

Gender diversity on corporate boards: when the voice is not enough

Received
8th June 2021

Revised
17th January 2022

Accepted
25th July 2022

Sara De Masi - Agnieszka Słomka-Gołębiowska - Andrea Paci

Abstract

Purpose of the paper: To understand the “black box” of boardroom behavior, we test the impact of different thresholds of female directors on a set of board processes. Using the two percentages indicated by the gender quota law, we distinguish between two possible situations that women face: (1) voicing of women’s opinions, and (2) having their voices heard.

Methodology: We employ an econometric model to test our research question on a sample of all of the 40 Italian companies listed in the FTSE-MIB between the years 2008 to 2015,

Findings: We provide evidence that when women voice to their opinion (i.e. they are represented by at least 20% of the board seats), boards devote more time to their activities, and the cognitive conflicts among members is enhanced. However, when women’s voice are heard (i.e. when the threshold of at least 33% of women is reached), boards increase the directors’ attentiveness, and women become particularly effective in boosting the cognitive conflicts.

Research limits: In our analysis we use proxies of board behaviour that are built from secondary data.

Practical implications: Our findings provide insights which have implications for gender quota regulation, and offer a new understanding of the contribution of women at decision-making position levels.

Originality of the paper: We further develop the critical mass theory in the context of women on boards, focusing on two different situations that women might face. We analyse the channel variables between women on boards and corporate governance, investigating board behaviour and board dynamics.

Key words: corporate governance; women on boards; gender diversity; board processes; critical mass; gender quota.

1. Introduction

In recent years, a number of countries have started to discuss regulations, policies, and practices to increase the number of women on corporate boards (Casey, Skibnes, and Pringle, 2011; Cook and Glass, 2014; Labelle *et al.*, 2015; Cullen and Murphy, 2018). The promotion of gender diversity is based on the reasoning that women contribute to better corporate governance, and hence, firms’ performance (Wiley and Monllor-Tormos, 2018). A major assumption underlying this relationship is that women bring different resources, qualities, and managerial practices to the

board that potentially enhance its performance. The value that women add and bring to the boardroom remains a puzzle, and the empirical evidence calls for additional verification (Huse *et al.*, 2009; Nielsen and Huse, 2010a, 2010b; Wiley and Monllor-Tormos, 2018).

Prior corporate governance studies represent gender diversity as the following measures: the ratio of women on the board, the presence of women (dummy), and the number of women (Gabaldon *et al.*, 2016; Post and Byron, 2015; Terjesen *et al.*, 2009). The effects of gender diversity on board outcomes are not conclusive. Drawing on the theory of critical mass, we explore when female directors, as the minority, influence the group work in the boardroom and bring pronounced improvement in the engagement of the directors in the board activities. In accordance with emerging literature (Konrad *et al.* 2008; Torchia *et al.* 2011; De Masi, 2021), we argue that female directors are more effective when a critical mass of women on boards is reached. When this critical mass is achieved, women are more likely to give voice to their opinion. However, this may not be enough to influence certain board processes. In our study, we focus on two distinct sets of board process: (1) effort norms, and (2) cognitive conflicts. Effort norms are expressed as (a) the time that board members devote to specific board activities, and (b) the degree of attentiveness and participation of board directors. Cognitive conflicts refer to the presence of multiple viewpoints that create task-content related disagreement among board members.

Given the thresholds imposed by the gender quota law in Italy, our study shows that different critical masses of women impact processes through the improvement of board effort norms, as well as by boosting the board's cognitive conflict. We demonstrate that when women reach the threshold of 20%, boards devote more time to the board activities, and the cognitive conflict is enhanced. Moreover, we provide evidence that the threshold of 33% of women on boards is necessary to have an impact on the degree of attentiveness of the directors, and to further boost the cognitive conflict among members. Our results suggest that the voicing of women's opinions (which is likely to occur when the women reach the threshold of 20% of the board) is required to impact the time that boards employ in their activities. But to impact directors' attentiveness and to enhance the cognitive conflict among members, women's voices should be heard (which is likely to occur when the women reach a threshold of 33% on the board).

The paper contributes to the research literature in three ways. First, we validate the critical mass theory in the context of women on boards; this has attracted limited attention from empirical studies (Joerck *et al.*, 2013; Torchia *et al.*, 2011; Konrad *et al.*, 2008; De Masi *et al.*, 2021a). We show how different thresholds of female directors on boards matter with regard to board activities. The selection of country is crucial for this type of analysis. Italy provides a particularly interesting context, as reaching a critical mass of women is seen as the main political argument in favour of introducing quota regulations on boards (Torchia *et al.*, 2017). Prior to the law, in 2008, the average percentage of women who held a corporate board position was less than 5% (European Commission, 2018). As of 2012, the

law mandated a binding gender quota for the Italian-listed companies and for state-owned enterprises. In the first board term after the enforcement of the law, the board had to have reached the intermediate threshold of 20% of female directors. In the subsequent board term, 33% of the board seats had to be held by women. The law is well enforced (Desana 2017), and there is a wide range of sanctions, such as a warning, a fine, and the dismissal of all board members. In 2015, the percentage of women on boards in Italy was one of the highest in the European Union. Thus, in this setting of a quasi-natural experiment, we test the critical mass theory applied to women on boards. Second, we also contribute to the stream of research on gender diversity and corporate governance. Our study expands on Wiley and Monllor-Tormos (2018) and De Masi *et al.*, (2021a), by focussing on the channel variables between women on boards and corporate governance. Our study is situated in this research stream as we add to the literature about the potential sets of board processes, and investigate board behaviour and dynamics (Machold and Farquhar, 2013; Nielsen and Huse, 2010a, 2010b; Słomka-Golebiowska *et al.*, 2022). Moreover, we contribute to the discussion on how increasing the percentage of women on boards affects board activities.

The rest of the article is organised as follows. In the next section, the theoretical framework of the critical mass of women on boards is reviewed. After formulating the hypotheses, the dataset, the variables, and the methods used are presented. In the subsequent section, the results of our study are discussed. Finally, conclusions and implications for policy makers and regulators are proposed.

2. Theory and Hypothesis

2.1 *A critical mass of women on boards: from voicing the opinions to having the voice heard*

We built our research on the seminal work of Kanter (1977) that pioneered the critical mass theory. In her analysis, she focusses on the challenges faced by a minority, such as women in a male-dominated environment. When women are underrepresented, they may be seen as a symbol; a token. Kanter identifies three behavioural challenges of being a token: visibility, polarisation, and assimilation. First, visibility relates to a situation where the minority group finds itself being constantly watched. They are afraid to make any mistakes that could be perceived as fatal, and thus they tend to work much harder than men to receive recognition. Simultaneously, they are subject to increased performance pressures. Second, polarisation takes place when men may exclude the minority group from informal networks as they feel uncomfortable around women. Thus, men will exaggerate their similarities and emphasise the differences between men and women in order to prevent women from networking. Third, assimilation pressures women to accept the gendered stereotypes defined by men. Therefore, only limited roles and work are assigned to women. This only perpetuates stereotypes, and continues to set women

apart from the position of men within the group. The contribution of the token to the group can be hindered by stereotyping and categorisation. Individuals tend to categorise others according to easily observed identities such as gender (Carli and Eagly, 2002; Tajfel and Turner, 1986). When no other information is available, people rely on gender stereotypes, which are women's values, attitudes, and behaviour (Bird, 2003). Individuals favour those who are similar to them (Goodreau, Kitts, and Morris, 2009). However, stereotyping and categorisation create isolation, discomfort, and a lack of confidence among members of a minority (Ely, 1994; Heikes, 1992; Kanter, 1977; Simpson, 1997, 2000; Simpson and Lewis 2005). Thus, they hinder the exertion of the minority's influence on the group and on its decision.

Negative stereotyping and social categorisation are even stronger in the upper echelons of the company, due to the need for trust (Stafsdudd, 2006). The board work largely depends on each member; thus, the effect of the critical mass of female directors on group performance is more pronounced in the boardroom than in other contexts. On boards, one may assume actions, values, commitment, and loyalty are based on easily observable demographic characteristics, such as gender. When there is little personal knowledge and no time for communication, board directors rely on shared understating. These challenges that women face may be changed when the numerical representation of women increases. According to the critical mass theory (Kanter, 1977), women will not behave in a tokenistic fashion, when the numerical representation of women in a group is between 20% and 40%. Joecks *et al.* (2013) prove that the critical mass of female directors lies in the range of 20% to 40% of the total board. When women reach a critical mass, they are not treated as tokens, and they can influence the decision-making culture of the board. Gender is no longer a barrier to acceptance and communication. Women are free to raise questions, but they are more likely to be heard once their numerical representation increases (Konrad *et al.*, 2008).

There is a limited number of empirical studies that verify the critical mass theory in the context of women on boards (Konrad *et al.*, 2008; Torchia *et al.* 2011; Joerck *et al.*, 2013; Wiley and Monllor-Tormos, 2018; De Masi *et al.*, 2021b). The first empirical study that identifies the behavioural consequences of being a token minority representative on a board is Konrad *et al.* (2008). The authors document the following behaviour towards tokens: hypervisibility or invisibility, isolation, being stereotyped and viewed as representing all women, and needing to work harder to have an impact on the group. Being the minority on the boards, women choose to be socially invisible, and maintain a low profile within the board. Empirical research shows that powerful men who are sitting on boards tend to connect and socialise with men who are similar to them (Nielsen, 2009; Stafsdud, 2006). Nielsen and Huse (2010b) confirm that gender stereotypes may limit the potential influence of women on boards working as a group. These authors demonstrate that the perception of women as unequal board members may limit their potential contribution to board decision-making. Being token representatives of their gender, women tend to assume caricatured roles, and are more like symbols on boards rather

than substance. Testing critical mass theory in the board context, and based on primary data from Norwegian boards, Torchia *et al.* (2011) confirm the previous research outcomes. Specifically, they show that in a tokenistic role, female directors are unable to positively impact strategic board tasks and organisational innovation. The empirical evidence confirms the critical mass theory that gender diversity does not matter if women are merely tokens. Focussing on the relationship between board gender diversity and firm performance, Wiley and Monllor-Tormos (2018) suggest that below the critical mass threshold, women may represent a disadvantage to the board, as this situation may facilitate the formation of subgroups, dysfunctional conflicts, and distrust. However, at or above the critical mass threshold, women facilitate the better monitoring of management, greater resource provisions, and divergent thinking. Building on that, we look inside the boardroom, focussing on the relationship between the critical mass of women and board processes.

2.2 Gender diversity and board processes

Drawing from the critical mass theory, we look at the relationship between certain thresholds of women on boards, indicated by the gender quota law, and a set of board processes. We have built on the conceptual framework of Forbes and Milliken (1999) that considers board processes as an intermediate step between board characteristics and board performance. In this section, we discuss two board processes: (1) effort norms and (2) cognitive conflicts.

The first board process captures the effort of individual board members (Steiner, 1972; Wageman, 1995). Hence, effort norms ensure a high level of preparation, participation, and analysis of the board contributing to its activities. There are two important manifestations of the board effort norms: (1) the time that directors devote to their tasks; and (2) the directors' degree of attentiveness to, and participation in, their tasks. The manifestation of effort by female directors may be more pronounced. Previous studies show that the presence of women on boards improves firm monitoring, as they are not perceived as part of the "old boys' network". According to the critical mass theory, women have harder jobs as a minority to establish credibility, and to influence other board members. They are not perceived to be part of the "old boys' network" (Ibarra, 1993; Holgersson, 2020). All these factors can make women more vigilant than men when preparing for board meetings (Singh *et al.*, 2002; Huse and Solberg, 2006). Konrad *et al.* (2008), analysing the impact of the critical mass of female directors on board behaviour, show that women who are part of the minority feel free to raise issues. We expect that the change of women's status in boardrooms from token representatives to fully fledged board members should occur when certain thresholds of female directors are reached. Hence, we hypothesise as follows:

Hypothesis 1: At the threshold of 20% of female directors, women voice their opinion, thus improving the board effort norms expressed as the time devoted to their tasks.

The degree of attentiveness and participation in board meetings refers to the careful scrutiny of information provided by management before meetings, finding information regarding issues that are relevant to the company, and actively participating during meetings. Compared to men, women experience more difficulty establishing credibility and influencing others. This means that they tend to put more effort into preparing and participating in board meetings (Carli, 1999; Foschi, 2000; Singh *et al.*, 2002). Izraeli (2000) and Huse and Solberg (2006) argue that women prepare conscientiously for board meetings. Thus, women directors frequently ask questions, so they tend not to quickly accept information circulated by executives. Women are likely to question business practices that are unethical (Franke, *et al.*, 1997), and tend to apply stricter ethical standards (Pan and Sparks, 2012). While women are likely to voice their opinion when they reach a critical mass, they may encounter difficulties in being heard (Belenky *et al.*, 1997; West and Zimmerman, 2002). We argue that the numerical representation of the minority shifts the board behaviour: the board members accept women and perceive them as equal colleagues. Thus, we hypothesise as follows:

Hypothesis 2a: At the threshold of 20% of female directors, women voice their opinions, and the board members' attentiveness is improved.

Hypothesis 2b: At the threshold of 33% of female directors, women's voices are heard, and the board members' attentiveness is improved.

The second board process is cognitive conflict. This refers to the presence of task-content related disagreement among board members (Jehn, 1995). Hambrick *et al.* (2008) and Huse and Gabrielsson (2019) define boards as interdependent groups which may face difficulties with their interactions and capacity to work as a team. The board effectiveness as a group depends on the utilisation of the knowledge, skills, and multiple viewpoints available on the board. Gabrielsson *et al.* (2007) argue that individual board members do not possess all of the relevant knowledge and information needed on the board. Using the collective knowledge, tapped from each individual that is assembled on the board, determines the effectiveness of the board as a group. Therefore, working as a group has a higher impact on the outcome than the efforts of individual board members.

Female directors bring diversity in terms of knowledge and skills (Ross-Smith and Huppertz, 2010). Studies demonstrate that female directors are differentiated from male board members in terms of education; for instance, they more frequently hold MBA and PhD degrees and have professional experience (Hillman *et al.*, 2002). Studies also show that they are more likely than men to have held managerial positions in areas related to human resources, corporate social responsibility, marketing, and advertising (Zelechowski and Bilimoria, 2004). Furthermore, women have had more international experiences, but they are less likely to have been a CEO or COO (Terjesen *et al.* 2009).

As women bring different perspectives and experiences compared to male directors, they may stimulate discussions and engage in debates

(Pearce and Zahra, 1991; Burke, 1997). Thus, they positively affect cognitive conflict (Torchia *et al.*, 2017). However, a group that is too diverse may result in interactions based on formal communication and bureaucratic procedures (Milliken and Martins, 1996). Thus, decisions are made at a slower pace. Homogenous groups use the same language; hence, consensus is reached faster.

On the one hand, Bart and McQueen (2013) and Adams and Funk (2012) indicate that female board members are more likely to use cooperative decision-making and value interdependence and tolerance. Additionally, women are more empathetic than men, and thus are more likely to accept others' standpoints (Eagly and Johannesen-Schmidt, 2001). Thus, women demonstrate different work styles (Daily and Dalton, 2003) and create a good working atmosphere in the boardroom, while standing up for different values than male directors (Huse and Solberg, 2006).

On the other hand, women are more likely to question conventional thinking (Huse and Solberg, 2006; Bilimoria and Wheeler, 2000). This initiates debates and cognitive conflicts that facilitate the exchange of information among board members (Amason and Sapienza, 1997). The nature of the interactions between board members depends on the size of the minority within the group, for example, female directors. Based on the above arguments, we posit the following hypotheses:

Hypothesis 3a: At the threshold of 20% of female directors on the board, women voice their opinions, and they improve the cognitive conflicts.

Hypothesis 3b: At the threshold of 33% of female directors on the board, women's voices are heard, and they become particularly effective in boosting cognitive conflicts

3. Method

3.1 Sample and data

Our sample consists of 40 Italian companies listed in the FTSE MIB index, and includes observations from 2008 to 2015. The choice of the sample and the research period are in line with the aim of the study to examine the effect of different thresholds of female directors on a certain set of board processes. Italy introduced a law in 2012 on the quota of female board directors required for public companies and state-owned companies. Specifically, in 2012, every listed company had to comply with the regulation, and reach the intermediate threshold of 20% of female directors on the board for the first post-law board term, and then 33% for subsequent board terms. As the thresholds are enforced by the quota law, it is considered to be an exogenous shock to understand the effect of the critical mass of female directors on board processes.

To test out the hypotheses, we used data from Thomson Reuters-Datastream ASSET4 ESG database. This database provides detailed information on some board processes, such as certain corporate governance policies for guiding the behaviour of board members, descriptions of board routines, and the time dedicated to board activities. The original

data sources are the companies' annual reports on corporate governance, financial statements, and any other publicly available documents that were related to the companies' corporate governance. Measures of board processes are based on scores calculated by equally weighting and z-scoring all underlying data points, and comparing them against all of the companies in the ASSET4 ESG database. A higher score indicates a better board process and a better performed board task. Because of the availability of data in the Thomson Reuters-Datastream ASSET4 ESG database, the final sample consisted of 35 companies. We also eliminated three companies from this sample which did not disclose data about board attendance and meetings.

3.2 Variables

The dependent variables are related to the board processes discussed in the theory and the hypotheses development sections. Based on the research (Forbes and Milliken 1999; Huse 2005, 2007; van Ees *et al.*, 2009), we distinguish a set of board processes: (1) the effort norms related to the time that the board member devote to their activities; (2) the effort norms expressed as the board members' attentiveness and participation; and (3) the cognitive conflict.

The first board process is proxied by board attendance and board meetings. These capture the time that directors devote to board activities. These two proxies also measure the flow of information between board members. The more intense the flow, the better the understanding of company activities. Thus, board members are more prepared for the decision-making process.

Being present and well prepared for board meetings is necessary, but not sufficient, to becoming involved in board activities, and participating in boardroom discussions. Thus, we introduce the second board process as the effort expressed as the board members' attentiveness. This includes a set of norms and codified rules that guide board members' behaviour (Van Ees *et al.* 2009; Nielsen and Huse, 2010b). These codified rules are policies related to different areas of board activities, board induction programmes, systematic board evaluations and board work instructions. This board process is proxied by a Datastream score assessing whether the board has internal information tools to develop appropriate and effective board member behaviour.

The third board process is cognitive conflicts. Diversity is supposed to influence discussions among board members because it brings into the boardroom different knowledge, backgrounds, and perspectives (van Knippenberg and Schippers, 2007; Fisher *et al.*, 2012; van Dijk *et al.*, 2017; Bell *et al.*, 2011). We proxy the level of cognitive conflicts in the boardroom by the presence of a well-balanced board composition in terms of experience, knowledge, skills, and qualities. We use a Datastream score assessing whether the company has rules to maintain a well-balanced board.

These two scores are Z-scores, which range from zero to 100. They express the value in units of standard deviation of that value from the

mean value of all companies. They are calculated by subtracting the mean value of all the companies from the score of the single company, and then dividing this difference by the standard deviation of all companies. They are relative measures which compare one company with a given benchmark. They enable the creation of more distinction between values that otherwise might be very close together.

We use two dummy variables that indicate the two thresholds of women on the board introduced by the gender quota law: 20% and 33%. The coefficient of the dummy variables measures, respectively, the effect of women's opinions and the effect of having women's voices heard on board processes.

We include control variables related to the board characteristics that affect board processes; size, and independence have been considered two of the most important variables in explaining board activities (Dalton *et al.*, 1998). The former is measured as the total number of directors sitting on the board. The latter is measured as the percentage of independent directors on the board. The busy directors' variable is measured as the average number of other corporate affiliations of the board member, and the CEO duality is a dummy variable that is equal to 1 if the CEO is also the chairman. As a proxy of firm size, we use Total Assets. All variables are defined in Table 1. Table 2 reports the descriptive statistics.

Tab. 1: Description of variables

Variable	Description
Time devoted by the board member to board activities	The average number of attendances of the individual board members at board meetings (score)
	Number of board meetings per year (score).
Attentiveness and participation	Z-score assessing whether the company has the necessary internal improvement and information tools to develop appropriate and effective board functions and committees?
Cognitive conflict	Z-score assessing whether the company has rules to maintain a well-balanced board in terms of experience, knowledge, skills, and qualities.
Women 20%	This is a dummy equal to 1 if the percentage of women on the board is equal or greater than 20% and zero otherwise.
Women 33%	This is a dummy equal to 1 if the percentage of women in the board is equal or greater than 33% and zero otherwise.
Independent directors %	Percentage of independent board members as reported by the company.
CEO duality	This is a dummy equal to 1 if the CEO is also chairman, and zero otherwise
Busy directors	The average number of other corporate affiliations for each board member.
Board size	The total number of board members at the end of the fiscal year.

The Scores are calculated by equally weighting and z-scoring all underlying data points and comparing them against all companies in Datastream. The resulting percentage is therefore a relative measure of performance, z-scored and normalised to better distinguish values and position the score between 0 and 100%. A z-score, or "standard score" expresses the value in units of standard deviation of that value from the mean value of all companies.

Source: Own development

Tab. 2: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Time devoted by the board member to board activities (Board Meetings Score)	225	57.12	26.55	1	100
Time devoted by the board member to board activities (Board Attendance Score)	256	41.20	29.82	0	95.90
Attentiveness and participation	256	64.34	26.36	5.47	81.89
Cognitive conflict	256	61.25	2.79	54.51	63.65
Female directors %	256	13.48	11.75	0	50
Independent directors %	238	55.09	22.58	0	100
Board Size	256	15.77	5.77	8	38
Busy directors score	250	54.51	29.27	0	90.71
Firm size (total assets)	307	9.45*10 ⁰⁷	1.81*10 ⁰⁸	63404	1.04*10 ⁰⁹

For the definition of the variables, see Table 1.

Source: Own development

2.3 Method of analysis

To investigate the effect of the critical mass of female directors on board processes, we estimate the multiple regression analysis using two distinct sets of board processes. The two thresholds of the critical mass of female directors identified by the gender quota law - 20% and 33% - are regressed on: (1) the effort norms expressed as (a) the time that the board member devote to board activities, and (b) the degree of attentiveness and participation of the directors; and (2) the cognitive conflicts expressed as the presence of multiple viewpoints that create task-content related disagreement among board members. We use fixed effect estimations to control for industry effects. Results are clustered for the firms.

Table 2 presents descriptive statistics. The mean value of the scores for the variables representing the time devoted to board activities is respectively 57.12 (the Board Meeting Score) and 41.20 (the Board Attendance Score). The average value of the variable “attentiveness” is 64.34. The score that proxies the cognitive conflict is 61.25. All these three measures are valued by scores that go from 0 to 100 (Datastream, 2017). A high score indicates a high level of a board’s engagement in its activities.

Regarding the control variables, the average board size is about 15.77 members, and the board independence is over 55%, showing that in most of the largest listed companies, the majority of the directors is independent. CEO duality occurs in 19% of companies.

The average representation of women on boards in our sample is 13%. The period investigated includes 2012, the year the gender quota law was introduced. The introduction of this new requirement about the gender balance in the boardroom has changed the board composition, increasing the proportion of women on boards. For this reason, we also provide descriptive statistics by year (Table 3). In 2005, the average percentage of women on boards was 3.25% and in 2017 it was 26.50%. In 2005, 25% of the companies reached the first threshold required by the law (20%

of women on boards) and 22% of the companies achieved the second threshold of 33%. After the introduction of the board gender quota law, the average percentage of companies that had at least 20% of women on boards increased from 38% in 2012 to 92% in 2015. Whereas the average percentage of companies that had at least 33% of women on board was 23% in 2012 and 38% in 2015.

Sara De Masi
Agnieszka Słomka-
Golebiowska
Andrea Paci
Gender diversity on
corporate boards: when the
voice is not enough

Tab. 3: Percentage of women by year (average values)

Variable	Women on Boards %	20%	33%
2008	3.25	0.25	0.22
2009	3.65	0.25	0.22
2010	7.74	0.25	0.20
2011	8.47	0.26	0.20
2012	13.45	0.38	0.23
2013	19.31	0.58	0.30
2014	24.34	0.75	0.38
2015	26.50	0.92	0.38

Source: Own elaboration

4. Results and discussion

The regression results show the different effects of the thresholds of women directors on board processes (Table 4). Specifically, we find that the effort norms (models 1 to 6) measured as the time devoted by directors to the board activities, and the board directors' attentiveness are affected by the threshold of 20% of women. At this threshold, women voice their opinions. When the board has at least 20% of women, board meetings rise by 2.77. The threshold of 20% also has a positive and significant effect on the board attendance (score). When the percentage of women on boards is at least 20%, the board attendance score increases by 3.64. Board meetings and board attendance are fundamental sources of internal firm information for directors. Hence, the higher these numbers, the more relevant the information the board members can acquire, and the higher the quality of decision making by boards. According to Huse and Solberg (2006), boards with higher female representation are also more likely to engage in constant professionalisation on the job by organising extra meetings, such as orientation programmes or deep dives. Our results document that the difference in the board member's behaviours in terms of time devoted to the board activities is visible at the threshold of 20%. Giving a voice to women makes the whole board more engaged in its activities. At the threshold of 33%, board members do not change their behaviour. Thus, at the threshold of 33% of women, boards may just continue with this new attitude. Our results suggest elevating women's voices influences an increase of the directors' time spent on board activities. In particular, women voicing their opinions is sufficient to increase the attendance of board members, thus pushing them to participate in the board meetings.

Tab. 4: Results

	Effort norms						Cognitive conflict	
	Time devoted by the directors to board activities				Attentiveness of the directors to the board activities			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Women (20%)	2.77** (2.19)		3.64* (1.82)		4.46* (1.79)		0.87*** (3.28)	
Women (33%)		1.09 (0.52)		2.99 (0.41)		10.70* (1.83)		0.78*** (4.72)
CEO duality	2.23* (1.88)	1.32 (1.24)	3.26 (0.89)	2.20 (0.62)	-14.83*** (-3.22)	-15.16** (-2.26)	1.05*** (2.74)	0.93** (2.24)
Independent directors %	0.02 (1.02)	0.02 (1.18)	0.10* (1.87)	0.12 (0.06)	0.06 (0.89)	0.08 (0.60)	0.01 (0.58)	0.01 (0.82)
Busy directors	0.03 (1.26)	0.03 (1.58)						
Board size	-0.29* (-1.95)	-0.35** (-2.09)	0.15 (0.37)	0.05 (0.92)	0.79* (1.72)	0.73** (1.92)	0.07*** (2.77)	0.05*** (2.12)
Total assets	1.36*10 ⁹ (0.38)	1.93*10 ⁹ (0.59)	-2.04*10 ¹⁰ (-0.01)	-6.62*10 ¹⁰ (0.96)	4.16*10 ^{8**} (1.95)	4.00*10 ^{8**} (2.72)	3.74*10 ¹¹ (0.97)	4.71*10 ¹¹ (0.96)
R-squared	0.26	0.28	0.60	0.61	0.20	0.25	0.17	0.21
N. Obs	188	188	212	212	238	238	238	238
N. Firms	29	29	32	32	35	35	35	35

T-statistics are reported in brackets. *, **, and *** denote significance at 10%, 5%, and 1% respectively. Robust standard errors are clustered at the firm-division level. Results are controlled for industry. All tests are two-tailed. *Time devoted by the directors to board activities* are proxied by board meeting score (columns 1 and 2) and board attendance score (columns 3 and 4). *Attentiveness of the directors to the board activities* is a score that measures whether the company has internal tools to develop appropriate and effective board functions and committees. *Cognitive conflict* is a score assessing the company's rule to maintain a well-balanced board in terms of experience, knowledge, skills, and qualities.

Source: Own development

However, devoting time to attend board meetings might not improve its effectiveness if the directors are not active in gathering information and discussing the board agenda. A stream of research argues that directors might not be particularly effective in performing their tasks if they receive limited information, and they do not spend enough time exchanging ideas among themselves or with the management (Vafeas, 1999). Our results document the fact that women on boards also improve the board members' attentiveness. Meeting the threshold of 20% of women on boards significantly and positively affects the attentiveness of the board members. When the percentage of women reaches 20%, the attentiveness score rises by 4.46. This effect more than doubles when the percentage of women is equal to, or higher than, 33%. Our results suggest that boards benefit when women voice their opinions. Gender-diverse boards are more often engaged in board activities, such as a regular board assessment and a review of the balance of board skills, knowledge and experience, as well as CEO succession planning (Singh and Vinnicombe, 2004). Huse and Solberg (2006) state that women directors, being less experienced board members, may devote time to board evaluation, and can identify

areas for improvement. They also indicate that boards with higher female representation are more likely to engage in constant professionalisation, as female directors are devoted to improving their visibility. They are diligent, and they work hard as a board member to avoid having stereotyped women's roles assigned to them within a team of board members. These benefits are particularly present when women's voices are heard, and the board is able to exploit the advantages of better balance. At a threshold of 33% of women on boards, women's voices are heard and accepted by the other board members. At this threshold, women start to be considered as equal colleagues by male directors, and their opinions are taken seriously. Specifically, women's tendency to ask for more codified information through formal channels might also induce other board members to make similar requests, and to support the women's request.

The second board process is cognitive conflict. The thresholds required by the law also have a positive effect on the level of cognitive conflict. A 20% and 33% percentage of women on the board improves the balance of the board by 0.87 and 0.78, respectively. It seems that at the thresholds of 20% and 33%, boards have just the right amount of diversity in terms of skills, experience, and competences, and the level of cognitive conflict increases. Having a voice and being heard improve the cognitive conflict among board's members. Research clearly states that cognitive conflict is influenced by demographic differences among group members, which affects the group interaction (Skvoretz and Fararo, 1996; Webster and Foschi, 1988; Martins and Sohn, 2022) in two possible directions. The first direction, which is the most preferred, is called "kaleidoscope thinking" (Kanter, 1986, p. 11). This means that the diversity of gender, knowledge, skills, and experience might stimulate creative idea production by other members because the board members rearrange and combine information and knowledge to create new ideas or solutions. The second direction is called "group faultlines" (Lau and Murnighan, 1998), which refers to situations in which the gender diversity splits the board into subgroups. These might be in contrast with each other, and raise barriers that make it more difficult to discuss alternative ideas proposed by the opposite subgroup. While most of the studies focus on the behaviours of people in the same subgroups (Chen and Tesluk, 2012), our results indicate that at the threshold of 20% the behaviour of male directors changes. At the threshold of 30% women's voices are heard, accepted, and supported. At these thresholds the gender is not an attribute that creates conflicts among subgroups. The proportions of women and men become more balanced, and the diversity of knowledge, skills, and experience are more likely to be used in board discussions.

Regarding the control variables, CEO duality has a positive and significant effect on the time that board members devote to the board activities, which is measured as the board meetings score, but it has a negative and statistically significant effect on the presence of internal tools used to acquire information. This is in line with the argument that CEO duality can be seen as a measure of CEO power within the board. If the CEO is also the chairman, the company might require more board meetings to formally show commitment towards the monitoring of CEO activities.

However, because of the CEO's power on the board, board members might feel uncomfortable in introducing and putting in place formal tools to acquire more information.

The board size has a negative and statistically significant effect on the Board Meetings Score, but it has a positive and statistically significant relationship with Board Attentiveness, measured as the score assessing whether the board has formal information tools in place. These results are in line with the previous studies which suggest that a larger board might not be particularly effective in monitoring because of possible problems of groupthink and social loaf (Thompson, 2008). As the board monitoring is often measured as the number of board meetings (Vafeas, 1999), this explains the negative relationship between board size and board meetings. Larger boards might be affected by lack of commitment, moral hazard problems, and greater control by the CEO (Faleye *et al.*, 2011). For these reasons larger boards might require more formal tools to gather information needed to make decisions. On the other hands, large boards have a larger pool of competences, background, and experience. This statement is empirically supported by our results that document a positive relationship between board size and a well-balanced board composition in terms of experience, knowledge, skills, and qualities.

5. Conclusion

In recent debates on gender equality, there is a growing emphasis on the benefits of increasing the number of women on corporate boards. Our study moves the discussion forward, focussing on the relationship between different thresholds of a critical mass of women on boards and boards activities, concentrating on two statuses of women: women voicing their opinions, and having their voices heard. Building on the critical mass theory, this article contributes both to theory and practice by studying the effect of the two measures of the critical mass of female directors introduced by the gender quota law on board processes.

The major novelty of the research is to provide evidence that different thresholds of critical mass causes different effects on board outcomes depending on the type of board process. Our findings show that boards that reach the threshold of 20% of female directors identified by the quota, devote more time to board activities. Boards that reach the threshold of 33% of female directors have higher attentiveness. The threshold of 20% makes women more likely to ask for additional information and to raise their voices. This propels the board members towards greater diligence and stronger engagement in board activities. At the threshold of 33%, women are perceived as equal colleagues, and the board becomes more attentive to its activities.

We also document the fact that when women voice their opinion (reaching 20% of the board seats) and their voice is heard (reaching the threshold of 33%), they improve the level of cognitive conflict in the boardroom, setting the scene for better board decision-making processes. One explanation could be that when the critical mass reaches 20%, the

minority feel more comfortable in raising their voice. When the minority reaches the threshold of 33%, it is accepted by the majority in the group. This means that women's different knowledge and perspectives are more likely to be utilised.

The paper makes several contributions to the academic and professional debate on women on boards. First, we test the validity of critical mass in the context of women on boards. Our result moves the debate about gender diversity in the boardroom from the ratio/presence of female directors to critical mass and the difference between giving voice to opinions and having the voice heard.

Second, in contrast to previous research, we demonstrate that certain board processes may require different dynamics from the board as a working group, and thus, raising the threshold of the critical mass of female directors brings different effects.

Third, our study contributes to corporate governance research by offering a new understanding of how gender diversity influences corporate governance. We explore what is happening in the "black box" of the boardroom. The focus on board processes provides a better understanding of how boards operate, and how a critical mass of women affects board activities. Our study fits in with the trend of research that attempts to open "the black box of board behaviour" (Machold and Farquare, 2013, Zattoni *et al.*, 2015; Zona and Zattoni, 2007; Brown and Kelan, 2020).

Fourth, this study has important implications for corporate boards and policy makers. In preparation for implementing the Directive of the European Parliament and of the Council on improving the gender balance on boards of companies listed on stock exchanges, several governments across Europe have adopted quotas to increase gender diversity on corporate boards, including Italy. The requirements for a critical mass of female directors on corporate boards of Italian companies will not be mandatory after 2030. Our research demonstrates that different thresholds of the critical mass of women on boards have improved a certain set of board processes. Moreover, we advocate quota regulation as an effective and the only enforceable affirmative measure of reaching a critical mass of female directors. Reaching a critical mass of women brings added value to the boardroom. This is a way to show male leaders that essential gender beliefs are a myth. Changing these underlying beliefs is crucial to motivate men to become change agents for gender equality. It may be especially crucial in countries that traditionally have very low institutional support for women in their careers, unlike in the Nordic countries - predominately Norway - which most research has referred to.

We also acknowledge some limitations of the study and directions for future research. First, research demonstrating how women contribute to better decision-making processes is unexplored. Understanding which board decisions are impacted by the changes to decision-making processes enforced by the women's presence on boards is the key to understanding the contributions made by gender diversity. More qualitative studies are needed to reveal the extent to which decisions change when more women were nominated to the board.

Sara De Masi
Agnieszka Słomka-
Golebiowska
Andrea Paci
Gender diversity on
corporate boards: when the
voice is not enough

Second, we do not test the interrelation between different board processes. More research is needed on the relationship between the critical mass of women and board processes, as it may be critical to understand the value added when women are on boards.

Third, the cognitive conflict and effort norms are very complex phenomena. We approach these topics, focusing on one single aspect which is the presence of women on boards. Although in our models we control for a set of control variables, the cognitive conflict and the attentiveness of the directors during the board meetings might be correlated with the complexity of the business environment or/and the complexity of the relationships among board members. In this vein, women on boards might be seen as a moderator of the relationship between the board processes (i.e. the cognitive conflict and effort norms) and the complexity of the decisions that the board is asked to make. Future research might go into this direction.

References

- ADAMS R., FUNK P. (2012), "Beyond the glass ceiling: Does gender matter?", *Management Science*, vol. 58, n. 2, pp. 219-235.
- AGUILERA R., JACKSON G. (2003), "The cross national-diversity of corporate governance. Dimensions and determinants", *Academy of Management Review*, vol. 28, n. 3, pp. 447-465.
- AMASON A.C., SAPIENZA H.J. (1997), "The effects of top management team size and interaction norms on cognitive and affective conflict", *Journal of Management*, vol. 23, n. 4, pp. 495-516.
- BANKEWITZ M. (2018), "Board Advisory Tasks: The importance to differentiate between functional and firm-specific advice", *European Management Review*, vol. 15, n. 4, pp. 521-539.
- BART C., MCQUEEN G. (2013), "Why Women Make Better Directors", *International Journal of Business Governance and Ethics*, vol. 8, n. 1, pp. 93-99.
- BELENKY M., CLINCHY B., GOLDBERGER N., TARULE J. (1997), *Women's ways of knowing: The development of self, voice and mind*, Basic Books, New York.
- BELL S.T., VILLADO A.J., LUKASIK M.A., BELAU L., BRIGGS A.L. (2011), "Getting specific about demographic diversity variable and team performance relationships: A meta-analysis", *Journal of Management*, vol. 37, n. 3, pp. 709-743.
- BILIMORIA D., WHEELER J. (2000), "Women corporate directors: Current research and future directions", in *Women in Management: Current Research Issues*, Davidson M., Burke R. (eds), pp. 138-163.
- BIRD S.R. (2003), "Sex Composition, Masculinity Stereotype Dissimilarity and the Quality of Men's Workplace Social Relations", *Gender, Work and Organization*, vol. 10, n. 5, pp. 579-604.
- BROWN S., KELAN E. (2020), *Gender and Corporate Boards: The Route to a Seat at the Table*, Routledge, New York.
- BURKE R. (1997), "Women directors: Selection, acceptance and benefits for board membership", *Corporate Governance: An International Review*, n. 5, pp. 118-125.

- CARLI LL, EAGLY AH. (2002), "Gender, Hierarchy, and Leadership", *Journal of Social Issues*, vol. 57, n. 4, pp. 629-636.
- CARLI L.L. (1999), "Gender, interpersonal power, and social influence", *Journal of Social Issues*, vol. 55, n. 1, pp. 81-91.
- CASEY C., SKIBNES R. PRINGLE J.K. (2011), "Gender Equality and Corporate Governance: Policy Strategies in Norway and New Zealand", *Gender, Work and Organization*, vol. 18, n. 6, pp. 613-630.
- CHEN G., TESLUK P. (2012), *Team Participation and Empowerment: A Multilevel Perspective*, The Oxford Handbook of Organizational Psychology, Volume 2.
- COOK A., GLASS, C. (2014), "Women and Leadership", *Gender, Work and Organization*, vol. 21, n. 1, pp. 91-103.
- CULLEN P., MURPHY M.P. (2018), "Leading the debate for the business case for gender equality, perilous for whom?", *Gender, Work and Organization*, vol. 25, n. 2, pp. 110- 126.
- DAILY C.M., DALTON D.R. (2003), "Women in the Boardroom: A Business Imperative", *Journal of Business Strategy*, vol. 24, n. 5, pp. 8-10.
- DALTON D., DAILY C., ELLSTRAND A., JOHNSON J. (1998), "Meta-analytic reviews of board composition, leadership structure, and financial performance", *Strategic Management Journal*, vol. 19, n. 3, pp. 269-290.
- DE MASI S. (2021), "Boards Contributing to the Protection of the Environment: Looking at the Dynamics between In-groups and Out-groups", *International Journal of Business Research and Management (IJBRM), Computer Science Journals (CSC Journals)*, vol. 12, n. 2, pp. 76-88.
- DE MASI S., SŁOMKA-GOŁĘBIOWSKA A., BECAGLI C., PACI A. (2021b), "Toward sustainable corporate behavior: The effect of the critical mass of female directors on environmental, social, and governance disclosure", *Business Strategy and Environment*, vol. 30, pp. 1865- 1878.
- DE MASI S., SŁOMKA-GOŁĘBIOWSKA A., PACI A. (2021), "Women on boards and monitoring tasks: an empirical application of Kanter's theory", *Management Decision*, vol. 59 n. 13, pp. 56-72.
- DESANA E. (2017), "La legge 120 del 2011: luci e ombre e prospettive. Osservatorio sulla corporate governance", *RDS 2/2017*.
- EAGLY A, JOHANNESSEN-SCHMIDT M. (2001), "The leadership styles of women and men", *Journal of Social Issues*, vol. 57, n. 4, pp. 781-797.
- ELY R. (1994), "The social construction of relationships among professional women at work", In Davidson M., Burke R. (Eds), *Women in management: Current research issues*, Paul Chapman, London, pp. 129-43.
- EUROPEAN COMMISSION. (2018), "Database on women and men in decision-making", <https://eige.europa.eu/gender-statistics/dgs/browse/wmidm>
- FALEYE O., HOITASH R., HOITASH U. (2011), "The costs of intense board monitoring", *Journal of Financial Economics*, n. 101, pp- 160-181.
- FISHER D.M., BELL S.T., DIERDORFF E.C., BELOHLAV J.A. (2012), "Facet personality and surface-level diversity as team mental model antecedents: Implications for implicit coordination", *Journal of Applied Psychology*, vol. 97, n. 4, pp. 825-841
- FORBES D.P., MILLIKEN FJ. (1999), "Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups", *Academy of Management Review*, vol. 24, n. 3, pp. 489-505.

Sara De Masi
Agnieszka Słomka-
Gołębiowska
Andrea Paci
Gender diversity on
corporate boards: when the
voice is not enough

- FOSCHI M. (2000), "Double standards for competence: theory and research", *Annual Review of Sociology*, vol. 26, n. 1, pp. 21-31.
- FRANKE G., CROWN D., SPAKE D. (1997), "Gender differences in ethical perceptions of business practices: A social role theory perspective", *Journal of Applied Psychology*, vol. 82, n. 6, pp. 920-934.
- GABALDON P., ANCA C., MATEOS DE CABO R., GIMENO R. (2016), "Searching for women on boards: An analysis from the supply and demand perspective", *Corporate Governance: An International Review*, n. 24, pp. 371-385.
- GABRIELSSON J., HUSE M., MINICHILLI A. (2007), "Understanding the leadership role of the board chairperson through a team production approach", *International Journal of Leadership Studies*, vol. 3, n. 1, pp. 21-39.
- GOODREAU S., KITTS J., MORRIS M. (2009), "Birds of feather, or friend of a friend? Using exponential random graph models to investigate adolescent social networks", *Demography*, vol. 46, n. 1, pp. 103-125.
- HAMBRICK D., WERDER A., ZAJAC E. (2008), "New Directions in Corporate Governance", *Research in Organization Science*, vol. 19, n. 3, pp. 381-385.
- HEIKES J. (1992), "When men are in the minority: The case of men in nursing", *The Sociological Quarterly*, vol. 32, n. 3, pp. 389-401.
- HILLMAN A., CANNELLA A., HARRIS I. (2002), "Women and racial minorities in the boardroom: How do they differ?", *Journal of Management Studies*, vol. 28, n. 6, pp. 747-763.
- HOLGERSSON C. (2020), "Gender and corporate boards: The route to a seat at the table", *Gender Work Organization*, vol. 28, n. 3, pp. 1195-1198.
- HUSE M., GABRIELSSON J. (2019), "Value-creating boards in SMEs: Team production efforts", In Leblanc R., *Handbook of board governance*, 2nd edition: Wiley, New Jersey.
- HUSE M., SOLBERG S. (2006), "Gender-related boardroom dynamics: how Scandinavian women make and can make contributions on corporate boards", *Management Review*, vol. 21, n. 2, pp. 113-130.
- HUSE M. (2005), "Accountability and creating accountability: A framework for exploring behavioral perspectives of corporate governance", *British Journal of Management*, vol. 16, n. s1, pp. 65-79.
- HUSE M. (2007), *Boards, Governance and Value Creation: The Human Side of Corporate Governance*, Cambridge University Press, Cambridge.
- HUSE M., NIELSEN S., HAGEN I. (2009), "Women and employee-elected board members, and their contribution to board control tasks", *Journal of Business Ethics*, vol. 89, n. 4, pp. 581-597.
- IBARRA H. (1993), "Personal networks of women and minorities in management: A conceptual framework", *Academy of Management Review*, vol. 18, n. 1, pp. 56-87.
- IZRAELI D. (2000), "Women Directors in Israel", in Burke R., Mattis M. (eds.) *Women on Corporate Boards of Directors: International Challenges and Opportunities*, Kluwer: Dordrecht, The Netherlands, pp. 75-96.
- JEHN K. (1995), "A multimethod examination of the benefits and detriments of intragroup conflict", *Administrative Science Quarterly*, vol. 40, n. 2, pp. 256-282.
- JOECKS J., PULL K., VETTER K. (2013), "Gender diversity in the boardroom and firm performance: what exactly constitutes a 'Critical Mass'?", *Journal Business Ethics*, vol. 118, n. 1, pp. 61-72.

- KANTER R. (1977), *Men and women of the corporation*, Basic Books, New York.
- KANTER R. (1986), "Creating the creative environment", *Management Review*, vol. 15, pp 11-12.
- KIRSCH A. (2017), "The gender composition of corporate boards: A review and research agenda", *The Leadership Quarterly*, vol. 29, n. 2, pp. 346-364.
- KONRAD A., KRAMER V., ERKUT S. (2008), "Critical mass: The impact of three or more women on corporate boards", *Organizational Dynamics*, vol. 37, n. 2, pp. 145-64.
- LABELLE R., FRANCOEUR C., LAKHAL F. (2015), "To Regulate Or Not To Regulate? Early Evidence on the Means Used Around the World to Promote Gender Diversity in the Boardroom", *Gender, Work and Organization*, vol. 22, n. 4, pp. 339- 363.
- LAU D.C., MURNIGHAN J.K. (1998), "Demographic Diversity and Faultlines: The Compositional Dynamics of Organizational Groups", *The Academy of Management Review*, vol. 23, n. 2, pp. 325-40.
- LODEN M. (1985), *Feminine Leadership or How to Succeed in Business Without Being One of the Boys*, Times Books, New York.
- MACHOLD S., FARQUHAR S. (2013), "Board Task Evolution: A Longitudinal Field Study in the UK", *Corporate Governance*, *An International Review*, vol. 21, n. 2, pp. 147-64.
- MARTINS L.L., SOHN W. (2022), "How Does Diversity Affect Team Cognitive Processes? Understanding the Cognitive Pathways Underlying the Diversity Dividend in Teams", *Academy of Management Annals*, vol. 16, pp. 134-178.
- MILLIKEN F., MARTINS L. (1996), "Searching for common threads: Understanding the multiple effects of diversity in organizational groups", *Academy of Management Review*, vol. 21, n. 2, pp. 402-403.
- NIELSEN S. (2009), "Why do top management teams look the way they do? A multilevel exploration of the antecedents of TMT heterogeneity", *Strategic Organization*, vol. 7, n. 3, pp. 277-305.
- NIELSEN S., HUSE M. (2010a), "Women directors' contribution to board decision-making and strategic involvement: The role of equality perception", *European Management Review*, vol. 7, n. 1, pp. 16- 29.
- NIELSEN S., HUSE M. (2010b), "The contribution of women on boards of directors: Going beyond the surface", *Corporate Governance: An International Review*, vol. 18, n. 2, pp. 136-148.
- PAN Y., PARKS J. (2012), "Predictors, consequence, and measurement of ethical judgments: Review and meta-analysis", *Journal of Business Research*, vol. 65, n. 1, pp. 84-91.
- PEARCE J., ZAHRA S. (1991), "The relative power of the CEOs and boards of directors: Associations with corporate performance", *Strategic Management Journal*, vol. 12, pp. 135-153.
- POST C., BYRON K. (2015), "Women on boards and firm financial performance: A meta-analysis", *Academy of Management Journal*, vol. 58, n. 5, pp. 1546-1571.
- ROSS-SMITH A., HUPPATZ K. (2010), "Management, Women and Gender Capital. Gender", *Work and Organization*, vol. 17, n. 5, pp. 547-566.
- SHERIDAN A., MCKENZIE F.H., STILL L. (2011), "Complex and Contradictory: The Doing of Gender on Regional Development Boards", *Gender, Work and Organization*, vol. 18, n. 3, pp. 282-297.

Sara De Masi
Agnieszka Słomka-
Golebiowska
Andrea Paci
Gender diversity on
corporate boards: when the
voice is not enough

- SIMPSON R. (1997), "Have times changed? Career barriers and the token woman manager", *British Journal of Management*, vol. 8, n. s1, pp. 121-129.
- SIMPSON R. (2000), "Gender mix and organizational fit: How gender imbalance at different levels of the organization impacts on women managers", *Women in Management Review*, vol. 15, n. 1, pp. 5-20.
- SIMPSON R., LEWIS P. (2005), "An investigation of silence and a scrutiny of transparency: Re-examining gender in organization literature through the concepts of voice and visibility", *Human Relations*, vol. 58, n. 10, pp. 1253-1275.
- SINGH V., KUMRA S., VINNICOMBE S. (2002), "Gender and impression management: Playing the promotion game", *Journal of Business Ethics*, vol. 37, n. 1, pp. 77-89.
- SINGH V., VINNICOMBE S. (2004), "Why so few women in top UK boardrooms? Evidence and theoretical explanations", *Corporate Governance: An International Review*, vol. 12, n. 4, pp. 479-488.
- SLOMKA-GOLEBIEWSKA A., DE MASI S., PACI A. (2022), "Board dynamics and board tasks empowered by women on boards: Evidence from Italy", *Management Research Review*, ahead- of- print.
- SKVORETZ J., FARARO T.J. (1996), "Generating Symbolic Interaction: Production System Models", *Sociological Methods and Research*, vol. 25, n. 1, pp. 60-102.
- STAFSUDD A. (2006), "People are strange when you're a stranger: senior executives select similar successors", *European Management Review*, vol. 3, n. 3, pp. 77- 89.
- STEINER ID. (1972), *Group process and productivity*, Academic Press, New York.
- TAJFEL H., TURNER T. (1986), "The Social Identity Theory of Intergroup Behavior", In Worchel S., Austin W.G., Eds., *Psychology of Intergroup Relation*, Hall Publishers, Chicago, 7-24.
- TERJESEN S., SEALY R., SINGH V. (2009), "Women Directors on Corporate Boards: A Review and Research Agenda", *Corporate Governance: An International Review*, vol. 17, n. 3, pp. 320-337.
- THOMPSON L.L. (2008), *Making the Team: A guide for Managers*, (3rd ed.) Prentice Hall, NJ.
- TORCHIA M., CALABRÒ A., HUSE M. (2011), "Women Directors on Corporate Boards: From Tokenism to Critical Mass", *Journal of Business Ethics*, vol. 102, n. 2, pp. 299-317.
- TORCHIA M., SEIERSTAD C., WARNER-SØDERHOLM G., HUSE M. (2017), "Women on boards: Beyond the institutional setting-The role of stakeholders and actors", *Journal of Business Ethics*, vol. 141, n. 2, pp. 289-315.
- VAFEAS N. (1999), "Board meeting frequency and firm performance", *Journal of Financial Economics*, vol. 53, n. 1, pp. 113-142.
- VAN DIJK H., MEYER B., VAN ENGEN M., LOYD D.L. (2017), "Microdynamics in diverse teams: A review and integration of the diversity and stereotyping literatures", *Academy of Management Annals*, vol. 11, n. 1, pp. 517-557
- VAN EES H., GABRIELSSON J., HUSE M. (2009), "Toward a behavioral theory of boards and corporate governance", *Corporate Governance: An International Review*, vol. 17, n. 3, pp. 307-319.
- VAN KNIPPENBERG D., SCHIPPERS M.C. (2007), "Work group diversity", *Annual Review of Psychology*, n. 58, pp. 515-541.

- WEBSTER M.J.R., FOSCHI M. (1988), *Status generalization: New theory and research*, Stanford University Press.
- WEST C., ZIMMERMAN D. (2002), "Doing gender", In Fenstermaker S., West C. (Eds), *Doing gender, doing difference*, Routledge, London, pp. 3-23.
- WAGEMAN R. (1995), "Interdependence and group effectiveness", *Administrative Science Quarterly*, vol. 40, n. 1, pp. 145-180.
- WILEY C., MONLLOR-TORMOS M. (2018), "Board Gender Diversity in the STEM&F Sectors: The Critical Mass Required to Drive Firm Performance", *Journal of Leadership and Organizational Studies*, vol. 25, n. 3, pp. 290-308.
- ZATTONI A., HUSE M., GNAN L. (2015), "Does family involvement influence firm performance? Exploring the mediating effects of board processes and tasks", *Journal of Management*, vol. 41, n. 4, pp. 1214-1243.
- ZELECHOWSKI D., BILIMORIA D. (2004), "Characteristics of Women and Men Corporate Inside Directors in the Us", *Corporate Governance: An International Review*, vol. 12, n. 3, pp. 337-342.
- ZONA F., ZATTONI A. (2007), "Beyond the black box of demography: board process and task effectiveness within Italian firms", *Corporate Governance: An International Review*, vol. 15, n. 5, pp. 852-864.

Sara De Masi
Agnieszka Słomka-
Gołębiowska
Andrea Paci
Gender diversity on
corporate boards: when the
voice is not enough

Academic or professional position and contacts

Sara De Masi

Assistant Professor of Management
University of Florence - Italy
e-mail: sara.demasi@unifi.it

Agnieszka Słomka-Gołębiowska

Full Professor of Corporate Governance
Warsaw School of Economics - Poland
email: aslomka@sgh.waw.pl

Andrea Paci

Full Professor of Management
University of Florence - Italy
e-mail: andrea.paci@unifi.it

sinergie
italian journal of management

ISSN print 0393-5108
ISSN online 2785-549X
DOI 10.7433/s118.2022.08
pp. 169-189

FONDAZIONE
CUEIM

S
I
M
A

Italian Society of
MANAGEMENT