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WOMEN ON CORPORATE BOARDS IN ITALY

by Magda Bianco*, Angela Ciavarella** and Rossella Signoretti***

Abstract

We examine the presence of women in Italian corporate boards before the introduction of Law 120/2012. We consider all directors of publicly-traded firms in 2008-10 and investigate the potential determinants of having boards with gender-diverse representation and the correlation between female directorship and selected governance measures. Two different models emerge. In the majority of diverse boards at least one of the women has a family connection with the controlling shareholder: family-affiliated women are more frequently found in smaller companies, firms with a concentrated ownership, businesses that operate in the consumer sector and those with larger boards. By contrast, unaffiliated women are more common in widely held companies, companies with younger and more highly educated boards, those with a higher proportion of independent directors and those with fewer "connected" directors. With reference to governance-related outcomes, the number of board meetings is positively correlated with the presence of women on boards, while no difference is found between female and male directors in board meeting attendance.

JEL classification*:* G34, G38
Keywords*:* gender diversity, corporate governance, board of directors.

Contents

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** Consob, Divisione Studi.
*** Consob, Divisione Corporate Governance.

1. Introduction and main results*

Women still hold very few corporate seats. In 2011, the "Catalyst Census: Fortune 500 women boards directors" reported that women held 16.1 board seats, up from 9.6% in 1995. In most cases where there is a woman, she is the only one. However there is a growing pressure to increase female presence on boards, both due to a greater attention to reduce gender gaps more generally and to the analyses (mainly) in the corporate governance literature suggesting that diverse boards might be (under some conditions) more effective.

Boards typically perform two roles: an advisory role towards management and a monitoring role. The importance of diversity in corporate boards has been shown both in light of the agency theory (monitoring role) and in the resource dependence framework (advisory role). Both theories claim that individuals' characteristics can influence the ability to monitor and advise the inside directors and provide outside connections.

According to the former, a heterogeneous board is a stronger monitor of executives behavior in the interest of the shareholders. This is grounded on the fact that diverse people may have different backgrounds and bring different viewpoints to board oversight (Anderson *et al*., 2009; Adams and Funk, 2010). Being generally excluded from old-boys networks, female directors might enhance board independence of thought and monitoring functions (Adams and Ferreira, 2009; Rhode and Packel, 2010).

The resource dependence framework considers directors as providers of important resources to the firms such as connections with the outside environment, advice and counsel (Pfeffer and Salanick, 1978; Ferreira, 2009). The more directors can provide a breadth of resources including different professional backgrounds, perspectives, problem-solving skills, the more they will be able to endow top managers with valuable advice and counsel (Anderson *et al*., 2009; Terjesen *et al*., 2009).

Obviously for both these roles the female presence would be less beneficial if women were appointed as "tokens" (Kanter, 1977). First their selection would not be based on merit; secondly they would probably not have a sufficient critical mass. In fact, not only the presence but also the number of women directors seems to be crucial and a critical mass, which according to the literature should be of at least three, is deemed necessary to be significant influencers (Konrad *et al*., 2008; Elstad and Ladegard, 2010; Kramer *et al*., 2009).

Many researchers have tried to measure the effects of female representation on both governance and financial performance outcomes. However, no conclusive evidence on how gender diversity affects performance exists so far.

As for the effects of diversity on the adoption of good governance practices, a wider female representation has been found to be associated with stronger attention to the handling of conflict of interests and boards with two or more women make more use of search consultants

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(Brown *et al*., 2002). A recent study on a large panel of U.S. boards finds that gender diversity has a positive effect on some board practices associated with good governance. The greater the percentage of women in the board the higher the attendance of male directors, the number of board meetings and the pay-for-performance (Adams and Ferreira, 2009). These results suggest that diverse boards are indeed stronger monitors. Finally, a recent contribution supports the idea that gender diversity is beneficial by demonstrating its positive influence on a firm's general orientation towards stakeholders (Adams, Licht and Sagiv, 2010).

Much of empirical research on gender diversity has focused directly on its effects on various performance measures, though with mixed evidence. While some authors find a positive relationship between gender (and ethnic) diversity and Tobin's Q or accounting measures of performance (Erhardt *et al*., 2003; Carter *et al*., 2003), others do not reach statistically significant nor conclusive results. The impact of diversity varies with firm characteristics: it may be beneficial in some but detrimental in others. According to Anderson *et al*. (2009), board diversity (including gender) positively affects the performance of more complex firms but has detrimental effects in less complex organizations. Adams and Ferreira (2009) find in general a negative relationship between gender diversity and both Tobin's Q and ROA. However, the latter result changes when controlling for firm's governance, as measured through the G Index, by Gompers et al. (2003). The authors conclude that in firms with weaker shareholders' protection, gender diversity positively affects performance while in well-governed firms additional monitoring (i.e. that exerted by diverse boards) is negative.

However, the results of the studies on the effects of gender diversity have to be taken carefully, since they often suffer from endogeneity problems and reverse causality. For example, results on the impact of female directorship on corporate governance measures could be driven by differences in some unobservable firms characteristics, such as corporate culture[1], affecting both performance and gender diversity. Moreover, the reverse causality problem makes it difficult to attribute a causal interpretation to a positive coefficient on the proportion of female directors on performance or on governance outcomes (see Rhode and Packel, 2010).

The gender diversity issue is now also driving a policy debate which is leading a number of European countries to introduce some kind of compulsory quotas. After the leading example of Norway, gender quotas are currently on the agenda of rule makers around the world who aim at addressing the scant progress in increasing female representation (Catalyst, 2010; EPWN, 2010). Table 1 summarizes the state of the art of gender diversity regulation across Europe.

In Continental Europe, various countries have mandated gender quotas or are discussing such a provision. Countries that had initially taken a softer approach by addressing this issue in corporate governance codes, have later moved towards compulsory quotas or are debating on doing so. In Italy, the one-third gender quota has been recently introduced[2] after a long debate.

Quotas regulation are generally justified on the basis of equality and fairness grounds. Nonetheless, imposing constraints on board composition may affect firms' value and raise costs in terms of restricting the possibility of appointing the best available candidate (Adams,

[1] As Adams and Ferreira (2009) point out: "*it is plausible to assume that some firms are more progressive than others, so they have both better governance, as well as more female directors*".

[2] Law 120/2011 which will be in force since August 2012.

Gray and Nowland, 2010). From a theoretical point of view, if firms define their board structure in order to maximize their value, any regulatory constraint should be detrimental. However, if board structure is chosen to maximize the private benefits of insiders, diversity can increase firms' value (Ahern and Dittmar, 2010).

Though there is limited evidence on the effects of the introduction of compulsory quotas, a study on Norway finds that, consistent with the expected reorganization of boards, market reaction to the first announcement of the law is negative for all-male board companies and positive for those that have at least one female director (Ahern and Dittmar, 2010). The authors also document a negative effect of the new regulation in terms of Tobin's Q. Another research on the Norwegian market finds that quotas increased labor costs and employment levels while reducing short-term profits (Matsa and Miller, 2010). Female directors appointed in Norway as a consequence of the new law provisions are found to be younger, less experienced and more stakeholder-oriented (Ahern and Dittmar, 2010; Matsa and Miller, 2010).

Also to inform this debate, it might be useful to investigate corporate drivers of gender diversity. This might help understanding how the selection mechanism has worked until today and provide a guide in interpreting possible further developments.

In this paper we concentrate on Italian boards. The Italian labor market is characterized by a very limited women participation. As the Global Gender Gap Index[3] shows, Italy is one of the lowest-ranking countries in the EU as for the size of the gender inequality gap, and its rank has further deteriorated in 2011[4]. The percentage of female employees in Italian private companies is among the lowest (30%), with only India, Japan, Turkey and Austria performing worst[5]. Vertical segregation is even stronger: female employees tend to be concentrated in low or middle-level positions[6].

This paper sheds some light on female representation in Italian corporate boards, by taking into account the peculiarities of the Italian corporate control models. We consider all directors of publicly-traded firms at the end of 2008-2009 and 2010 and investigate the main characteristics of female directors, as well as potential determinants of diverse boards. We take into account the characteristics of both firms and and female directors, specifically their affiliation with the controlling shareholder. Moreover, we look at the correlation between female directorship and some governance measures, in order to get some insights on the possible effects of gender diversity.

We find that female directors in Italy are still gold dust, since at the end of 2010 only 6,8% of total board sits was held by a woman and the majority of listed companies had all-male boards

[3] The Global Gender Gap Index was introduced by the World Economic Forum in 2006 as a framework for capturing the size of the gender inequality gap across countries in four areas: (i) economic participation and opportunity; (ii) educational attainment; (iii) health and survival; (iv) political empowerment.

[4] Italy in 2010 was ranked 74, while in the 2009 it was 72. Considering only the sub-index related to the area "economic participation and opportunity", Italy ranks 97th (The Global Gender Gap Report, 2010).

[5] India is the country with the lowest percentage of female employees (23%), followed by Japan (24%), Turkey (26%) and Austria (29%).

[6] Even if considering a (small) sample of the largest companies Italy appears to have a rather high percentage of female CEOs, together with Finland (13%), Norway (12%), Turkey (12%) and Brazil (11%) (see The Corporate Gender Gap Report (2010), p. 5).

(in 2011 they reached 7,4%). Both the number of female directors and that of companies where at least one board member is a woman are steadily but slowly growing (Table 2).

When considering women's affiliation with the controlling agent, we find a pervasive presence of women directors with a family connection with the controlling shareholder: in 48% of diverse-board companies female directors are exclusively family members and in further 9% there is at least one family-affiliated woman. We also investigate the peculiarities of family and non-family women directors, with reference to their level of education and the role in the board. "Family" directors are on average less educated than not-affiliated women directors: the proportion of graduated women is much higher in the non-family group than in the other one (93% vs. 61%).

As for the role, we find that only a minority of female directors is an independent director, whereas in almost half of the cases women are non executive directors and in one case out of three they have an executive role. Both executive and non-executive positions are more frequently held by a family-affiliated woman, while non-family women are usually independent directors.

These descriptive statistics provide evidence of a twofold nature of female representation in the Italian market, which is confirmed by the econometric analysis we perform in order to shed a light on the relation between some firm characteristics and gender diversity. Two different models emerge. On the one hand, family-affiliated women are more present in smaller companies, with a concentrated ownership, which operate in the consumers sector and have a larger board. On the other hand, not-affiliated women are more common in widely held companies, with younger and more educated boards, with a higher proportion of independent directors and a smaller number of "connected" directors. In both models the presence of institutional investors is positively related to female representation.

We also try to assess possible effects of women presence on some governance related outcomes. The number of board meetings appears to be positively correlated with the presence of women on boards (mainly not family affiliated women), whereas there doesn't seem to exist differences in meetings' attendance between female and male directors.

The paper is organized as follows. Section 2 describes Italian corporate boards, also with regard to the regulations addressing their composition. Section 3 provides some descriptive statistics on female representation in Italian publicly traded firms and describes the methodology we use to understand its possible drivers and effects. Section 4 illustrates the results of the analyses of the company-level determinants of female representation and of the relationship between women presence and board activity outcomes. Finally, section 5 concludes.

2. Boards In Italy

The Italian legislation allows for three types of board structure since the 2003 company law reform:

i) a "traditional" model with a board of directors and a board of statutory auditors (*collegio sindacale*), both appointed by the shareholders' meeting; the board may delegate day-to-day managerial powers to one or more executive directors, or to an executive committee;

ii) a "two-tier" model (*dualistico*) with a supervisory board appointed by the shareholders' meeting and a management board appointed by the supervisory board, unless the bylaws provides for appointment by the shareholders' meeting. The supervisory board is not vested with operative executive powers;

iii) a "one-tier" model (*monistico*) with a board of directors appointed by the shareholders' meeting and a management control committee made up of non-executive independent members of the board. The board may delegate day-to-day managerial powers to one or more managing directors, or to an executive committee.

The traditional model is the most prevalent governance system in the Italian market indeed; very few listed companies have so far adopted the alternative two-tier and one-tier models (7 and 3 firms, respectively). Directors mandates are generally for a three-year period, though companies' bylaws or general meetings may provide or allow for shorter (e.g. one-year) or different terms (e.g. staggered boards).

Also as a result of some recent reforms, board composition has been strengthened with a view to enhance its monitoring role.

First, the presence of independent directors within the board is both mandated by the law and recommended by self-regulation. According to the former, at least one director, or two for boards with more than seven members, is required to be independent following the legislative standard set for statutory auditors. Moreover, the Italian corporate governance Code recommends that an adequate number of directors, and in any case at least two of them, should be independent according to its (more accurate) criteria, inspired by the EC Recommendation No. 162/2005.

Second, following the Parmalat and Cirio scandals, the 2005 Law on Savings has mandated the slate voting mechanism ("*voto di lista*") for the appointment of directors[7]. Such mechanism allows for the designation of at least one board member by minority shareholders: directors are indeed appointed by the general meeting on the basis of slates of candidates presented by shareholders owning a minimum threshold of the company's share capital (varying from 0,5% to 4,5%) and at least one board member is elected by the slate ranked second in terms of votes. The reform aimed at strengthening the ability of outside shareholders to monitor insiders (executives and controlling shareholders) by appointing a candidate of their own choice.

Finally, Law 120/2011 has mandated gender quotas for Italian listed companies. Also in light of the limited female representation in corporate boards, the law requires at least one third (one fifth for the first term) of boards seats to be held by directors of the less represented gender. This provision will be in force starting from August 2012 and is subject to a three board terms sunset clause.

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[7] Privatized listed companies have longer been subject to the slate voting provision, which was first envisaged by the 1994 Law on Privatization. Moreover, the same mechanism has been mandated since 1998 for the appointment of statutory auditors in all listed companies.

On average Italian boards of directors consist of 10 directors (see Assonime, 2012): executive directors (such as CEOs and members of the executive committee) account for more than one fourth of the total number of directors, while among non-executive directors, those meeting the independence criteria account for over one third of the board.

The appointment of minority directors is increasing, though their presence within the board is still limited: companies where more than one slate of directors was presented in the period 2007-2010 account for nearly 40% of the market. Minority slates are more frequently presented in blue chips and financial companies, generally characterized by more dispersed ownership; in only 8% of the market minorities presenting a slate of candidates are institutional investors (Assonime, 2011).

Female representation in Italian corporate boards has grown in recent years. As shown by Table 2, both the number of female directors and that of companies where at least one board member is a woman have continuously increased from 2004 to 2011. Nonetheless, women directors reach only 7,4% in 2011 and nearly half of the market has all-male boards.

3. Data and Methodology

3.1 Data

Our sample includes all companies listed on the Italian stock exchange and the members of their board of directors for the period 2008-2010. In particular, the initial sample consists of an unbalanced panel of 8,279 director-level observations from 834 companies. We draw information on board composition as well as on companies' ownership structure from Consob databases. We obtain information on internal governance characteristics from companies' Corporate Governance Reports for the years 2008-2010 and data on financial performance from Datastream Worldscope.

Table 3 describes all the variables taken into consideration in the analyses while Table 4 provides some summary statistics of our sample, distinguishing between firms' characteristics, board composition and activity and director-level variables.

Firm-level summary statistics confirm the traditional features of the Italian governance structure, in terms of concentrated ownership and limited institutional investors' presence. The average controlling stake is nearly 50% of the share capital and the free float is approximately 40%, while institutional investors are major shareholders (i.e. hold a stake higher than the 2% reporting threshold) in less than half of the companies.

With regard to board composition, independent directors account for more than one third of the board, while the presence of minority directors is still limited (nearly 5% of the directors). Interlocking remains a major feature of the Italian market: one in every two directors sits in another listed company and, in the average board, almost three directors out of ten are interlockers.

Female representation is very limited as they represent on average only 6,7% of the board. Diverse corporate boards, i.e. comprising at least one female director, account for 47% of listed companies, hence the majority of boards of directors are all-male. In addition, more than one

female director is present in only 13% of the companies, suggesting that the most frequent scenario in diverse boards is therefore the presence of only one female director.

Figures on women representation in Italian corporate boards are far below those shown in the United States - where the percentage of female directors is 15,7% - and in Scandinavia - with nearly 24% of women in Sweden and Finland and nearly the required gender quota of 40% in Norway (Catalyst, 2010), but less distant from continental European countries.

3.1.1. Companies characteristics: size, industry and control model

We want to test whether certain firms' characteristics are associated to a different female representation in the board. First, we investigate the relationship between industry and female representation. As shown in Table 5, women's presence is higher in the IT/telecommunication and consumer products industries, characterized by smaller boards with a higher presence of women.

Moreover, Table 6 shows the breakdown of women representation by market index, as a proxy of firm size (capitalization). Even if their boards are significantly larger, blue chips (firms in the FTSE Mib and Mid Cap Indices) show lower female representation both in terms of percentage of companies with diverse boards and weight of female directors. Diversity in boards is more frequent in the Star index, comprising midsize companies subject to stricter requirements regarding transparency, liquidity and corporate governance[8]. Smaller caps, i.e. firms not included in the mentioned indices, show the highest figures on women's involvement within the board, where they hold a more extensive fraction of board seats. Overall, these preliminary results on the relationship between size and gender diversity suggest that firms where women are represented in the boardroom tend to be smaller caps. Such result appears to differ from the theoretical hypothesis and empirical findings supporting the idea that firm size is positively related to gender representation[9].

Finally, Table 7 shows how different control models are associated with different gender representation. This is of particular interest in the Italian context where the large majority of listed companies is controlled by a single agent, coalitions are gaining importance and disperse ownership is a characteristic of a few companies (Bianchi and Bianco, 2008). The evidence in Section A of the Table suggests that in companies controlled by a single agent (either private or public) women are present in almost half of the cases and hold on average 7,4% of the board seats. On the other hand, more dispersed ownership structures, such as coalitions[10] and widely held companies, appear to be associated with a lower female representation, especially in terms of percentage of women on board. Section B of the same Table provides another classification,

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[8] Companies in the Star segment have a capitalization of less than 1 billion euros and voluntarily adhere to and comply with (i) high transparency and disclosure requirements; (ii) high liquidity (minimum 35% of free float) and (iii) corporate governance best practices.

[9] A number of studies report a positive correlation between firm size and women directorship (Burke, 2000; Singh *et al*., 2001; Hyland and Marcellino, 2002; Singh and Vinnicombe, 2004; Hillman *et al*., 2007; Peterson and Philpot, 2007; Terjesen and Singh, 2008; Adams and Ferreira, 2009). Common measures of firm's size are market capitalization, sales, total assets, number of employees.

[10] It includes cases where a formal shareholder agreement defines the governance of a listed company and situations where, even if no shareholder agreement has been signed, the company is not widely held nor a single shareholder can exert a dominant influence on the general meetings.

simply distinguishing companies with family control (either by a single shareholder or a coalition) from the others. Results point out that if a family is the controlling agent, female directors are more often present and hold a larger fraction of board seats.

3.1.2 Directors characteristics: female and male directors

As a further step we look at directors' characteristics in order to shed a light on possible differences between female and male directors when it comes to their education and their role within the board (Table 8).

When looking at directors' busyness and education, no significant difference emerges. First, the average number of directorships held by women is only marginally lower than men (1,44 vs. 1,52). Second, by considering a simple proxy for directors' education, women appear to hold (at least) a bachelor's degree with a slightly lower frequency than men (75% vs. 80%).

When looking at women's role within the board, data show that they have an executive role in one case out of three while only a minority of them is independent (nearly 22%); hence, in almost half of the cases female directors are non-executive but not independent directors. Compared to men, women are more often executive directors, while they are independent and members of the internal audit and remuneration committees with a lower frequency.

At a first glance, such evidence substantially differs from the Anglo-Saxon countries, where female are less likely to be executive/inside directors (Carter *et al*., 2003; Singh *et al*., 2008). On the contrary, in those countries the large majority of female directors is independent (Adams and Ferreira, 2009).

In view of the diffusion of family ownership in the Italian context, we wonder whether such evidence could be partly explained by possible connections between firms' ownership and control model and selection of board members. Hence, we carry out a more in-depth analysis of the characteristics of female directors, by considering their possible affiliation with the controlling agent. Results are shown in Table 9 both from firms' and directors' perspectives.

In the majority of diverse companies at least one of the women on board has a family connection with the controlling shareholder, being the controlling shareholder herself or his wife, daughter or close relative. In particular, in 48% of diverse boards, female directors are exclusively family members and in a further 9% there is at least one family-affiliated woman; overall, family-affiliated female directors are present in 57% of the sample. Statistics from a director-level perspective confirm that the majority of female directors (56%) is the controlling agent or has a family connection with her.

A previous study on Italian boards in a historical perspective provides some evidence on personal characteristics of Italian female directors, including kinship. Results show that the percentage of family-affiliated women has decreased in the last four decades (Gamba and Goldstein, 2008)[11].

[11] The authors analyzed the importance of women representation in the board of directors of Italian listed companies. They carried out an investigation of the common characteristics of women directors in seven benchmark years (1962, 1970, 1978, 1986, 1994, 2002 and 2007) drawing information from various sources.

A twofold nature of female representation in Italian boards emerges. On the one hand, there are female directors who are owners (or owners' relatives) and run the company (the larger group), on the other hand, there are professional directors. To better understand this duality, Table 10 provides a breakdown of women directors depending on their affiliation with the controlling agent and other individuals' characteristics, namely interlocking, education and role within the board.

Family-affiliated female directors hold a larger number of directorships than non-family women while the proportion of female directors who are graduated is significantly higher in the non-family group (93% vs. 61%). As expected, family-affiliated female directors exert with a higher frequency an executive role (40% of cases), although in the most common scenario they are non-executive directors. On the other side, non-family female directors are in almost half of the cases independent while they have an executive role in the company in one case out of four.

3.2 Methodology

In order to better understand gender diversity in the Italian context, we investigate its drivers and effects.

First, we perform a more comprehensive analysis of the relationship between female directorship and corporate characteristics. In particular, we investigate whether some firms' characteristics, including ownership and control structure, industry, presence of institutional investors and some board characteristics are related to female representation. In carrying out our investigation, we also control for other firm characteristics, such as size, as measured by the logarithm of market capitalization, and some performance measures, namely the return on equity (Roe) and Tobin's Q. As in Adams and Ferreira (2009), Tobin's Q is calculated as the ratio of the firm's market value to its book value, where the firm's market value is the book value of assets minus the book value of equity plus the market value of equity. Moreover, we control for the firm's age (since going public), in order to count for potential alternative explanation for limited female representation, such as "inertia" (traditional boards maintaining the same structure, Hillman *et al*., 2007).

Second, we examine whether governance characteristics of diverse boards are different from the others. We focus on two governance-related outcomes of board activity: on the one side, from a company-level perspective, we look at the number of board meetings; on the other, from a director-level standpoint, we examine individuals' attendance behavior, i.e. the percentage of board meetings which every director attended during the relevant year.

Our objective is to get some insights on the possible effects of gender diversity on governance-related variables which, consistently with Adams and Ferreira (2009), can be considered as a proxy of board effective monitoring. Board meetings are indeed a crucial source of information for directors: hence, the higher their number, the more directors can obtain the relevant information in order to carry out their monitoring and advisory role. Moreover, by looking at individuals' attendance behavior we can also investigate whether female directors behave differently than men and whether, as in Adams and Ferreira (2009), women presence has spillover effects on male directors attendance. Also here we control for firms' and boards'

characteristics, as well as for some variables capturing directors' busyness, education and role within the board.

In performing both the analyses of the determinants and of the effects of gender diversity, we consider both female directorship as a whole and we distinguish between affiliated and not affiliated women on board.

In carrying out our investigations we have to address the endogeneity problems that arise because of omitted unobservable firm characteristics, which could affect the appointment of female directors. For example, in the analysis of the effects of board diversity on governance, corporate culture (which is not observable) may play a very relevant role: firms which are more progressive than others may have both better governance and more female directors. To address the concern that any time invariant firm characteristics is driving our results we use firm fixed effects (even if on a small 3-years panel). We also report results without firm fixed effects, with the twofold objective of comparison and of gaining an insight into the correlation arising between some observable time invariant firm characteristics and female directorship. Since we are not able to convincingly address the reverse causality issues – mainly given the short span of our analysis – we will interpret our results mainly as correlations.

4. Empirical results

4.1 Determinants of female directorship

Table 11 shows the results from probit regressions without firm fixed effects, while Table 12 shows results from linear probability (ordinary least squares) models with firm fixed effects. In all specifications year dummies are included and standard errors are adjusted for potential heteroskedasticity. Standard errors are also adjusted for group correlation at firm level in the probit regressions.

We do not only investigate which variables are correlated to female directorship as a whole, but we also try to understand if they differ according to the "type" of woman appointed. In particular, we want to learn whether the predictors of family-affiliated female directorship differ from those of not affiliated. Hence, we estimate three different models:

- in the first (column 1 of both Tables) the dependent variable is a dummy assuming value equal to one if at least one female director is in the company's board;
- in the second (column 2 of both Tables), the dependent variable is a dummy assuming value equal to one if at least one family-affiliated female director is in the company's board; here the sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where family women are more than non-family women;
- in the third (column 3 of both Tables) the dependent variable is a dummy assuming value equal to one if at least one non family-affiliated female director is in the company's board; here the sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where non-family women are more than family women.

For descriptive purposes, Table 11 provides the results of our regressions including time invariant firm characteristics.

When considering female directorship as a whole, results show that companies with lower Tobin's Q, small caps as well as older firms have more frequently women on boards. The latter result is consistent with Hillman *et al*. (2007) and counters the "inertia" intuition, which would otherwise suggest that traditional boards tend to maintain the same structure. The negative correlation with firm size confirms the previous descriptive statistics and does not support the suggestion that large firms, being more subject to market scrutiny, have more incentives to conform to societal expectations, including the pressure to increase female representation (Di Maggio and Powel 1985; Meyer and Rowan, 1977).

With regard to the ownership structure, it seems that females are more frequently represented in companies with a concentrated ownership (*free float* is negative and significant). However, when considering the control model nor the existence of a single controlling agent nor, on the other hand, a more dispersed ownership structure are significantly related to female directorship (the coefficients for *single* and *widely held* are both positive but not significant).

Women are more frequently appointed when institutional investors are major shareholders. This is in line with the idea that institutional investors increasingly scrutinize corporate boardrooms for diversity (Browder, 1995; Gillan and Starks, 2000; Singh, 2005).

Further, some board characteristics are related to female directorship: specifically younger and better educated boards (i.e. with a higher number of graduated directors) are more likely to be diverse.

With regard to industry, firms in the *it/tlc* sector show a higher probability to appoint women directors as compared to other sectors: on the one hand, these firms are smaller (they represent only 4% of the market capitalization) and more dynamic than the others; on the other hand, it might be that in the *it/tlc* sector the complexity of the matters increases the level of information asymmetry between managers and directors; greater monitoring ability is therefore needed and women could be selected in order to increase such ability.

When comparing the results for family-affiliated and not affiliated women directors, it appears that some of the general results are influenced by a specific type of woman. In particular, smaller and worse performing companies are associated with the presence of family-affiliated women, who are also more likely to be appointed the larger the board size[12]. Further, the presence of family women is more frequent in the consumer sector, in line with the idea that diversity in the boardroom is often sought by firms with gender diverse final users.

Instead, younger and better educated boards are associated with the presence of not affiliated female directors only. The presence of such directors is also higher in companies characterized by more dispersed ownership, such as widely held companies, in line with the idea that the more the number of shareholders, the wider the interests to take into account (Hillman *et al*.,

[12] According to de Cabo *et al*. (2009), firms with a lower preference for homogeneity could tend to have larger boards. Moreover, the larger the board, the more the seats available for potential female candidates (Agrawal and Knoeber, 2001). A positive correlation between female directorship and board size has been documented by several studies (Carter et al., 2003; Hyland and Marcellino, 2002; Brammer et al., 2007; Sealy et al., 2007)

2002; Carter *et al*., 2003; Kang *et al*., 2007). Moreover, firms with more independent and less connected boards (i.e. boards with a higher fraction of independent directors and with a lower number of interlockers) are associated with non-family women directorship.

Some results are common to both kind of women directors. This is the case of the correlations with concentrated ownership (though the negative coefficient for *free float* is highly significant for family-women only), age of listing (*listing year* is negative) and the presence of institutional investors. The previous result regarding *it/tlc* firms is also confirmed for both family-affiliated and not affiliated women.

Table 12 focuses on the determinants of female directorship, refining the previous analysis, by including firms' fixed effects. Results show that some of the variables which appeared to be associated with female directorship are indeed a predictor of the latter.

Specifically, the probability of having at least one woman on board is driven by some board characteristics which can be a proxy of its "openness" to diversity. Younger, more independent and less connected (i.e. with fewer interlockers) boards are indeed associated with more frequent female directorship. When taking into account the affiliation of female directors, it appears that these effects are (mainly) driven by non-family women, since none of them is significant for family women directors.

4.2 Effects of female directorship on governance outcomes

4.2.1. Effects on the number of board meetings

We consider the number of board meetings as one proxy for the effectiveness of directors' monitoring. Board meetings are indeed a crucial source of information for directors: hence, the higher their number, the more directors can obtain the relevant information in order to carry out their monitoring and advisory role. We analyze whether women presence is associated with board activity and whether results vary with female directors affiliation. In performing such analyses we also control for firms' size, performance and ownership structure and for board composition.

Table 13 shows results from ordinary least square regressions while Table 14 shows results from regressions with firm fixed effects regressions. In all specifications year dummies are included and standard errors are adjusted for potential heteroskedasticity. In the ordinary least square regressions standard errors are adjusted for group correlation at firm level and industry effects are included. In all estimations the dependent variable is the number of board meetings held during the year.

In column 2 of both Tables the sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where family women are more than non-family women, while in column 3 the sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where non-family women are more than family women.

The OLS specification (Table 13) reports a negative relationship between female representation as a whole and the number of board meetings, other relevant variable being the size of the board (which might capture some unobserved characteristic of the company) and the

degree of interlocking. If we distinguish between family and non-family directors, we find that the relationship with the dependent variable is negative for both groups and statistically significant only for family women (the coefficient is significant at the 1% level).

However results vary considerably once we include fixed effects (Table 14). In particular, the effect of the presence of female directors on the number of board meetings becomes positive. Hence, the negative sign shown by the OLS specification is led by time-invariant firm characteristics not accounted for. The effect of women presence for both the family and non-family specifications is never significant, though the sign of the relevant coefficient is positive only for non-family female directors, while it is negative for family women.

With regard to the other variables affecting the number of board meetings, the OLS specifications show a negative correlation with Tobin's Q, suggesting that directors' monitoring is more intense in case of poor performance. A relationship between board composition and its activity also emerges: the lower the number of interlockers and the higher the presence of minority directors (only when non family women sit on boards) and the number of directors (only when women directorship as a whole is considered), the greater the number of board meetings.

However, when counting for firms' fixed effects, other variables affect board activity. First, younger boards convene more frequently. Second, the number of meetings decreases with firm size and with the weight of independent directors within the board. The result is counterintuitive and might suggest that a board with a too large number of independent directors might be less interested in obtaining relevant information and in advising management.

4.2.2 Attendance

As Adams and Ferreira (2009) point out, the intuition that female directorship may affect board performance rests on the twofold assumption that not only women behave differently than men but also that their presence has effects on other directors' behavior. Hence, we first analyse both the attendance of all director, in order to observe differences in women's behavior, also taking into account their affiliation. Secondly, we focus on male attendance in order to assess possible spillover effects of women presence. In performing the analyses we control for other director-level variables aimed at capturing their education, demographic, busyness and role within the board or in certain key committees. We also control for board-level variables such as board size and meetings and for firms' size and performance.

Table 15 shows results from ordinary least square regressions while Table 16 shows results from regressions with firm fixed effects. The dependent variable is the percentage of board meetings attended by the director during the year. We do not include in the sample those directors appointed during the year who have been in charge for less than 200 days.

The OLS specification in Table 15, column 1, shows that female directors perform worse than men in terms of attendance, as the relative coefficient is negative and significant at the 10% level. When considering together female directorship and family affiliation, the coefficient for the interaction variable is still negative, although not significant (column 3). Moreover,

spillover effects of women on men behavior, as measured by the coefficient of the percentage of women in the board on male attendance, are negative.

However, as shown by Table 16, once we include fixed effects the differences in attendance behavior between men and women lose significance.

With regard to other variables, both the OLS and fixed effect specifications show that directors are more present in board meetings when they have an executive role or are members of the remuneration or audit committees; on the contrary, independent directors and interlockers show lower attendance.

5. Conclusions

The female presence in Italian boards still concerns the minority of companies (mainly the smaller ones). When women are present, in most cases they are alone. Even a simplified descriptive (regression) analysis shows some interesting regularities: their presence is associated to different characteristics of boards and of women themselves, depending in particular on whether they are related (through family links) to the controlling agent.

Overall, our descriptive results confirm a twofold nature of female representation in the Italian market: the variables to which female directorship is associated vary with the affiliation of the directors. This might provide some insight and indications regarding the future process of recruitment of women associated with the imposition of gender quotas in Italy. It is worth noting that the appointments over the last year (before the law on gender quotas entered into force) have tilted the relative weight of family vs non family women in favor of the secodn category (see Figure 1).

Coming to the possible impact of the presence of women on Italian boards we observe that having at least one woman is associated with a greater number of boards' meetings whereas there are no significant differences in terms of meetings' attendance. A limited impact of women presence on boards is however to be expected given that in most cases they are alone in the board and most organizational studies suggest that the critical mass to have a sizeable impact is three. Hence we might expect to see some results – if the selection will be based on merit and especially if women will be independent or minority board members – after the quota legislation will be fully implemented.

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Table 1. **Gender quotas regulation across European countries**

Country	Corporate Governance Code		Legislation	
Norway			All public limited firms are required to have at least 40% female directors.	2003 (effective since 2006)
Finland	Under the comply or explain principle, it is recommended that both genders are represented in public companies boards.	2010	A 40% gender quota is required for wholly state-owned companies.	2004 (effective since 2006)
Sweden	Listed companies should strive for equal gender distribution on the board.	2008	The issue of gender quotas is being debated	
Spain	Firms with no or few female directors should explain the reasons and the solutions taken (the nomination committee should take steps to ensure that no gender bias affects directors' appointment)	2006	The law requires a 40% gender quota in board of directors.	2007 (effective from 2015)
France	An appropriate balance between men and women should be taken into account in board and committees composition.	2010	The law requires a 40% gender quota for large listed companies	2011 (effective from 2017)
United Kingdom	The UK Corporate Governance Code recommends that search of candidates and appointments are made with due regard to the benefits of diversity, including gender. After the 2011 revision, *ad hoc* disclosure on diversity policy is required and gender diversity is stated as one of the areas to take into account in the board review.	2010-2011	No specific legislation but Davies Report (2011) made recommendations; the compliance with them will be carefully monitored	
Italy	The benefits of diversity, including gender, should be taken into account in the annual board review.	2011	The law requires a one-third gender quota for listed and state-owned firms (three-term sunset clause)	2011 (effective from 2012)
Germany	Respect for diversity and appropriate consideration of women shall be taken into account in the appointment of the management board and in the filling of managerial positions in the enterprise.	2010	The issue of gender quotas is being debated	
Netherlands	The supervisory board shall prepare a profile of its size and composition, which considers diversity and states the objectives pursued in relation to it.	2008	Minimum representation of 30% of each gender in large companies (250 employees)	2011 (effective by 2016)
Belgium	Gender diversity should be taken into account in companies' key policies and in board composition.	2009	Law imposes at least 1/3 of each gender in management boards of state and listed companies	2011 (5 years to comply)

Table 2**. Female representation in corporate boards for Italian listed companies in 2004-2011**

	2004		2005		2006		2007		2008		2009		2010		2011	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Female directors	122	4,5	130	4,6	133	4,7	155	5,4	170	5,9	173	6,3	182	6,8	187	7,4
Firms with at least one female director	91	33,8	97	35,3	103	36,4	118	39,9	126	43,8	129	46,4	133	49,6	136	51,7

Table 3. **Description of the variables**

Name	Description
Company-level variables	
Female	Dummy variable assuming value equal to one if at least a female director holds a board sit
F_female	Dummy variable assuming value equal to one if at least a family affiliated female director holds a board sit
nf_female	Dummy variable assuming value equal to one if at least a non-family affiliated female director holds a board sit
Lcap	Natural logarithm of firms' market capitalization
ROE	Return on equity
Tobin's Q	Ratio between the market value of the firm and its book value
Board size	Number of directors
Listing year	Year of listing
Control Stake	Stake held by the controlling shareholder or coalition or by the shareholder with the highest stake
Free float	Stake held by dispersed shareholders or by institutional investors
Single	Dummy variable assuming value equal to one if a company is controlled by a single shareholder
Widely held	Dummy variable assuming value equal to one if a company is widely held
It/Tlc	Dummy variable assuming value equal to one if a company is in the It/Telecommunication sector
Consumers	Dummy variable assuming value equal to one if a company is in the consumers' sector
Financial	Dummy variable assuming value equal to one if a company is in the financial sector (i.e. banks, insurance companies or other financial institutions)
Industrial	Dummy variable assuming value equal to one if a company is in the industrial sector
Mh_ii	Dummy variable assuming value equal to one if at least one institutional investor is a major shareholder
# Interlocker directors	Number of directors in the board with directorships in other firms
# Graduated directors	Number of graduated directors in the board
Age Board	Average age of directors
% min_dir	Percentage of minority directors in the board
% ind_dir	Percentage of independent directors in the board
# Board meetings	Number of meeting held by the board of directors during the year
Director-level variables	
Female dummy	Dummy variable assuming value equal to one if the director is a female
F_female dummy	Dummy variable assuming value equal to one if the director is a family-affiliated female
Nf_female dummy	Dummy variable assuming value equal to one if the director is a non family-affiliated female
% Attendance	Percentage of board meetings attended by the director during the year
% Female directors	Percentage of female directors in the board

Name	Description
# Other directorships	Number of directorship held by the director in other firms
CEO	Dummy variable assuming value equal to one if the director is a CEO
Chairman	Dummy variable assuming value equal to one if the director is the chairman of the board of directors
Age	Age of the director
Graduated_dummy	Dummy variable assuming value equal to one if the director is graduated
Executive	Dummy variable assuming value equal to one if the director is executive
Independent	Dummy variable assuming value equal to one if the director is independent
Minority	Dummy variable assuming value equal to one if the director is appointed by minorities
IC member	Dummy variable assuming value equal to one if the director is a member of the audit committee
RC member	Dummy variable assuming value equal to one if the director is a member of the remuneration committee
# IC meetings	Number of meeting held by the audit committee during the year
# RC meetings	Number of meeting held by the remuneration committee during the year

Table 4. **Description of the sample**

Name	Obs	Mean	St. deviation	Min	Max
Firm characteristics					
Lcap	832	8,27	0,81	6,53	10,85
ROE	777	-32,03	281,90	-5.828,02	367,82
Tobin's Q	817	1.136,97	492,86	419,77	5.409,28
Listing year	834	1997,17	8,63	1978	2010
Control stake	834	48,51	22,05	0	100,00
Free float	834	40,34	18,72	-	100,00
Mh_ii	834	0,48	0,50	0	1
Board characteristics					
Board size	834	9,93	3,80	2	25
Age Board	834	56,18	5,40	40,00	69,67
% min_dir	834	5,31	11,15	-	100,00
% ind_dir	802	36,87	15,96	-	90,00
# Female directors	834	0,63	0,81	-	5,00
% Female directors	834	6,73	9,20	-	75,00
Female	834	0,47	0,50	0	1
More than one female director	834	0,13	0,34	0	1
# interlocker directors	834	2,84	3,05	-	16,00
# graduated directors	833	7,93	3,66	-	21,00
# board meetings	795	10,13	5,23	4,00	43,00
IC meetings	701	5,94	5,28	-	53,00
RC meetings	660	2,62	2,39	-	21,00
Directors' characteristics					
Female dummy	8279	0,06	0,24	0	1
% Attendance	7064	88,61	17,79	-	100,00
Interlocking / # other direct.	8279	1,52	1,04	1,00	12,00
Age	8245	56,88	11,89	20,00	101,00
Graduated_dummy	8204	0,80	0,40	0	1
CEO	8279	0,10	0,30	0	1
Chairman	8279	0,07	0,25	0	1
Executive	8030	0,29	0,45	0	1
Independent	7691	0,37	0,48	0	1
Minority	8053	0,05	0,22	0	1

Table 5. **Female representation in Italian listed companies by industry (2008-2010)**

Industry	Obs.	% of firms with at least a female director	Average % of female directors	Average board size
Consumer	253	49,8	8,1	8,92
Financial	184	42,4	5,6	12,29
Industrial	234	47,9	6,6	9,83
It/Tlc	81	53,1	8,5	8,16
Public Utilities	82	35,4	3,7	9,74
Total	834	46,5	6,7	9,93

Table 6. **Female representation in Italian listed companies by market index (2008-2010)**

Market index	Obs.	% of firms with at least a female director	Average % of female directors	Average board size
MIB	113	37,2	3,7	13,23
Mid Cap	124	44,4	4,9	12,53
Star	212	50,0	6,9	9,35
Other	385	48,1	8,1	8,43
Total	834	46,5	6,7	9,93

Table 7. **Female representation in Italian listed companies by control model and controlling agent (2008-2010)**

A) Control Model	Obs.	% of firms with at least a female director	Average % of female directors	Average board size
Single	545	48,6	7,4	9,51
Formal coalition	170	46,5	6,3	10,84
Informal coalition	68	36,8	4,9	8,75
Widely held	27	48,1	6,1	10,63
Cooperatives	24	25,0	1,4	15,46
Total	834	46,5	6,7	9,93
B) Controlling Agent				
Family	559	49,0	7,6	9,26
Other/non-family	275	41,5	5,0	11,28
Total	834	46,5	6,7	9,93

Table 8. **Comparison between female and male directors**.(t-statistics of the mean comparison test are reported. *,** and *** indicate statistical significance at the 10%, 5% and 1% level, respectively)

	Female directors		Male directors		
	#	Mean	#	Mean	t-statistic
Interlocking	525	1,44*	7754	1,52*	1.72
Education (*graduated_dummy*)	516	0,75***	7688	0,81***	3.12
Executive	515	0,33**	7515	0,28**	-2.48
Independent	498	0,22***	7193	0,38***	7.48
IC member	456	0,18***	6808	0,30***	5.37
RC member	429	0,24***	6498	0,30***	2.92

Table 9. **Distribution of diverse companies and female directors by family affiliation**

Affiliation of female directors	Obs	Mean	St. deviation	Min	Max
Companies with at least one female director					
Family	187	0,48	0,50	0	1
Non Family	166	0,43	0,50	0	1
Both	35	0,09	0,29	0	1
Female directors					
F_female dummy	293	0,56	0,50	0	1
Nf_female dummy	232	0,44	0,50	0	1

Table 10. **Comparison between family and non-family female directors**. (t-statistics of the mean comparison test are reported. *,** and *** indicate statistical significance at the 10%, 5% and 1% level, respectively)

	Family Female Directors		Non-family Female Directors		
	#	Mean	#	Mean	t-statistic
Interlocking	293	1,59***	232	1,26***	-3.45
Education (*graduated_dummy*)	288	0,61***	228	0,93***	8.92
Executive	290	0,40***	225	0,24***	-3.84
Independent	282	0,02***	216	0,47***	14.37

Table 11: **Determinants of female directorship.**

All specifications show results from probit regressions. Standards errors are adjusted for potential heteroskedasticity and for group correlation at firm level. Year dummies are included.

Column 1: The dependent variable is a dummy variable assuming value equal to one if at least one female director is in the company's board. The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010. Column 2: The dependent variable is a dummy variable assuming value equal to one if at least one family-affiliated female director is in the company's board. The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where family women are more than non-family women. Column 3: The dependent variable is a dummy variable assuming value equal to one if at least one non family-affiliated female director is in the company's board. The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where non-family women are more than family women. Regressors: size, performance measures, listing year, ownership and control structure variables, board characteristics, industry. In parentheses p-values are reported. * , **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively. Marginal effects are reported.

	Dependent variable: Female	Dependent variable: f_female	Dependent variable: nf_female
	(1)	(2)	(3)
Lcap	-0.2750**	-0.3186**	-0.1032
	(0.032)	(0.045)	(0.502)
ROE	0.0000	0.0000	0.0003
	(0.842)	(0.917)	(0.633)
Tobin's Q	-0.0002*	-0.0006**	-0.0002
	(0.063)	(0.019)	(0.170)
Listing year	-0.0274***	-0.0210*	-0.0296**
	(0.009)	(0.096)	(0.026)
Control Stake	0.0017	-7.13	0.0031
	(0.707)	(0.999)	(0.593)
Free float	-0.0175***	-0.0241***	-0.0113*
	(0.002)	(0.001)	(0.097)
Single	0.0282	-0.1698	0.1092
	(0.872)	(0.392)	(0.597)
Widely held	0.6784		0.9343*
	(0.148)		(0.083)
Mh_ii	0.5472***	0.6415***	0.3902**
	(0.000)	(0.001)	(0.036)
Board Size	0.0555	0.0965**	-0.0046
	(0.220)	(0.037)	(0.944)
Age Board	-0.0333**	-0.0095	-0.0537***
	(0.049)	(0.646)	(0.006)
# Interlocker directors	-0.0274	0.0226	-0.1014**
	(0.441)	(0.599)	(0.029)
# Graduated directors	0.0775*	-0.0481	0.1685**
	(0.080)	(0.342)	(0.017)
% min_dir	-0.7117	-0.7220	-0.8030
	(0.282)	(0.419)	(0.318)
% ind_dir	0.0914	-0.7183	1.3032**
	(0.851)	(0.217)	(0.043)
It/Tlc	0.6397*	1.0791**	0.6899*
	(0.051)	(0.018)	(0.070)
Financial	0.0292	0.4867	0.1250
	(0.919)	(0.260)	(0.698)
Consumers	0.2822	0.8864**	-0.1357
	(0.272)	(0.017)	(0.660)
Industrial	0.1244	0.5988	0.2282
	(0.629)	(0.110)	(0.448)
C	58.19***	44.49*	61.46**
	(0.006)	(0.080)	(0.021)
Obs	748	566	535
Pseudo R^2	0.1265	0.1787	0.1667

Table12: **Determinants of female directorship.**

All specifications show results from linear probability (ordinary least squares) models. Standards errors are adjusted for potential heteroskedasticity. In all specifications firm fixed effects and year dummies are included.
Column 1: The dependent variable is a dummy variable assuming value equal to one if at least one female director is in the company's board. The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010. Column 2: The dependent variable is a dummy variable assuming value equal to one if at least one family-affiliated female director is in the company's board. The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where family women are more than non-family women. Column 3: The dependent variable is a dummy variable assuming value equal to one if at least one non family-affiliated female director is in the company's board. The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where non-family women are more than family women. Regressors: size, performance measures, board characteristics. In parentheses p-values are reported. * , **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Dependent variable: Female	Dependent variable: f_female	Dependent variable: nf_female
	(1)	(2)	(3)
Lcap	0.0384	0.0306	0.0522
	(0.665)	(0.766)	(0.627)
ROE	0.0000	-0.0000	-0.0001
	(0.896)	(0.907)	(0.427)
Tobin's Q	0.0002	-0.0000	0.0000
	(0.670)	(0.533)	(0.744)
Board Size	0.0409	0.0179	0.0400
	(0.104)	(0.448)	(0.151)
Age Board	-0.0346***	-0.0072	-0.0312***
	(0.000)	(0.496)	(0.003)
# Interlocker directors	-0.0302*	0.0032	-0.0266
	(0.074)	(0.888)	(0.215)
# Graduated directors	-0.0174	-0.0178	-0.0182
	(0.515)	(0.485)	(0.528)
% ind_dir	0.4453**	-0.0567	0.5562**
	(0.019)	(0.638)	(0.019)
C	1.725**	0.3473	1.156
	(0.037)	(0.732)	(0.216)
Obs	757	580	544

Table 13: **Number of board meetings.**

All specifications show results from ordinary least square regressions. Standards errors are adjusted for potential heteroskedasticity and for group correlation at firm level. Year dummies and industry dummies are included.
The dependent variable is the number of board meetings held during the year.
Column 1: The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010. Column 2: The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where family-women are more than non-family women. Column 3: The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where non-family women are more than family women.
Regressors: size, performance measures, listing year, ownership and control structure variables, board characteristics. In parentheses p-values are reported. * , **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Dependent variable: # Board meetings		
	(1)	(2)	(3)
Lcap	0.8213	0.8599	0.6659
	(0.147)	(0.204)	(0.319)
ROE	-0.0017	-0.0014	-0.0018
	(0.131)	(0.181)	(0.165)
Tobin's Q	-0.0008**	-0.0013***	-0.0012**
	(0.049)	(0.003)	(0.016)
Listing year	0.0544*	0.0498	0.0987**
	(0.087)	(0.202)	(0.014)
Female dummy	-1.1467**		
	(0.014)		
F_female dummy		-2.0739***	
		(0.000)	
Nf_female dummy			-0.2642
			(0.660)
Single	-0.3619	0.0272	-0.3174
	(0.496)	(0.962)	(0.613)
Widely held	-0.7262	-0.6072	-0.8652
	(0.609)	(0.777)	(0.581)
Board Size	0.2286*	0.1344	0.2853
	(0.098)	(0.415)	(0.102)
Age Board	-0.0503	-0.0657	-0.0314
	(0.251)	(0.192)	(0.564)
# Interlocker directors	-0.3099***	-0.2737**	-0.2140
	(0.001)	(0.010)	(0.102)
# Graduated directors	-0.1446	-0.0698	-0.2550
	(0.305)	(0.650)	(0.206)
% min_dir	5.1441	4.4519	7.4763*
	(0.120)	(0.202)	(0.066)
% ind_dir	2.0388	0.4231	1.8907
	(0.202)	(0.834)	(0.323)
C	-102.85	-91.84	-191.14**
	(0.112)	(0.242)	(0.019)
Industry effects	YES	YES	YES
Obs	740	564	531
R^2	0.1973	0.2060	0.1929

Table 14: **Number of board meetings.**

All specifications show results from firm fixed effects regressions. Standards errors are adjusted for potential heteroskedasticity. Year dummies are included.

The dependent variable is the number of board meetings held during the year.

Column 1: The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010. Column 2: The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where family women are more than non-family women. Column 3: The sample consists of an unbalanced panel of all Italian listed firms in the period 2008-2010 with all-male boards or with diverse boards where non-family women are more than family women.

Regressors: size, performance measures, board characteristics. In parentheses p-values are reported. * , **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Dependent variable: # Board meetings		
	(1)	(2)	(3)
Lcap	-3.1932***	-4.1379***	-3.9881***
	(0.004)	(0.004)	(0.003)
ROE	-0.0002	-0.0009	-0.0059
	(0.593)	(0.639)	(0.280)
Tobin's Q	-0.0000	0.0007	0.0004
	(0.901)	(0.307)	(0.534)
Female dummy	1.0283*		
	(0.083)		
F_female dummy		-0.4646	
		(0.433)	
Nf_female dummy			0.9607
			(0.145)
Board Size	-0.1360	0.0019	-0.1684
	(0.671)	(0.996)	(0.612)
Age Board	-0.1738**	-0.2922**	-0.1420
	(0.042)	(0.010)	(0.180)
# Interlocker directors	0.1033	0.0003	0.1908
	(0.551)	(0.999)	(0.376)
# Graduated directors	0.0381	-0.0889	0.1949
	(0.902)	(0.829)	(0.572)
% ind_dir	-4.4644**	-5.2357**	-5.6576*
	(0.047)	(0.047)	(0.066)
C	48.15***	62.57***	52.62***
	(0.000)	(0.000)	(0.000)
Obs	748	572	539

Table 15: **Attendance.**

All specifications show results from ordinary least square regressions. Standards errors are adjusted for potential heteroskedasticity and for group correlation at firm level. Year dummies and industry dummies are included.
The dependent variable is the percentage of board meetings attended by the director during the year.
Columns 1 and 3: The sample consists of an unbalanced panel of director data from all Italian firms listed in the period 2008-2010. Column 2: The sample consists of an unbalanced panel of male director data from Italian firms listed in the period 2008-2010.
Regressors: size, performance measures, directors characteristics, number of board meetings, number of meetings held by the internal committee, number of meetings held by the remuneration committee. In parentheses p-values are reported. * , **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Dependent variable: % Attendance		
	(1)	(2)	(3)
Lcap	2.4864***	2.3418***	2.4863***
	(0.001)	(0.000)	(0.001)
ROE	-0.0006	-0.0012**	-0.0006
	(0.249)	(0.044)	(0.223)
Tobin's Q	-0.0004	-0.0004	-0.0004
	(0.536)	(0.499)	(0.535)
Female dummy	-2.9543*		-1.1669
	(0.066)		(0.596)
% Female directors		-10.32**	
		(0.042)	
Female dummy*F_family dummy			-3.1688
			(0.315)
# Other directorships	-1.5398***	-1.2804***	-1.5232***
	(0.000)	(0.000)	(0.000)
CEO	2.3872***	2.3940***	2.3835***
	(0.000)	(0.000)	(0.000)
Chairman	5.9298***	5.8150***	5.9488***
	(0.000)	(0.000)	(0.000)
Age	0.0376	0.0458	0.0377
	(0.205)	(0.109)	(0.202)
Graduated_dummy	-0.4812	-1.2873*	-0.5601
	(0.545)	(0.086)	(0.484)
Board Size	-0.2795**	-0.2529**	-0.2822**
	(0.016)	(0.023)	(0.016)
Executive	10.3860***	10.29***	10.35***
	(0.000)	(0.000)	(0.000)
Independent	-2.2843**	-2.0805**	-2.3683**
	(0.027)	(0.047)	(0.022)
Minority	-1.6365	-0.9375	-1.6526
	(0.212)	(0.455)	(0.209)
IC member	5.5352***	5.3428***	5.5191***
	(0.000)	(0.000)	(0.000)
RC member	1.6479**	1.1934*	1.6329**
	(0.020)	(0.091)	(0.021)
# Board meetings	-0.0795	-0.0811	-0.0814
	(0.418)	(0.379)	(0.405)
# IC meetings	0.2034*	0.1918*	0.2049*
	(0.059)	(0.062)	(0.058)
# RC meetings	0.2718*	0.2565*	0.2669*
	(0.060)	(0.067)	(0.065)
C	65.27***	66.71***	65.39***
	(0.000)	(0.000)	(0.000)
Industry effects	YES	YES	YES
Obs	5547	5214	5547
R^2	0.1194	0.1187	0.1198

Table 16: **Attendance.**

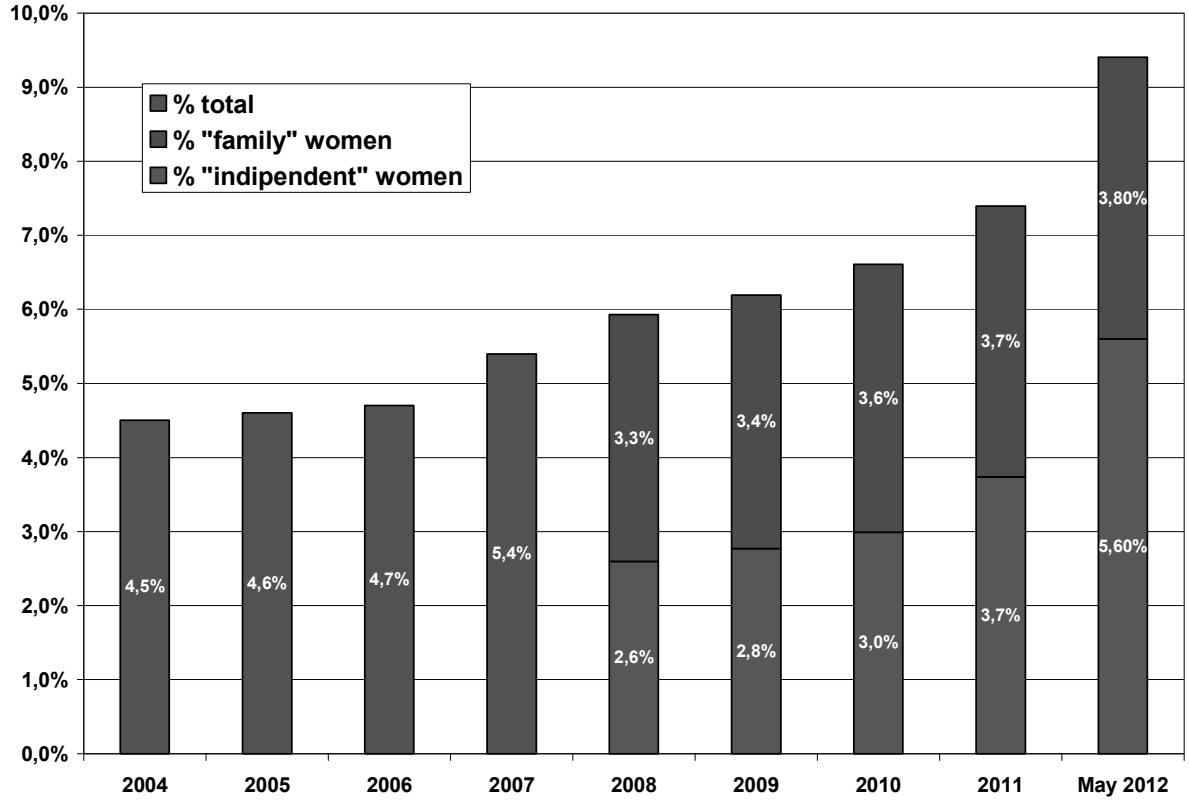
All specifications show results from firm fixed effects regressions. Standards errors are adjusted for potential heteroskedasticity. Year dummies are included.

The dependent variable is the percentage of board meetings attended by the director during the year.

The sample consists of an unbalanced panel of director data from all Italian firms listed in the period 2008-2010. Regressors: size, performance measures, directors characteristics, number of board meetings, number of meetings held by the internal committee, number of meetings held by the remuneration committee. In parentheses p-values are reported. * , **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively.

	Dependent variable: % Attendance	
	(1)	(2)
Lcap	3.7291	3.7215
	(0.304)	(0.305)
ROE	0.0009	0.009
	(0.342)	(0.331)
Tobin's Q	-0.0008	-0.008
	(0.770)	(0.766)
Female dummy	-2.4117	-0.0603
	(0.114)	(0.981)
Female dummy*F_family dummy		-4.0924
		(0.197)
# Other directorships	-1.7128***	-1.6892***
	(0.000)	(0.000)
CEO	2.7895***	2.8436***
	(0.000)	(0.000)
Chairman	5.8633***	5.9031***
	(0.000)	(0.000)
Age	0.0417	0.0410
	(0.145)	(0.153)
Graduated_dummy	-1.1701	-1.2544*
	(0.121)	(0.099)
Board Size	0.5579	0.5658
	(0.364)	(0.356)
Executive	11.060***	10.99***
	(0.000)	(0.000)
Independent	-2.2447***	-2.3497***
	(0.008)	(0.006)
Minority	-1.6163	-1.6251
	(0.246)	(0.243)
IC member	5.8739***	5.8599***
	(0.000)	(0.000)
RC member	1.7135**	1.6919**
	(0.015)	(0.017)
# Board meetings	-0.1347	-0.1344
	(0.462)	(0.463)
# IC meetings	0.3180	0.3176
	(0.198)	(0.199)
# RC meetings	0.1232	0.1158
	(0.677)	(0.695)
C	33.28	33.45
	(0.386)	(0.384)
Obs	3707	3707
R^2	0.2116	0.2122

Figure 1: **Share of women in listed companies' boards**



Source: Consob.