisioning), according to managerial hegemony, agency, stewardship and resource dependency perspectives. We also performed a correlation analysis on the first sample and a descriptive analysis on both of them. To describe BoD’s structure and composition we used following variables:

- Market capitalization (logarithmic value);
- Country (dummy variable);
- Model (dummy variable);
- Boardsize (number of board members);
- Outside or non executive directors (% on the total number of BoD’s members);
- Independent directors, if indicated by companies’ reports (% on the total number of BoD’s members);
- Female members (% on the total number of BoD’s members);
- Foreign members (% on the total number of BoD’s members);
- Board duality (dummy variable);
- Lead independent director (dummy variable).

To describe BoD’s organization we used following variables:

- Committees (number in each board);
- Meetings (number of BoD’s meetings per year).

To describe board members’ skills we used the variables shown in table 3. The % of availability of information on personal profiles is described in table 4.

Insert Tables 3 and 4 about here

5. Results

In this section we present the results of our study. We first analyse descriptive statistics, then correlation analysis’ and finally outcomes of ANOVA statistics and cluster analysis.

Descriptive Statistics

The average features of BoDs are shown in tables 5 and 6 and in graph 4. Considering that some variables are discrete (as model, country, duality, lead) or have a log scale (as size) the mean is not always a significant indicator of the sample’s description.

Companies have an average number of 15 board members, what demonstrates that biggest European firms tend to be governed by lean boards granting flexibility and speed to decision making processes. Their minority in the board could have as an effect a limited power in the decision process and a low impact on CEO and management control.

The diversity is low, not reaching even an average 1% for the total sample. The number of committees – on average 3 – shows how companies tend to comply with domestic codes of conducts – suggesting at least an audit, a nomination and a
remuneration committee – and do not broadly use this organizational mechanism to enhance individual participation to board activity on other specific topics, like strategy, compliance, or others. Finally, boards meet less than once a month.

**Insert Table 5 about here**

Table 6 shows in more details some differences in size and independence among countries. Except for Germany, European boards have equal size but the number of the independents is different: the boards of all UK are more independent, while the Spanish are less so.

**Insert Table 6 about here**

In graph 4 differences in terms of structure, diversity and organization between countries are represented.

As far as boardsize is concerned, Germany’s supervisory boards are at the first place, followed by France. Italy is slightly below average. The lower meeting frequency noticeable in German boards must be linked to the fact that it is referred to supervisory boards, which have mostly a control function and are not involved in management activities.

UK companies have the highest number of board committees, followed by the Spanish ones. Germany and France are below average while Italy is at the last place, since several companies do not yet have a nomination committee.

In terms of diversity, UK and Germany show the highest presence of female directors, while Italy is at the very last place; the highest percentage of foreigners characterizes French boards.

**Insert Graph 4 about here**

Descriptive statistics about our sample of board members are summarized in the following tables (7 and 8) and graphs (5 and 6). The analysis by board position reveals the presence of executives for over 40%, the non-executives are less than 20% while the independents are about 30%, in a few cases co-ordinated by a Lead Independent Director (1.46%). The cases of duality in the sample are very limited (0.29%).

On average, the directors’ length of service in Europe is about 5 years, with higher values for Spain and France and significantly lower values for the Italian case. Not surprisingly, the length of service is higher for executives (5.5 years) than that of independent (4.4 years) and non-executives (4.3 years) although with some exceptions. If Spanish and French, the non-executives’ length of service is superior to that of executives.

**Insert Tables 7 and 8 about here**

Turning our attention to the directors’ personal profile, the Italian and French directors are in average older, whereas the British are the youngest; overall the men directors are oldest than women directors (59 versus 56 years). The directors with a degree have a predominantly economic and scientific training, only a minority have a humanistic training (less than 10%).

**Insert Graphs 5 and 6 about here**

**Correlation**

Table 9 shows the correlation analysis on the sample companies and gives some more evidence on the relationship between structure and organization of the boards. First, the corporate governance model seems to have an impact on the board composition in terms of diversity. The number of female members decreases from one tier to two tier systems and so does the frequency of board meetings. The increase in boardsize leads to a lower meeting frequency and to a lower presence of independent. Moreover, a higher quote of independent seems to be associated with a higher number of meetings in a year.

**Insert Table 9 about here**

**Cluster Analysis**

The cluster analysis of the sample companies highlights three different significant groups of boards, showing different features in terms of structure and organization. In each cluster a specific corporate governance system appears to be dominant. Cluster 1, is basically composed by Italian and Spanish traditional boards; cluster 2 has a prevailing presence of German dualistic boards and in cluster 3 there is a majority quote of French and British monistic structures.

Cluster 1 (that we name “Involved”) refers mainly to a supporting role for the boards contains middle sized boards, with the highest level of meeting frequency, the lower percentage of foreign members and a high quote of independents.

Cluster 2 (that we name “Supervisor”) refers mainly to a supervisory role for the boards and shows a higher size, a low meeting frequency and a high quote of foreigners.

Cluster 3 (that we name “Independent”) is composed by companies with little boards, meeting with high frequency and showing a more heterogeneous composition in terms of directors’ nationalities and a higher degree of independence.

Following graphs (7, 8 and 9) and Table10 highlight the differences between clusters.

**Insert Graphs 7, 8, 9 and Table 10 about here**
Table 11 shows the distance between clusters and represents the similarity degree among them. Cluster 2 and 3 are more similar, while cluster 1 has a higher distance from the other two.

**Insert Table 11 about here**

Table 12 reports Anova test results and confirms that determinant factors in cluster distribution are, besides the corporate governance model and the country, board size, board composition and organization (meeting, independent, lead independent, foreigners). Of little relevance, on the contrary, are the number of female directors, committees and duality.

**Insert Table 12 about here**

The differences obtained between clusters confirm H1 and H2, showing that the structures and the organization of European boards vary across the country and the typical system (traditional, monistic, dualistic) adopted by listed companies. In order to demonstrate H3, the analysis must be completed with the skills’ profiles of directors represented in the sample.

Table 13 shows the directors’ profiles in each cluster. It has been obtained by linking the directors in the sample with the cluster corresponding to the company on which board they sit. The distribution of the directors inside the three clusters reflects the number of companies. On average, board members look different with respect to education and experience between clusters. The bigger differences can be noticed between cluster 1 and cluster 3. Directors in cluster 1 have predominantly a degree in economics, while in cluster 3 there is a higher heterogeneity between degrees. In cluster 1, several directors have a degree in law, which is a typical feature of Italian boards (Carretta et al., 2007). 2% of directors in cluster 3 have an MBA and another 3% has more than one degree. In cluster 3, directors have a limited number of appointments (as in cluster 1) but a higher length of service in the same board. As far as experience is concerned, cluster 1 and cluster 2 have a higher percentage of directors with past managerial experience and with experience within the same industry than cluster 2.

In summary, in the cluster “Involved” directors are older, mostly men. They have a limited tenure of membership in society with an equally small number of other tasks. Mostly, they are distributed equally between economic, legal and scientific degree while humanists are in minority. Only a few directors have more than a degree or a Phd / MBA with work experience fairly distributed between managerial and industrial.

In the cluster “Supervisor”, which is also sizeable (1,325 directors), the directors are younger, in many cases they are women with a high length of service and a number of high positions. Many directors are a MBA or a Phd, the training is mainly for scientific and humanistic, even though many have more degrees, with a prevalence of management experience competencies.

Lastly, in the cluster “Independent”, boards appear to be structured and organized in order to achieve higher efficiency through smaller size, a more heterogeneous skill mix. Although managerial competencies are prevailing, characterizing a board with high potential, there is a broader spectrum of experiences represented in the board. Directors are mostly independent, and are committed to their role, as testified by the low number of other appointments and the length of service.

**Insert Table 13 about here**

Our third hypotheses H3 can be considered confirmed, in the sense that different clusters show their own distinctive features in terms of skill mix and experiences of directors.

6. Discussion and conclusions

Are European boards converging toward a common model? On the base of a large sample of European listed companies and their directors – whose professional profiles have been described and analysed on an individual base – our study supports the hypothesis that European corporate governance do not yet converging towards a common model. Contrary to the claim of Goergen et al (2008), the results put in evidence in fact the existence of three dominant corporate governance profiles in European listed companies, different each others.

The determinants of these profiles depend on the typical governance system (traditional, dualistic and monistic) adopted by the same companies – that are prevalent in the cluster - and on country’s culture and history; as a consequence, each of them has a own attitude of the board, in terms of structure, organization and skill mix characteristics.

With respect to the structure of the board, reference is made to certain factors, such as its dimensions, composition, relations between executive and non-executive directors, number of independent directors, presence of duality case, and the board diversity (in terms of number of female and foreign directors).

By organizational characteristics we mean the processes and proceedings of boards. In particular, the presence of committees with policy-making authority, the frequency of formal board and committee meetings and the attendance to them by directors, are all elements capable of affecting the quality of the BoD and, indeed, corporate performance.

The skill mix of the directors, like the third dimension of our theoretical model, is considered a relevant variable according to the “resource based
The board of directors contributes to corporate performance not only by procuring the necessary resources from the outside, but also through the professional skills and expertise present within its ranks (Provan, 1980; Mace, 1986). The company is viewed as the set of its resources, and capabilities and skills, may represent both a constraint on corporate development, if there are none, or a competitive edge, if they are present (Langlois and Robertson, 1995; Madhok, 1997).

One of the responsibilities of boards, in fact, concerns the strategic policy-making of the senior management. In order to perform this role, directors must possess the suitable skills to make important decisions for the company.

A first distinction may concern the skills related to the comprehension of the strategic activities underlying the company’s operations and of the possible competitive scenarios (Nonaka, 1994), and those concerning the traditional ambit of corporate activities that represent an important factor for formulating strategies (Ancona and Caldwell, 1988).

On the contrary, a subsequent distinction may be based on firm-specific skills (those of the senior management and line management) and board-specific skills (those of the directors). The latter include, for example, educational qualifications, professional experience, independence, personal integrity, and the relational and networking capacities of the directors (Westphal and Milton, 2000).

A further factor of interest concerning skills is the development of specific processes that are institutionalized within the company through a learning process, which is also specific and cannot be generalized in other contexts, and which contributes directly to the creation of a shared culture.

In this light, skill mix are composed by many variables like age and gender of the director, board position, length of service in the company, number of other appointments, percentage of attendance to board’s and committees’ meetings, education and work experience of the director, distinguish between managerial or industrial.

Amongst the dominant corporate governance profiles in European market, the third one, which characterizes the one-tier model companies, has a fitter and more efficient board and further more has got a skill mix more heterogeneous both in terms of diversity and professional backgrounds of the directors.

Our paper has some important practical implications. First, our results highlight that a true convergence in corporate governance systems is difficult to be achieved since the differences existing in legal, economic and cultural variables of the various countries.

Second, we emphasize that convergence in governance models could be an incorrect goal to aspire since the above mentioned differences may make ineffective some governance practices.

At the light of these results, further research could examine if a “best practices approach” to corporate governance is really more advantageous than a “good practices approach” in assuring board effectiveness.

References

11. Assonime (2008), An analysis of the Compliance with the Italian Corporate Governance Code.


Convegno Banca d’Italia, Corporate Governance in Italy: 10 years after the Consolidated Law on Finance, December.


120. Vassallo P., Wells P. (2006), Firms’ information environment and board independence. Working paper. The University of Melbourne, Australia


Appendices

Table 1. The model and its variables

<table>
<thead>
<tr>
<th>Structure and composition</th>
<th>Organization</th>
<th>Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Size</td>
<td>- No.Committees</td>
<td>- Age, gender</td>
</tr>
<tr>
<td>- % outsider directors</td>
<td>- No.Board meetings/year</td>
<td>- Position: Chairman, Executive Director, Non Executive Director, Independent Director</td>
</tr>
<tr>
<td>- % independent directors</td>
<td>- (% attendance to meetings)</td>
<td>- Education</td>
</tr>
<tr>
<td>- Diversity: % female directors</td>
<td>- (Board evaluation)</td>
<td>- Prior experiences</td>
</tr>
<tr>
<td>- Diversity: % foreign directors</td>
<td>- (No. of meetings per year for each committee)</td>
<td>- (Presence in committees)</td>
</tr>
<tr>
<td>- Board duality</td>
<td>-</td>
<td>- Length of service</td>
</tr>
<tr>
<td>- Lead independent director</td>
<td>-</td>
<td>- No. of other appointments</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>- (% attendance to board’s and committees’ meetings)</td>
</tr>
</tbody>
</table>

Table 2. The sample: average market capitalization

<table>
<thead>
<tr>
<th>Country</th>
<th>Market Capitalization (31st December 2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>from 25,000 to 166,000 millions euro</td>
</tr>
<tr>
<td>SPAIN</td>
<td>from 4,800 to 88,400 millions euro</td>
</tr>
<tr>
<td>ITALY</td>
<td>from 4,300 to 102,000 millions euro</td>
</tr>
<tr>
<td>FRANCE</td>
<td>from 14,000 to 132,000 millions euro</td>
</tr>
<tr>
<td>GERMANY</td>
<td>from 7,600 to 71,000 millions euro</td>
</tr>
</tbody>
</table>
Graph 1. The sample: companies’ market capitalization per country (millions euro and %)

Graph 2. Corporate Governance Systems represented in the sample

Graph 3. Distribution of board members between countries
Table 3. Variable specification for directors’ skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board position</td>
<td>The role assumed by the director inside the board:</td>
</tr>
<tr>
<td></td>
<td>- Chairman</td>
</tr>
<tr>
<td></td>
<td>- Executive Director</td>
</tr>
<tr>
<td></td>
<td>- Non Executive Director</td>
</tr>
<tr>
<td></td>
<td>- Independent Director</td>
</tr>
<tr>
<td></td>
<td>- Lead Independent Director</td>
</tr>
<tr>
<td></td>
<td>- CEO</td>
</tr>
<tr>
<td>Sex</td>
<td>Male/Female</td>
</tr>
<tr>
<td>Age</td>
<td>Age of the director. Could be a proxy of general work experience</td>
</tr>
<tr>
<td>Length of service</td>
<td>Number of years inside the specific board</td>
</tr>
<tr>
<td>Number of appointments</td>
<td>Number of appointments in boards or control organs</td>
</tr>
<tr>
<td>Degree</td>
<td>Final degree:</td>
</tr>
<tr>
<td></td>
<td>- Economics</td>
</tr>
<tr>
<td></td>
<td>- Law</td>
</tr>
<tr>
<td></td>
<td>- Science</td>
</tr>
<tr>
<td></td>
<td>- Humanities</td>
</tr>
<tr>
<td></td>
<td>- Other</td>
</tr>
<tr>
<td></td>
<td>- More than one degree</td>
</tr>
<tr>
<td>Master/PhD</td>
<td>If the subject has acquired a Master or a PhD degree</td>
</tr>
<tr>
<td>Work Experience (managerial)</td>
<td>If the director had prior experiences in management (judgmental evaluation of CVs)</td>
</tr>
<tr>
<td>Work Experience (industry)</td>
<td>If the director had prior experiences in the same industry (judgmental evaluation of CVs)</td>
</tr>
</tbody>
</table>

Table 4. The availability of data on personal profiles

<table>
<thead>
<tr>
<th>Variable</th>
<th>Available data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>100%</td>
</tr>
<tr>
<td>Board position</td>
<td>90%</td>
</tr>
<tr>
<td>Age</td>
<td>67%</td>
</tr>
<tr>
<td>Sex</td>
<td>100%</td>
</tr>
<tr>
<td>Length of service</td>
<td>73%</td>
</tr>
<tr>
<td>Degree</td>
<td>43%</td>
</tr>
<tr>
<td>Master PhD</td>
<td>100%</td>
</tr>
<tr>
<td>Experience in management</td>
<td>44%</td>
</tr>
<tr>
<td>Experience in the industry</td>
<td>44%</td>
</tr>
</tbody>
</table>
Table 5. Descriptive analysis of sample companies

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>St.Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>150</td>
<td>3.65</td>
<td>8.37</td>
<td>12.02</td>
<td>10.030</td>
<td>0.890</td>
</tr>
<tr>
<td>Model</td>
<td>150</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2.050</td>
<td>0.862</td>
</tr>
<tr>
<td>Boardsize</td>
<td>150</td>
<td>20</td>
<td>6</td>
<td>26</td>
<td>15.220</td>
<td>4.241</td>
</tr>
<tr>
<td>Independent</td>
<td>150</td>
<td>0.954</td>
<td>0.000</td>
<td>0.954</td>
<td>0.402</td>
<td>0.281</td>
</tr>
<tr>
<td>Country</td>
<td>150</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>3.000</td>
<td>1.419</td>
</tr>
<tr>
<td>Foreign</td>
<td>150</td>
<td>0.710</td>
<td>0.000</td>
<td>0.710</td>
<td>0.080</td>
<td>0.151</td>
</tr>
<tr>
<td>Female</td>
<td>150</td>
<td>0.269</td>
<td>0.000</td>
<td>0.269</td>
<td>0.071</td>
<td>0.073</td>
</tr>
<tr>
<td>Duality</td>
<td>150</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.240</td>
<td>0.429</td>
</tr>
<tr>
<td>Lead</td>
<td>150</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0.230</td>
<td>0.420</td>
</tr>
<tr>
<td>Committee</td>
<td>150</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>3.250</td>
<td>1.042</td>
</tr>
<tr>
<td>Meeting</td>
<td>150</td>
<td>25</td>
<td>2</td>
<td>27</td>
<td>8.750</td>
<td>3.695</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Board size and independence in different countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Average Board Size</th>
<th>Average % of Independent directors in BoDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>14</td>
<td>64</td>
</tr>
<tr>
<td>Spain</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>Italy</td>
<td>15</td>
<td>55</td>
</tr>
<tr>
<td>France</td>
<td>15</td>
<td>48</td>
</tr>
<tr>
<td>Germany</td>
<td>19</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Note: German law does not explicitly require that Supervisory board members must be independent. The analysis does not take into account the distinction between shareholder and employee representative directors in German Supervisory boards because it is not relevant for the purpose of this study.

Graph 4. Differences in BoD’s structure, diversity and organization between countries
Table 7. Descriptive analysis of sample directors: board position

<table>
<thead>
<tr>
<th>Board position</th>
<th>Number of directors</th>
<th>% of the sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman</td>
<td>107</td>
<td>5.2%</td>
</tr>
<tr>
<td>Chairman and CEO</td>
<td>6</td>
<td>0.29%</td>
</tr>
<tr>
<td>Executive</td>
<td>856</td>
<td>41.61%</td>
</tr>
<tr>
<td>Non Executive</td>
<td>402</td>
<td>19.54%</td>
</tr>
<tr>
<td>Independent</td>
<td>656</td>
<td>31.89%</td>
</tr>
<tr>
<td>Lead Independent</td>
<td>30</td>
<td>1.46%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2057</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 8. Directors: average length of service for each board position

<table>
<thead>
<tr>
<th>Country/Position</th>
<th>Executive</th>
<th>Non executive</th>
<th>Independent</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>6.5</td>
<td>4.8</td>
<td>4.4</td>
<td>5.2</td>
</tr>
<tr>
<td>SPAIN</td>
<td>5.5</td>
<td>6.2</td>
<td>5.6</td>
<td>5.6</td>
</tr>
<tr>
<td>ITALY</td>
<td>2.4</td>
<td>3.0</td>
<td>2.0</td>
<td>2.3</td>
</tr>
<tr>
<td>FRANCE</td>
<td>5.7</td>
<td>7.0</td>
<td>5.6</td>
<td>5.7</td>
</tr>
<tr>
<td>GERMANY</td>
<td>5.1</td>
<td>4.0</td>
<td>n.a.</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5.5</td>
<td>4.3</td>
<td>4.4</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Graph 5. Age of directors in the sample

Graph 6. Directors’ education (% directors with degree in economics, law, scientific, humanities & other)
Table 9. Correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>Model</th>
<th>Boardsize</th>
<th>Independent</th>
<th>Female</th>
<th>Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boardsize</td>
<td>-0.040</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>-0.157</td>
<td>-0.390**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-0.381**</td>
<td>0.012</td>
<td>0.043</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Meeting</td>
<td>0.269**</td>
<td>-0.226**</td>
<td>0.362**</td>
<td>-0.138</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at 0.01 level (Listwise N=150).

Graph 7. The three clusters: number of companies in each cluster

Graph 8. Clusters profiles in relation to companies’ nationality

Graph 9. Clusters profiles in relation to board structure and organization
Table 10. Clusters profiles in relation to board diversity and independence

<table>
<thead>
<tr>
<th>CLUSTER</th>
<th>Foreign</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td>0.01</td>
<td>0.46</td>
</tr>
<tr>
<td>Supervisor</td>
<td>0.06</td>
<td>0.29</td>
</tr>
<tr>
<td>Independent</td>
<td>0.12</td>
<td>0.52</td>
</tr>
</tbody>
</table>

Table 11. Distances between clusters

<table>
<thead>
<tr>
<th>CLUSTER</th>
<th>Involved</th>
<th>Supervisor</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involved</td>
<td></td>
<td>10.677</td>
<td>8.056</td>
</tr>
<tr>
<td>Supervisor</td>
<td>10.677</td>
<td></td>
<td>7.145</td>
</tr>
<tr>
<td>Independent</td>
<td>8.056</td>
<td>7.145</td>
<td></td>
</tr>
</tbody>
</table>

Table 12. Anova test results

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Mean Square</th>
<th>df</th>
<th>Mean Square</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>19.505</td>
<td>2</td>
<td>1.775</td>
<td>147</td>
<td>10.986</td>
<td>0.000</td>
</tr>
<tr>
<td>Size</td>
<td>1.858</td>
<td>2</td>
<td>0.775</td>
<td>147</td>
<td>2.398</td>
<td>0.094</td>
</tr>
<tr>
<td>Boardsize</td>
<td>898.718</td>
<td>2</td>
<td>6.002</td>
<td>147</td>
<td>149.735</td>
<td>0.000</td>
</tr>
<tr>
<td>Model</td>
<td>4.914</td>
<td>2</td>
<td>0.686</td>
<td>147</td>
<td>7.162</td>
<td>0.001</td>
</tr>
<tr>
<td>Independent</td>
<td>0.92</td>
<td>2</td>
<td>0.068</td>
<td>147</td>
<td>13.522</td>
<td>0.000</td>
</tr>
<tr>
<td>Foreign</td>
<td>0.085</td>
<td>2</td>
<td>0.022</td>
<td>147</td>
<td>3.822</td>
<td>0.024</td>
</tr>
<tr>
<td>Female</td>
<td>0.009</td>
<td>2</td>
<td>0.005</td>
<td>147</td>
<td>1.679</td>
<td>0.190</td>
</tr>
<tr>
<td>Duality</td>
<td>0.228</td>
<td>2</td>
<td>0.183</td>
<td>147</td>
<td>1.247</td>
<td>0.290</td>
</tr>
<tr>
<td>Lead</td>
<td>1.314</td>
<td>2</td>
<td>0.161</td>
<td>147</td>
<td>8.162</td>
<td>0.000</td>
</tr>
<tr>
<td>Committee</td>
<td>0.342</td>
<td>2</td>
<td>1.097</td>
<td>147</td>
<td>0.312</td>
<td>0.733</td>
</tr>
<tr>
<td>Meeting</td>
<td>458.824</td>
<td>2</td>
<td>7.597</td>
<td>147</td>
<td>60.397</td>
<td>0.000</td>
</tr>
</tbody>
</table>

* Significant variables have Sig. < 0.05

Table 13. Clusters profiles in relation to directors’ characteristics

<table>
<thead>
<tr>
<th>Cluster Profiles</th>
<th>Involved</th>
<th>Supervisor</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>N° of directors</td>
<td>184</td>
<td>1325</td>
<td>769</td>
</tr>
<tr>
<td>Age (years)</td>
<td>59.55</td>
<td>58.87</td>
<td>58.98</td>
</tr>
<tr>
<td>Women (%)</td>
<td>6.40</td>
<td>7.80</td>
<td>8.45</td>
</tr>
<tr>
<td>N° appointments</td>
<td>2.70</td>
<td>3.77</td>
<td>2.86</td>
</tr>
<tr>
<td>Length of service</td>
<td>4.60</td>
<td>5.36</td>
<td>5.49</td>
</tr>
<tr>
<td>Final Degree: - Economic</td>
<td>30.43</td>
<td>17.20</td>
<td>18.33</td>
</tr>
<tr>
<td>- Law</td>
<td>15.22</td>
<td>7.77</td>
<td>9.23</td>
</tr>
<tr>
<td>- Scientific</td>
<td>16.30</td>
<td>10.49</td>
<td>8.76</td>
</tr>
<tr>
<td>- Other</td>
<td>1.63</td>
<td>4.15</td>
<td>2.86</td>
</tr>
<tr>
<td>- More than one</td>
<td>0.54</td>
<td>1.81</td>
<td>2.86</td>
</tr>
<tr>
<td>MBA / PhD</td>
<td>0.54</td>
<td>1.06</td>
<td>1.95</td>
</tr>
<tr>
<td>Management</td>
<td>39.67</td>
<td>28.22</td>
<td>37.84</td>
</tr>
<tr>
<td>Industrial</td>
<td>31.52</td>
<td>19.62</td>
<td>24.32</td>
</tr>
</tbody>
</table>