





Article

Gender Diversity in Spanish Banks: Trickle-Down and Productivity Effects

María Isabel Delgado-Piña ¹, Óscar Rodríguez-Ruiz ¹, Antonio Rodríguez-Duarte ¹
and Miguel Ángel Sastre-Castillo ^{2,*}

¹ Department of Management and Marketing, Faculty of Economics and Business, Complutense University of Madrid, Campus de Somosaguas, 28223 Madrid, Spain; maribel@ccee.ucm.es (M.I.D.-P.); orr@ccee.ucm.es (Ó.R.-R.); duarte@ccee.ucm.es (A.R.-D.)

² Department of Management and Marketing, Faculty of Commerce and Tourism, Complutense University of Madrid, Av. Filipinas 3, 28003 Madrid, Spain

* Correspondence: masastre@ucm.es

Received: 10 January 2020; Accepted: 2 March 2020; Published: 9 March 2020



Abstract: The study of the gender composition of top management and its impact for organizations has received increasing attention during recent decades. Despite this, findings have been conflicting and few consistent conclusions have been reached. This paper uses panel data methods to study how the presence of women at the board of governance impacts gender diversity at different organizational levels in the Spanish banking sector. In addition, we explore the influence of female representation on employee productivity. Our findings show that the presence of one or two women at the board of directors benefits the advancement of women to managerial positions. We also identify a positive significant relationship between gender diversity at different organizational strata and productivity. The main conclusion of this research is that female representation at the board has relevant implications in terms of women being promoted and organizational outcomes. This contribution is relevant for both scholars and practitioners, as it explores the business case for gender diversity going beyond the upper echelons of organizations.

Keywords: banks; governance; gender diversity; productivity; panel data; Spain; value in diversity perspectives

1. Introduction

This paper proposes bringing a multiple-organizational-level analysis to the topic of gender diversity in Spanish banks. Specifically, it suggests a causal relationship between the presence of women at the corporate board and gender diversity at the management and organizational level. Furthermore, it attempts to study the impact that gender diversity at different organizational levels has on employee productivity.

Research on workforce diversity has been extensive during the past few decades. Despite the efforts made, scholars have found contradictory results [1]. The scholarly debate on the importance of female corporate directors has been widely recognized [2]. Diversity has been associated with interconnected effects that take place at different levels of analysis [3]. However, few studies measure gender diversity at different hierarchical organizational strata [4–6]. Only a small amount of works has emphasized the role of middle managers for achieving firm performance (e.g., references [3,7]). In a similar way, there is not much research about the potential effects on organizational outcomes of organizational gender diversity (e.g., references [8,9]).

This paper attempts to cover this gap by studying the effects of gender diversity at different organizational levels of Spanish banks. The Spanish case is interesting as a country in which a strong

autocratic legacy has historically sanctioned the situation of women's subordination [10]. According to data from the INE (2019) [11], women are 45.86% of the employed population. Yet, only 17.3% of management positions are held by women [12]. The *Law on Effective Equality of Women and Men*, passed in Spain in 2007, prescribed that limited companies should have had at least 40 per cent of each gender on the boards by 2015. However, the proportion of women board members in largest listed companies is 26.4%, a rate below the EU average of 28.8% [13]. In the Spanish banking sector, the percentage of women in the workforce exceeds 50%, but they are a minority in the management jobs, and about 30% of the chairs on the boards of directors are occupied by women [14]. If men and women are equally represented in the workforce, it is relevant to understand the reasons for the low percentage of women in senior positions. This labor segregation also reveals the need to improve diversity at work [15,16].

The study of female presence at different organizational levels of Spanish banks and its impact on employee productivity represents an important topic that merits more attention and empirical study for different reasons. First of all, the low representation of female at senior levels reflects the existence of a "glass-ceiling" in a sector in which the entry in the profession is equal for males and females. This disadvantaged position of women is the result of systematic and structural discrimination [17]. Secondly, previous research has detected a positive relation between women presence at senior levels and female representation at the levels below. This relationship is known as the "trickle-down" effect [6]. In the banking sector, women are in a unique position to remove barriers and mentor other women. In this vein, we look to two potentially cascading positive effects of the presence of females at the corporate board: (a) the increase of gender diversity at the level of management (managers that develop executive, coordinating and advisory functions in the bank); (b) the increase of gender diversity in the whole firm workforce. Given the low representation of females at top management, our work can examine if women advocate for other women when they are in the minority [6]. This tendency contradicts the so-called "queen bee" syndrome [18], according to which women in male-dominated positions believe that other women threaten their special status.

Our work also studies how female representation at the board, management and organizational level influences employee productivity in a set of Spanish commercial banks. We assume that women have a different cognitive frame that it is likely to influence performance [19].

Our analysis is divided into several sections. After this introduction, Section 2 reviews the literature that explores the link between gender diversity at different hierarchical ranks and organizational performances. In Section 3 several hypotheses are formulated. We then describe our methodology and analytical approach (Section 4). The main results of the study are showed in Section 5. In Section 6, we analyze the significance of the results of the work. We finish with the main conclusions of this study.

2. Theoretical Framework

2.1. Current Studies on the Theme

As we have mentioned earlier, there is a very small number of studies that look at the organizational impact of gender diversity at multiple organizational levels. Among them, Cohen et al. (1998) [20] found that women in the savings and loan industry are more likely to be hired and promoted into a particular job level when the proportion of women at that level is high. Elvira and Cohen (2001) noted that women in low-ranking jobs are more likely to leave when there are more women at executive levels. Bilimoria (2006) [21] showed that the number of women directors on a Fortune 500 board is positively associated with the number of female officers at the company. In the same vein, Huffman et al. (2010) [22] found that women's presence in managerial positions reduces gender segregation between non-managerial workers. The work of Matsa and Miller (2012) [23] evidenced that a 10% increase in women on board increases the likelihood of having any women among the top five executives in the next year by 1%. Cohen and Broschak (2013) [24] reported that the relation between the proportion of female managers and the number of new management jobs filled by men is positive initially, but plateaus and turns negative. The study of Gould et al. (2018) [6], supporting the existence of a

“trickle-down” effect in 1837 Australian listed organizations, has shown that a 10% increase in female board representation is associated with a 38% increase in female executive representation.

The bulk of literature on demographic diversity in management has been mainly centered in the effects of board gender diversity on organizational performance [25]. “Diversity in the boardroom studies” have tried to detect the “magic number” of women in top management. Some have found that a critical mass of 30 percent maximizes performance [26]. The results of this research are inconclusive and yield small correlational findings [1]. This lack of agreement can be attributed to different factors such as the periods of time [27], the measures of performance used [28,29], and the regulatory and socio-cultural context [19]. Some works have found a positive impact of board gender diversity on financial indicators. For instance, Mínguez-Vera and López-Martínez (2010) [30] show that women’s presence on the board has a positive effect on return on assets (ROA). Rodríguez-Domínguez et al. (2012) [31] highlight the negative effects of the presence of female directors on the firm performance measured in terms of ROA, return on sales (ROS) and return on equity (ROE). Reguera-Alvarado et al. (2017) [10] found a positive relation between gender diversity at the board and financial performance, measured with the Tobin’s Q. In a global approach, the meta-analysis of Post and Byron (2015) [19] identifies a slightly positive relationship of board gender diversity to firm financial performance. All these research efforts show the need to identify the conditions under which the effects of diversity are positive [1].

Currently there is very little research analysing the effects of gender diversity of managers who are placed in hierarchical ranks below the top management (e.g., references [7,32]). Shrader et al. (1997) [33] found a positive association between women in management (total managers) and ROS, ROA, ROI (return on investment) and ROE. Dwyer et al. (2003) [34] explored whether the influence of diversity on firm performance is more fully realized when examined across midlevel managers. They noted that a gender-diverse management group provides benefits to growth-oriented firms that value innovation and flexibility. McMillan-Capehart and Simerly (2008) [32] proposed a U-shaped relationship between gender diversity in middle and lower management and organizational performance, measured in terms of ROE and employee productivity. Richard et al. (2013) [7] also hypothesized curvilinear relationships, but no significant results were observed. Schwab et al. (2016) [3] noted that when firms approach gender parity in management the beneficial impact on firm performance diminishes

The scarce studies centered on the influence of gender diversity at the managerial level shows contradictory results. These results do not indicate clearly whether gender diversity in management is relevant for explaining organizational performance and, if so, whether the relationship between both variables is linear or curvilinear.

Diversity-related literature at the organizational level of analysis is also limited [16,35]. The small number of studies that explore the link between the gender composition of the workforce and different measures of organizational performance have ambiguous results. For example, some researchers suggested positive outcomes of workforce diversity, such as higher firm performance (e.g., reference [7]). In this line, Ali et al. (2014) [25] draw a positive linear relationship between gender diversity of the whole workforce and employee productivity. By contrast, Sacco and Schmitt (2005) [36] do not identify any significant association of gender diversity with unit profitability. Richard et al. (2006) [9] fail to find a direct relationship between gender diversity and organizational performance. Frink et al. (2003) [8] detected an inverted U-shaped relationship between gender composition and profitability. Ali et al. (2011) [37] found a positive linear relationship between organizational gender diversity and employee productivity.

2.2. Theoretical Approaches

There are different theories that explain the “trickle-down” effect as a process according to which increases in female representation at higher organizational level are expected to result in increases in female representation at a lower level of management [38]. Gould et al. (2018) [6] note that the similarity attraction paradigm and the homophily principle explain the mechanisms of this effect.

The similarity-attraction theory [39] proposes that individuals are positively oriented towards those who they perceive to be as more like them. This makes females in higher positions want to work with other females. The homophily principle also emphasizes the idea that individuals prefer to work with similar people [20].

The diversity–performance relationship has also been studied from different theoretical frameworks. Some perspectives highlight the detrimental effects of diversity on performance, while other theoretical approaches show the positive effects of diversity [40]. There is not a general consensus in literature. Each theory provides some valid explanations and it seems crucial to integrate them in a multi-theoretical approach. In this section we summarize the main views grouping them in two broad categories: (a) Theories that consider that the relationship between gender diversity and performance is linear and (b) Theories that consider that the relationship between gender diversity and performance is curvilinear.

2.2.1. The Linear Relation between Diversity and Performance

The linear views consider that changes in the independent variable (gender diversity) cause the dependent variable (organizational outcomes) to change in a proportional way. Within this group, some theories emphasize the dysfunctional effects of gender diversity on firm performance. For instance, social identity theory [41] suggests that being member of a group creates a psychological state that defines social identity. The psychological processes related to social identity produce solidarity within one's group and discrimination against outsiders. Gender diversity might lead to dysfunctional results, because people classify themselves as belonging to the male group or the female group. These groups use stereotypes that might contribute to decreasing communication [42] and increasing conflict [43]. In a similar way, similarity–attraction theory points out that diversity implies differences. These dissimilarities are detrimental to social integration, leading to negative outcomes. The sociopsychological approaches described earlier are crucial to explain the effects of diversity at the individual or at the group level of analysis. However, the applicability of these approaches at the organizational level is questionable [37].

Within the linear views, some perspectives highlight the positive effects of gender diversity. These approaches show that diverse units whose members draw from different pools of informational resources improve decision making and deliver more creative products [44,45]. The idea that balanced distributions of gender are good is the basis for the value in diversity perspectives. In this context, the resource-based view of the firm [46] considers gender diversity a driver of economic performance. Heterogeneity may be a source of intangible resources (e.g., creativity) that firms exploit to gain competitive advantage [37]. The upper echelons' approaches [47] have also argued that diversity is associated with informational differences among team members. Women and men bring different knowledge and values to the boardroom, defining a “cognitive frame composition” [48]. Managerial gender diversity has the potential to improve managerial choices and subsequent firm performance [3]. In this vein, top management teams' diversity can improve productivity outcomes by providing different perspectives for problem solving [17]. Most of studies about the effects of diversity at the firm level of analysis have drawn on the resource-based view of the firm and the upper echelons' perspective [35].

2.2.2. The Curvilinear Relationship between Gender Diversity and Performance

The Blau theory of heterogeneity (1977) [49] studies social integration and its determinants. It proposes a curvilinear, U-shaped relationship between diversity and organizational outcomes. Social integration depends on opportunities for social contact. These opportunities are more prevalent in homogeneous and highly diverse groups [49]. By contrast, conflict and turnover will be higher with moderate levels of diversity [50,51]. For some studies, the curvilinear effects of diversity on organizational performance are derived from the integration of theoretical perspectives that support the beneficial effects of diversity and theories that note the detrimental effects of diversity. For instance,

Frink et al. (2003) [8] and Ali et al. (2011) [37] suggested that the relationship is inverted U-shaped (\cap). Thus, the negative effects of diversity predicted by social identity theory might overcome the positive effects claimed by the value-in-diversity approaches.

3. Hypotheses

Workforce diversity is likely to be positively affected by diversity at the upper echelons [52]. A higher representation of women on the board of governance has been found to influence gender diversity, increasing the presence of women in other managerial positions and in the whole organization [6,29]. Female corporate directors have the potential role of helping other women to advance [23]. Women are more likely to be involved in a network with other women [3]. Moreover, the presence of female directors signals career opportunities for lower-level female workers [53]. Female executives in senior roles advocate for other women through mentoring and “old-girls” networks [54]. There is a process of homosocial reproduction in which managers select and promote individuals who are socially similar to themselves [20]. Having more females on corporate boards has been associated with greater female managerial representation at the establishment level [55]. Research also shows that women officers hold more powerful titles when there are more women board members in financial, banking, and insurance companies [21]. In short, previous findings indicate that greater female representation in the board of directors will promote the advancement of women at managerial and organizational levels. Homosocial reproduction, as the tendency to act with people who are similar, influences recruitment, hiring, and promotions. As a result, we hypothesize:

Hypothesis 1a (H1a). Greater female representation among corporate board of directors is positively associated with gender diversity at the managerial level.

Hypothesis 1b (H1b). Greater female representation among corporate board of directors is positively associated with gender diversity at the organizational level.

Boards with high percentages of women are well positioned in their environments and perform well [33]. Firms making a commitment to increasing the number of women on boards can improve firm value [56]. It seems that women bring a different style to board activities and better adaptation to the environment [55]. In this vein, diversity of the board can facilitate the acquisition of information and resources [57]. Female cognitive frames contribute to board decision-making, increasing the pool of information taken into account [19]. Women are likely to possess a “feeling” cognitive style that emphasizes harmony [58]. For these reasons, they represent a key factor for companies facing a competitive environment [30]. Research has established a positive association between female representation at the board of directors and several outcomes such as market-to-book ratio [59], economic performance or the attraction of human capital [10]. Accordingly, we formulate the following hypothesis:

Hypothesis 2 (H2). Greater female representation among corporate board of directors is positively associated with firm performance (measured by employee productivity).

Research considers that middle management and other officials who implement policies have an impact on firm performance [32]. As more women assume management responsibilities, learning and organizational performance improve [33]. Gender diversity in management has also been positively related to performance when participative strategy making is high [7], or when diversity increases beyond token levels of representation [3]. The idea that women as managers can have a strong impact on productivity and profits has also been defended [60]. Recent works provide evidences of a positive linear relationship between top management gender diversity and productivity [17]. Consequently, we propose the following hypotheses.

Hypothesis 3 (H3). Gender diversity in management is positively associated with firm performance (measured by employee productivity).

Value in diversity perspectives proposes the idea that there is a positive relation between organizational gender diversity and organizational performance. Diversity seems to enhance organizations' creativity, problem-solving, and performance [15]. Firms with a greater gender balance have a higher performance than firms that are single-gender, due to the fact that diversity prevents fragmentation and tokenism problems [16]. A diverse workforce can benefit as well from different knowledge domains that positively impact corporate outputs. Visible diversity has been associated with task conflict, which improves decision-making and effectiveness [61]. The work of Frink et al. (2003) [8] notes that increases in female representation will be associated with increased performance in firms up to the point where the gender breakdown attains parity. It is possible to identify a positive relationship between organizational gender diversity and employee productivity [37]. Accordingly, we formulate the following hypothesis:

Hypothesis 4 (H4). Greater gender diversity at the organizational level is positively associated with firm performance (measured by employee productivity).

A representation of our research model is presented in Figure 1. The model assumes that there is a synergy between the presence of women in the board of governance and gender diversity at the management and organizational level (H1a and H1b). Furthermore, we hypothesize a significant and positive relationship between female representation at the board, management and organizational level, and employee productivity (H2, H3 and H4).

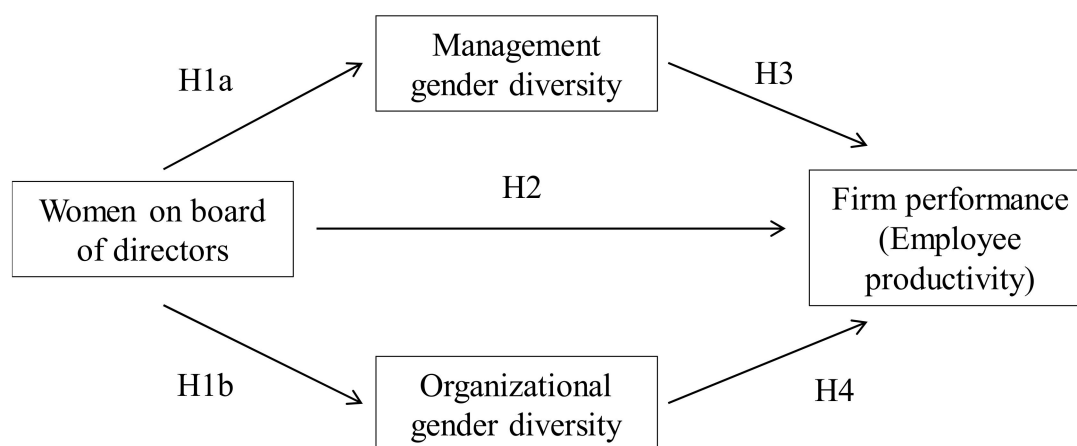


Figure 1. Research Model.

Figure 1. Research Model.

4. Method

4.1. Research Setting

Our sample consists of pooled time series and cross-sectional observations of Spanish commercial banks during the 1999–2010 period. We are focusing on the banking industry, because the reference population is more homogeneous [62]. In addition, the effect of diversity in this sector has been found to be stronger due to the complexity of the relationship with customers [63]. Spanish commercial banks are grouped in the Spanish Banking Association (AEB (<https://www.aebanca.es/el-sector-en-cifras/>)) that represents the main banks operating in Spain (63% of the Spanish Banking System). The rest of the entities are former savings banks (32%) and credit unions (5%). AEB's partner banks employed 94,792 workers in Spain in 2018. Almost half of these employees were women. AEB publishes the Statistical

Yearbook of the Spanish banks with the main data of the sector. Financial data and data about gender composition for our study were hand-collected from this source.

We have chosen the period 1999 to 2010 for two particular reasons. First of all, we aim to study the effect of equality policies promoted by the Spanish government, with the milestone of the Effective Equality Law passed in 2007. Secondly, we want to prevent our analysis from being affected by the process of consolidation of Spanish commercial banks (2010–2013) that contributed to improving the productive efficiency of entities using a strategy of mergers and acquisitions [64]. The restructuring of the Spanish banking system has involved a significant reduction in the number of banks operating in the country (around 70% less) and the conversion of savings banks into banks [65]. The process was developed in two phases. In the first phase, banking authorities forced the integration of savings banks. The second phase, which meant the integration of commercial banks with liquidity problems, started in November 2010.

The sample represents all the banks operating in Spain between 1999 and 2010 (59 firms), so the size is 649 observations. It is relevant to take into account that not all the firms are present in the whole period. Furthermore, there are firms that do not provide information about all the variables. We work then with an unbalanced panel. The real sample size is showed in each model. A number of important events, such as regulatory changes, have taken place in the industry during the years studied. However, these market circumstances do not bias the effects of gender diversity in ways different than for other service activities. Moreover, dummy variables document the effect of the temporal period. The longitudinal data allow us to make inferences about the effects of diversity in performance.

Our analysis examines gender diversity, decomposing it by organizational levels. We measure the presence of women on the board of directors, at the managerial level (managers that develop executive, coordinating and advisory functions) and at the firm level. We study gender diversity beyond management teams, with the aim of capturing the larger human capital pool that determines an organization's results [66].

In order to avoid the heterogeneity that exists in the analysis of the relationship between human resource policies and performance, we focus on a single industry. Despite the shortcomings in terms of external validity, this is a valid option because it contributes to the homogeneity of the omitted variables [67].

4.2. Design and Procedure

Our data span a diverse group of banks with very different internal and external characteristics (strategy, size, market power, etc.). To avoid bias in the estimates, it is necessary to control for a certain degree of heterogeneity among the organizations. One of the available solutions for this problem is to include a large set of control variables in the regression model. Theoretical approaches like the resource-based view [46] note that internal features of the firms such as corporate strategy can be unobservable in many cases. In this vein, it is necessary to consider that there are unobserved characteristics associated with gender policies.

For this reason, an appropriate option is to test our hypotheses using panel data methods. To collect panel data, we attempt to study the same firms across time. In the econometric analysis, it is not possible to assume that the observations are independently distributed across the period. One possible solution is to view the unobserved factors affecting the dependent variable as consisting of two types: those that are constant and those that change over time. The estimation of panel data can be done using two approaches: fixed- or random-effects regression. In both of these specifications, a separate intercept is specified for each bank, capturing the unobserved firm-specific effects. In the fixed-effects model (where the subscript i refers to the firm and t refers to the time period), the intercept α is different for each firm and is subscripted by i :

$$Y_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it} \quad (1)$$

In the random-effects model, the intercept α is assumed to consist of a deterministic component ($\underline{\alpha}$) and a random component u_i , which is considered to be distributed according to a normal distribution (i.e., $\alpha = \underline{\alpha} + u_i$). Therefore, the model is expressed thusly:

$$Y_{it} = \underline{\alpha} + \beta X_{it} + u_i + \varepsilon_{it} \quad (2)$$

We used the Hausman test [68] to check the assumption of independence between the random effects and the explanatory variables. If the test is not rejected, the random-effects model is the correct specification. Additionally, we included a set of dummy variables for each year. The inclusion of time dummy variables in panel data models with a (relatively) large N (number of firms) and a small T (time periods) reduces the influence of contemporaneous correlation [69]. At the same time, we control the possible endogeneity of the variables using one-year lagged values of the explanatory variables. The estimation is carried out with panel data using two-stage least squares (2SLS). This option has been previously adopted by Campbell and Mínguez-Vera (2008) [70].

When analyzing the relationship between gender diversity at different organizational strata and performance, a question arises: Could banks with better performance have more balanced gender ratios? In econometric terms, this possibility is called endogenous explanatory variable. A first approach to mitigate this potential problem is to use lagged values of the explanatory variables, but it is not enough. In this case, the method of two stage least squares (2SLS) can be used to estimate any identified equation in a system.

The problem of an endogenous explanatory variable is often caused by an omitted variable bias. In our case, an omitted (even unknown) variable (for example, sociological pressures) could be the cause that explains the impact of productivity on gender composition. It can be argued that banks with better productivity are more committed to social responsibility and tend to recruit more women. As we do not have a good estimator of corporate social responsibility policies, this variable is an omitted variable in our analysis.

There are two ways to deal with the problem of omitted variable bias [71]: (1) use a suitable proxy for the unobserved variable; and (2) assume that the omitted variable does not vary over time and use the fixed effects method. We try to control the existence of corporate social responsibility policies using the variable SUBSIDIARY as a control variable. We assume that if the bank is a subsidiary of an international branch, it is more likely to be subject to corporate social responsibility policies.

The second approach leaves the unobserved variable in the error term, and uses an estimation method that recognizes the presence of the omitted variable. This is the case of the method of instrumental variables 2SLS.

Despite its advantages, panel data present some limitations in its application [72]. The most relevant is the problem of attrition or loss of observations over time. Attrition may result in a selection bias when a rule other than simple random (or stratified) sampling is used to select observational units. In our database, a number of banks have disappeared during the period. For this reason, we restrict our sample to the years 1999–2010, just before the restructuring of the sector.

4.3. Measures

4.3.1. Dependent Measures

The dependent variable for Hypothesis 1a and 1b is gender diversity measured as the percentage of women at the firm level (F_WOMAN) and percentage of women at the management level (M_WOMAN). According to the Spanish Banking Collective Agreement (2015–2018), the Banking workforce is made up of technical and administrative workers. Technical workers, due to their knowledge and professional experience, are assigned to managerial, executive, coordinating or advisory functions. Among the technical workers, we can find roles from middle managers to senior management, with the exception of general management (the CEO and the executive chairman). We have analyzed gender diversity at the managerial level using data from technical workers. Following Schwab et al. (2016) [3], we think

that the relevant subset of employees that integrates management develop a primary function of improving productivity.

For hypotheses 2, 3 and 4 the dependent variable is firm performance, measured in terms of employee productivity. We measured employee productivity using objective financial measures to avoid the common variance bias.

Employee productivity (PRODUCTIV) is an intermediate-level measure of organizational performance usual in others studies (e.g., reference [17]). This measure is an important performance criterion in banks because of their relatively high labor costs [50]. Productivity reflects employee efforts disassociated from changes in product and capital markets [73]. It is calculated as the ratio of “average turnover” to “average personnel expenses”. Turnover is defined as addition of customers’ deposits and customers’ credits. Information on deposits, credits and personnel expenses (including social security and benefits) was obtained from the Statistical Yearbook of the Spanish Banking Association (AEB). The resulting values were transformed using a natural logarithm [66]. This makes estimates less sensitive to outliers on the variable [71].

4.3.2. Independent Variables

The relation between managerial gender diversity and employee productivity is conditioned by the relative degree of managerial gender diversity [3]. In our study we used three independent variables: presence of women at board level (B_WOMAN), percentage of women at management level (M_WOMAN), and percentage of women at firm-level (F_WOMAN). As mentioned previously, the proportion of women on the corporate boards of Spanish banks remains very small. Such boards of directors can be considered “skewed” groups, with women as tokens [18]. The proportion of women has increased in the period studied, but there has not been enough variation in time to use a measure of dispersion.

Research on group dynamics indicate that three may be somewhat of a “magic number”. Three women may be particularly beneficial for promoting change within the board of directors [74]. For these reasons, we use three dummies variables: one-woman director (B_WOMAN_1), two women directors (B_WOMAN_2) and at least three women executives (B_WOMAN_3). Our data source reports the gender of employees across three hierarchical levels: board of directors, technical staff and administrative staff.

4.3.3. Other Measures

We included several control variables to account for contextual factors that might influence performance. Ten-year dummy variables allow us to control macroeconomic changes. Firm size was specified in the model as a control variable. Size has a direct effect on financial performance due to economies of scale and market power [51]. Moreover, organizational size is positively related with internal labor markets in which there are more opportunities for women [15]. We operationalize firm size with two measures: the logarithmic transformation of the average total assets in millions of euros per year (ASSETS) and the number of branches a bank operates (OFFICES). Banks with a large number of branches have more labor expenses [75]. We also added two variables that may influence the relationship between gender composition and performance. Following Richard (2000) [66], one dummy variable indicates whether a bank is a subsidiary of a holding company (SUBSIDIARY). Banks that are part of a holding are more likely to follow the gender policies instituted by headquarters. The composition of the bank liabilities (EQUITY, measured as the logarithm of the equity) might also be related with the culture of the company. For instance, banks that use intensively shareholders’ equity to finance the company are more conservative and less sensitive to gender concerns. Table 1 includes a summary description of the variables included in our analysis.

Table 1. Description of main variables.

Abbreviation	Variable	Description	Sources
B_WOMAN_1	Presence of women at board level 1	One female director on board of directors	[2,26,62,74]
B_WOMAN_2	Presence of women at board level 2	Two female directors on board of directors	[2,26,62,74]
B_WOMAN_3	Presence of women at board level 3	At least three women on board of directors	[2,18,26,62,74]
EQUITY	Composition of the bank liabilities	Logarithm of the equity in millions of euros for each year	[27,76]
ASSETS	Organizational size 1	Logarithm of average total assets in millions of euros for each year	[10,15,51,62]
OFFICES	Organizational size 2	Number of branches of each bank	[75]
SUBSIDIARY	The bank is a subsidiary of a holding company	Dummy variable: 1 the bank is a subsidiary; 0 the bank is not a subsidiary.	[7,66]
PRODUCTIV	Firm performance, measured as employee productivity	Logarithm of the average turnover divided by the average personnel expenses. Turnover: sum of client's deposits plus client's credits in millions of euros for each year	[3,8,16,29,34]
F_WOMAN	Gender diversity at the firm level	Percentage of women in the workforce of each bank for each year.	[55,77]
M_WOMAN	Gender diversity at the management level	Percentage of women in technical staff of each bank for each year.	[55,77]

5. Results

5.1. Descriptive Analyses

Table 2 presents the means, standard deviations, and correlations for all the variables.

Table 2. Means, standard deviations and correlations.

	Mean	S. D.	1	2	3	4	5	6	7	8	9	10
1. B_WOMAN_1	0.412	0.493	1									
2. B_WOMAN_2	0.256	0.437	0.514	1								
3. B_WOMAN_3	0.156	0.363	0.271	0.526	1							
4. EQUITY ($\times 10^3$ mill. €)	94.89	36.58	−0.157	−0.146	−0.098	1						
5. ASSETS ($\times 10^3$ mill. €)	183.46	58.019	0.247	0.119	−0.006	−0.137	1					
6. OFFICES	282.58	682.61	0.229	0.108	0.007	−0.187	0.897	1				
7. SUBSIDIARY	0.339	0.474	−0.056	−0.101	−0.131	−0.056	−0.135	−0.144	1			
8. PRODUCTIV	168.98	332.18	0.052	−0.009	0.019	−0.222	0.029	−0.016	0.228	1		
9. F_WOMAN	0.365	0.109	0.101	0.028	−0.019	−0.093	−0.023	−0.139	0.090	0.217	1	
10. M_WOMAN	0.289	0.126	0.252	0.101	0.005	−0.160	0.958	0.936	−0.161	−0.004	−0.025	1

With regard to gender variables, we can say that nearly half of the banks have at least one woman on board (41.2%), but only 15.6% have three women or more (five women directors is the highest number in the sample). The presence of women in the workforce is notable (36.5%). The proportion of women at the management level is smaller (28.9%). The average of the productivity variable is 167, which means that each euro expended in labor expenses returns 167 euros in turnover.

Correlations between the variables in Table 2 show some high values. This could indicate potential problems of multicollinearity. The usual OLS statistics reflect that correlation among the explanatory variables does not violate any assumptions. In addition, high correlation between certain independent variables can be irrelevant for the estimation of other parameters in the model.

5.2. Test of Hypotheses

The results of the analysis regarding hypotheses 1a and 1b are presented in Table 3. Since the Hausman test was significant, all the estimations were carried out using fixed effects.

Table 3. 2SLS panel regression analysis for hypotheses 1a and 1b.

	Model 1 Dependent Variable M_WOMAN_{t+1}		Model 2 Dependent Variable F_WOMAN_{t+1}	
	Coeff. (Std. Error)	VIF	Coeff. (Std. Error)	VIF
C	0.452 (0.375)		0.201 (0.344)	
B_WOMAN_1 _t	0.135 *** (0.040)	1.397	−0.003 (0.004)	1.403
B_WOMAN_2 _t	0.181 *** (0.057)	1.780	0.015 (0.012)	1.780
B_WOMAN_3 _t	−0.015 (0.076)	1.448	−0.009 (0.025)	1.443
LOG(EQUITY _t)	0.051 (0.139)	2.148	0.033 *** (0.009)	2.136
SUBSIDIARY _t	−0.094 (0.144)	3.337	0.045 (0.075)	3.349
LOG(ASSETS _t)	0.058 ** (0.027)	2.671	0.008 (0.019)	2.689
LOG(OFFICES _t)	0.050 ** (0.021)	1.111	0.003 (0.006)	1.112
LOG(PRODUCTIV _t)	−0.203 (0.187)	1.906	0.022 (0.134)	1.906
Adjusted R ²	0.952		0.901	
Number of cross-sections	59		59	
Total observations	558		481	

Cross-section fixed (dummy variables), and period fixed (dummy variables). ** $p < 0.05$, *** $p < 0.01$.

Model 1 in Table 3 shows M_WOMAN_{t+1} as the dependent variable, representing the gender diversity at the managerial level. The coefficient of the variables B_WOMAN_1_t and B_WOMAN_2_t, which reflects the presence of one or two women at the board level, is positive and significant. The omitted category is the case in which no woman is present at the board. In this case the coefficients of the variables B_WOMAN_1_t, and B_WOMAN_2_t must be interpreted as the difference in the dependent variable between the banks with one or two women at the board and the banks with no women at the board. This means that the presence of one or two women as a token on the board of directors benefits gender diversity at the managerial level. In summary, Hypothesis 1a is supported.

Model 2 in Table 3 shows the regression analysis using the percentage of women in the total workforce in year $t + 1$ as the dependent variable (F_WOMAN_{t+1}). This variable represents the gender diversity of the whole organization. Results reflect that none of the variables representing the feminization of the board of directors in the year t (B_WOMAN_1_t, B_WOMAN_2_t and B_WOMAN_3_t) are significant to explain firm-level gender diversity. We do not find evidences showing that female directors promote an increase of the presence of women in the total organizational composition. Therefore, Hypothesis 1b is not confirmed.

Nevertheless, the high values of the correlation coefficients between the board variables could bias the results, inflating the standard errors and hiding a potential influence of those variables. For this reason, we calculate the variance inflation factors (VIFs). The method of VIFs measures the degree of collinearity between the regressors in an equation. The general rule of thumb is that VIFs exceeding 4 warrant further investigations. The highest value of the VIFs calculated for the Models 1 and 2 was 3.34. This means that there are not serious multicollinearity problems. Besides this, the results of an F test reject the joint influence of the board variables on both dependent variables (with the exception of the variables B_WOMAN_1_t and B_WOMAN_2_t on the M_WOMAN_{t+1}). In summary, our findings reflect that a minimal share of female directors is positively correlated with the proportion of women at managerial levels but not with the proportion of women in the total workforce.

The models presented in Table 4 test the relationships described in hypotheses 2 to 4. These models were also estimated under fixed effects, because Hausman's test was significant in all cases.

Table 4. 2SLS panel regression analysis for hypotheses 2 to 4. Dependent variable LOG (PRODUCTIV_{t+1}).

	Model 3		Model 4		Model 5		Model 6	
	Coeff. (Std. Error)	VIF	Coeff. (Std. Error)	VIF	Coeff. (Std. Error)	VIF	Coeff. (Std. Error)	VIF
C	2.002 *** (0.681)		0.537 (0.790)		−0.700 (1.016)		1.893 *** (0.621)	
B_WOMAN_1 _t	−0.031 (0.036)	1.396						
B_WOMAN_2 _t	0.116 * (0.066)	1.768						
B_WOMAN_3 _t	0.109 ** (0.055)	1.439						
M_WOMAN _t			6.254 ** (2.521)	2.077				
F_WOMAN _t					8.194 *** (2.739)	1.286		
LOG(EQUITY _t)	−0.311 *** (0.111)	1.801	−0.322 *** (0.118)	2.029	−0.389 *** (0.118)	1.790	−0.321 *** (0.058)	1.762
SUBSIDIARY _t	−0.326 * (0.167)	1.096	−0.411 ** (0.179)	1.109	−0.366 ** (0.164)	1.106	−0.210 * (0.114)	1.105
LOG(ASSETS _t)	0.166 ** (0.064)	3.436	0.145 ** (0.069)	4.472	0.102 (0.067)	3.437	0.144 *** (0.051)	3.233
LOG(OFFICES _t)	−0.155 (0.104)	2.516	−0.169 (0.106)	2.419	−0.016 (0.125)	2.903	−0.052 (0.065)	2.386
Adjusted R ²	0.890		0.829		0.867		0.791	
Number of cross-sections	59		59		59		59	
Total observations	555		583		583		583	

Cross-section fixed (dummy variables), and period fixed (dummy variables) * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

In all the models of Table 4, employee productivity in year $t + 1$ is the dependent variable. Model 3 shows that the presence of two or three or more women at the board level in year t (B_WOMAN_2_t and B_WOMAN_3_t) has a positive and significant influence on employee productivity. However, the significance of the B_WOMAN_2_t variable is only at 10% level. Hypothesis 2 is supported by the data, as the presence of three or more women at the board level in the previous year has a positive impact on employee performance in the next year. Moreover, a higher presence of women in banking institutions at both managerial and organizational level is important for employee productivity (Hypotheses 3 and 4). Model 4 shows that the percentage of women at managerial level in the previous year has a positive and significant influence on the employee productivity in the next year. Similar conclusions can be obtained from Model 5. There is a significant and positive linear influence of the percentage of women at the firm level in the previous year on the employee productivity in the next year. Additionally, in order to test if those relationships are non-linear, we run new equations including a square term of the variables M_WOMAN and F_WOMAN, respectively. However, the coefficients of the square terms were non-significant (results of these models are available upon request). In short, both hypotheses 3 and 4 are confirmed.

Although the results of the VIF show that only the variable ASSETS have a VIF above 4, the coefficient is still significant and the presence of multicollinearity does not cause problems of interpretation. Model 6 represents the control model, including only the control variables of our analysis. Models 3 to 5 present a better goodness of fit (measured as the value of the R-squared statistic). The contribution of female representation variables to employee productivity is more relevant than the contribution of control variables.

6. Discussion

This paper has explored how female representation at the board of governance of Spanish banks impacts gender diversity at different organizational levels. It also has studied the influence on productivity of the presence of women at the board, management and organizational level. In general terms, our findings reveal that female representation at the board of directors of Spanish banks benefits the promotion of women to managerial positions. However, we do not find this positive impact at the

organizational level. Furthermore, greater female representation in the three levels of measurement analyzed is associated with higher employee productivity.

Hypothesis 1a predicted that female representation at the board increased managerial gender diversity. This hypothesis is confirmed when there are one or two women at the board of directors. Three or more women do not affect the proportion of women managers. This finding differs from the study of Konrad et al. (2008) [74], in which the “magic number” for creating change within the boards of directors is three or more women. Our result confirms the view that women in token situations can exert pressures to promote other women. It seems that there is a “trickle-down” effect and not a “queen bee” syndrome [18] in the banks studied. Females at the board do not fear supporting other women in selection and promotion processes. It is important to consider that female representation in boards is extremely low due to the masculine characteristics of Spanish management culture. Less than half of the banks have a woman at the board and only 15% have three or more women.

Hypothesis 1b, which assumed that the presence of women at the boards of directors was associated with greater gender diversity at the organizational level, is not confirmed. Our results contrast with the findings of Bilimoria (2006) and Nishii et al. (2007) [21,52]. It might be that the proportion of female directors does not affect the experiences of women at the organizational level because their role is mainly reputational. They need to gain more numerical weight to exercise a leadership that takes into account minorities in the organizational ranks below them. It is difficult to speculate on why female directors have a different impact on the two levels of diversity analyzed. However, our data clearly show that firms with women in the highest positions do not experience a negative impact on gender diversity.

Hypothesis 2 predicted that female representation at the board is associated to employee productivity. This hypothesis is supported by our research. The presence of three or more women at the board has a significant and positive influence on employee productivity. The threshold of three women directors has been considered in other papers necessary for imposing a different style and improving decision making at the board (e.g., references [31,51]).

Our work has also confirmed hypotheses 3 and 4. The greater the proportion of women managers (H3) and women in the organization (H4), the higher employee productivity. Previous studies (e.g., reference [17]) have also recognized this positive effect on productivity.

We think that our research has clear theoretical implications. First, we have validated the possible “trickle-down” effect of the presence of women at the board on the proportion of women in other managerial positions. In contrast to Kanter (1977) [18] and Konrad et al. (2008) [74], we find that women-token in skewed groups have a relevant role in promoting the advancement of other women to lower managerial levels. However, when the numerical presence of women at the top of the companies begins to be significant (three or more women), it seems that they feel less need to push the advance of other women [20]. We appreciate in this case a sort of inverted “queen bee” syndrome, as when gender salience is high (less than three women) females at the board seem to advocate more for other women.

Secondly, we have studied the effects of female representation at different organizational levels. Few studies on corporate gender diversity have found a significant effect on employee productivity (e.g., reference [29]). Thus, the findings of our work strengthen the business case for board gender diversity. Regarding the impact of gender diversity at the managerial level, we also add to other international studies that find a positive association with productivity (e.g., reference [17]). Something similar can be said of the link between organizational gender diversity and productivity. Only the study of Ali et al. (2011) [37] found a positive linear between both variables.

This work has practical implications as well. Our findings point out the relevance of the demographical composition of banks. We have shown that a small minority of female directors can benefit gender diversity at the management level. This means that there is a “trickle down” effect according to which a reduced number of highly placed women may push for increasing the number of women in other organizational levels. In addition, banks with a relative degree of balance in the gender composition of their organizational strata have better employee productivity than homogeneous

banking institutions. In this vein, gender diversity seems to represent an important intangible asset that staffing and training policies should take into account.

Our research has several limitations that must be considered when putting the findings into perspective. First of all, we do not know the specific nature of the managerial positions captured in the Statistical Yearbook of Spanish Banks. Future efforts may try to examine more carefully the different managerial levels. Secondly, we cannot deny that the explanatory power of our models is limited. Our dataset is restricted by the low representation of women in top positions. Productivity differentials are difficult to explain empirically at the firm level. One could theorize that there is a positive selection effect, as more productive women remain in the banks while those who are less productive leave. In this vein, we have to clearly state that our results do not reflect a generalizable universal relationship between gender and employee productivity but rather, the gender-performance profiles of certain organizational groups. Lastly, we study the link diversity-performance within one national context and specific sector. The generalization of results to other settings should be done with caution.

7. Conclusions

This article shows the relevance of studying the effects of female representation at different organizational levels in a sample of Spanish banks. Female presence at different organizational strata has relevant implications in terms of women being promoted and organizational outcomes. Specifically, we have found that one or two female directors at the board have a positive influence on gender diversity at the management level. This means that the appointment of female directors can increase female executive representation. However, the presence of “token” women at the board does not involve a greater participation of women in the organizational composition. We have also shown that the influence of gender on organizational performance is significant and positive as the presence of women at both the managerial and firm-level is important for employee productivity. Our findings support the business case for gender diversity. The presence of three or more women at the board of governance of banks has a positive impact on productivity. Similarly, the percentage of women at the managerial and firm level influences this variable in a significant and positive manner. To some extent, we can consider that gender diversity is a strategic intangible asset in a sector historically dominated by men. This is interesting as banks are service firms that have traditionally relied more on human capital than on other assets.

This work leaves space for future research directions. Our paper has tested both a linear and curvilinear relationship between diversity and performance. Although we cannot confirm the curvilinear relation, we believe that it is necessary for further study. Moreover, we have used productivity as the dependent variable. It would be interesting to explore the impact of female representation on intermediate performance variables, such as innovation, or “social” performance. It could also be convenient to contrast the model in other sectors, since the gender diversity–productivity relationship may be different in manufacturing companies, in non-profit organizations, or in public companies.

Author Contributions: Conceptualization, M.I.D.-P., Ó.R.-R., A.R.-D. and M.A.S.-C.; methodology M.I.D.-P., Ó.R.-R., A.R.-D. and M.A.S.-C.; formal analysis, M.I.D.-P., Ó.R.-R., A.R.-D. and M.A.S.-C.; writing—original draft preparation M.I.D.-P., Ó.R.-R. and A.R.-D.; funding acquisition, M.A.S.-C. All authors have read the paper and agreed to publish this version of manuscript.

Funding: This research was funded by the UCM-Cofares Research Chair, INBOTS project H2020 (grant agreement 780073) and ISDI.

Acknowledgments: The authors would like to thank the anonymous referees for their constructive comments on this paper.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Eagly, A.H. When passionate advocates meet research on diversity, does the honest broker stand a chance? *J. Soc. Issues* **2016**, *72*, 199–222. [CrossRef]
2. Torchia, M.; Calabró, A.; Huse, M. Women Directors on Corporate Boards: From Tokenism to Critical Mass. *J. Bus. Ethics* **2011**, *102*, 299–317. [CrossRef]
3. Schwab, A.; Werbel, J.D.; Hofmann, H.; Henriques, P.L. Managerial gender diversity and firm performance: An integration of different theoretical perspectives. *Group Organ. Manag.* **2016**, *41*, 5–31. [CrossRef]
4. Elvira, M.M.; Cohen, L. Location matters: A cross-level analysis of the effects of organizational sex composition on turnover. *Acad. Manag. J.* **2001**, *44*, 591–605.
5. Nielsen, S. Top Management Team Diversity: A Review of Theories and Methodologies. *Int. J. Manag. Rev.* **2010**, *12*, 301–316. [CrossRef]
6. Gould, J.A.; Kulik, C.T.; Sardeshmukh, S.R. Trickle-down effect: The impact of female board members on executive gender diversity. *Hum. Resour. Manag.* **2018**, *57*, 931–945. [CrossRef]
7. Richard, O.C.; Kirby, S.L.; Chadwick, K. The impact of racial and gender diversity in management on financial performance: How participative strategy making features can unleash a diversity advantage. *Int. J. Hum. Resour. Manag.* **2013**, *24*, 2571–2582. [CrossRef]
8. Frink, D.D.; Robinson, R.K.; Reithel, B.; Arthur, M.M.; Ammeter, A.P.; Ferris, G.R.; Kaplan, D.M.; Morrisette, H.S. Gender demography and organization performance. A two-study investigation with convergence. *Group Organ. Manag.* **2003**, *28*, 127–147. [CrossRef]
9. Richard, O.C.; Ford, D.; Ismail, K. Exploring the performance effects of visible attribute diversity: The moderating role of span of control and organizational life cycle. *Int. J. Hum. Resour. Manag.* **2006**, *17*, 2091–2109. [CrossRef]
10. Reguera-Alvarado, N.; Fuentes, P.; Laffarga, J. Does Board Gender Diversity Influence Financial Performance? Evidence from Spain. *J. Bus. Ethics* **2017**, *141*, 337–350. [CrossRef]
11. INE. Encuesta de Población Activa. Cuarto Trimestre 2019. Available online: https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595# (accessed on 6 February 2020).
12. The Women Institute. Estadísticas: Mujeres en Cifras. Poder y Toma de Decisiones. Poder Económico. Available online: <http://www.inmujer.gob.es/MujerCifras/PoderDecisiones/PoderEconomico.htm> (accessed on 5 February 2020).
13. European Institute for Gender Equality. Gender Statistics Database (2019, Second Semester). Available online: https://eige.europa.eu/gender-statistics/dgs/indicator/wmidm_bus_bus_wmid_comp_compbm/bar/year:2019-B2/geo:EU28,ES/EGROUP:COMP/sex:M,W/UNIT:PC/POSITION:MEMB_BRD/NACE:TOT (accessed on 6 February 2020).
14. European Banking Authority. EBA Report on the Benchmarking of Diversity Practices at the European Union Level under Article 91(11) of Directive 2013/36/EU (2018 Data). Available online: <https://eba.europa.eu/eba-calls-measures-ensure-more-balanced-composition-management-bodies-institutions> (accessed on 6 February 2020).
15. Herring, C. Does Diversity Pay? Race, Gender, and the Business Case for Diversity. *Am. Sociol. Rev.* **2009**, *74*, 208–224. [CrossRef]
16. González, J.A.; Denisi, A.S. Cross-level effects of demography and diversity climate on organizational attachment and firm effectiveness. *J. Organ. Behav.* **2009**, *30*, 21–40. [CrossRef]
17. Luanglath, N.; Ali, M.; Mohannak, K. Top management team gender diversity and productivity: The role of board gender diversity. *Equal. Divers. Incl. Int. J.* **2019**, *39*, 71–86. [CrossRef]
18. Kanter, R.M. Some effects of proportions on group life: Skewed sex ratios and responses to token women. *Am. J. Sociol.* **1977**, *82*, 965–990. [CrossRef]
19. Post, C.; Byron, K. Women on boards and firm financial performance: A meta-analysis. *Acad. Manag. J.* **2015**, *58*, 1546–1571. [CrossRef]
20. Cohen, L.E.; Broschak, J.P.; Haveman, H.A. And Then There Were More? The Effect of Organizational Sex Composition on Hiring and Promotion of Managers. *Am. Sociol. Rev.* **1998**, *63*, 711–727. [CrossRef]
21. Bilimoria, D. The Relationship between Women Corporate Directors and Women Corporate Officers. *J. Manag. Issues* **2006**, *18*, 47–61.

22. Huffman, M.L.; Cohen, P.N.; Pearlman, J. Engendering change: Organizational dynamics and workplace gender segregation. *Adm. Sci. Q.* **2010**, *55*, 255–277. [\[CrossRef\]](#)
23. Matsa, D.A.; Miller, A.R. Chipping Away at the Glass Ceiling: Gender Spillovers in Corporate Leadership. *Am. Econ. Rev.* **2011**, *101*, 635–639. [\[CrossRef\]](#)
24. Cohen, L.E.; Broschak, J.P. “Whose Jobs Are These? The Impact of the Proportion of Female Managers on the Number of New Management Jobs Filled by Women versus Men”. *Adm. Sci. Q.* **2013**, *58*, 509–541. [\[CrossRef\]](#)
25. Ali, M.; Ng, Y.L.; Kulik, C.T. Board Age and Gender Diversity: A Test of Competing Linear and Curvilinear Predictions. *J. Bus. Ethics* **2014**, *125*, 497–512. [\[CrossRef\]](#)
26. Joecks, J.; Pull, K.; Vetter, K. Gender Diversity in the Boardroom and Firm Performance: What Exactly Constitutes a “Critical Mass”? *J. Bus. Ethics* **2013**, *118*, 61–72. [\[CrossRef\]](#)
27. Pathan, S.; Faff, R. Does board structure in banks really affect their performance? *J. Bank. Financ.* **2013**, *37*, 1573–1589. [\[CrossRef\]](#)
28. Smith, N.; Smith, V.; Verner, M. Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *Int. J. Perform. Manag.* **2006**, *55*, 569–593. [\[CrossRef\]](#)
29. Ali, M.; Metz, I.; Kulik, C.T. The Impact of Work–Family Programs on the Relationship between Gender Diversity and Performance. *Hum. Resour. Manag.* **2014**, *54*, 553–576. [\[CrossRef\]](#)
30. Mínguez-Vera, A.; López-Martínez, R. Female directors and SMEs: An empirical analysis. *J. Glob. Strateg. Manag.* **2010**, *4*, 30–46. [\[CrossRef\]](#)
31. Rodríguez-Domínguez, L.; García-Sánchez, I.M.; Gallego-Álvarez, I. Explanatory factors of the relationship between gender diversity and corporate performance. *Eur. J. Law Econ.* **2012**, *33*, 603–620. [\[CrossRef\]](#)
32. McMillan-Capehart, A.; Simerly, R.L. Effects of Managerial Racial and Gender Diversity on Organizational Performance: An Empirical Study. *Int. J. Manag.* **2008**, *25*, 446–592.
33. Shrader, C.B.; Blackburn, V.B.; Iles, P. Women in management and firm financial performance: An exploratory study. *J. Manag. Issues* **1997**, *9*, 355–372.
34. Dwyer, S.; Richard, O.C.; Chadwick, K. Gender diversity in management and firm performance: The influence of growth orientation and organizational culture. *J. Bus. Res.* **2003**, *56*, 1009–1019. [\[CrossRef\]](#)
35. Joshi, A.; Liao, H.; Roh, H. Bridging domains in workplace demography research: A review and reconceptualization. *J. Manag.* **2011**, *37*, 521–552. [\[CrossRef\]](#)
36. Sacco, J.M.; Schmitt, N. A dynamic multilevel model of demographic diversity and misfit effects. *J. Appl. Psychol.* **2005**, *90*, 203–231. [\[CrossRef\]](#) [\[PubMed\]](#)
37. Ali, M.; Kulik, C.T.; Metz, I. The gender-diversity performance relationship in services and manufacturing organizations. *Int. J. Hum. Resour. Manag.* **2011**, *2*, 1464–1485. [\[CrossRef\]](#)
38. Gould, J.A.; Kulik, C.T.; Sardeshmukh, S.R. Gender diversity, time to take it from the top? An integration of competing theories. *Acad. Manag. Annu. Meet. Proc.* **2014**, *2014*, 13194. [\[CrossRef\]](#)
39. Byrne, D. *The Attraction Paradigm*; Academic Press: New York, NY, USA, 1971.
40. Williams, K.Y.; O'Reilly, C.A. Demography and diversity in organizations: A review of 40 years of research. In *Research in Organizational Behaviour*, 20; Staw, B.M., Sutton, R., Eds.; JAI Press: Greenwich, UK, 1998; pp. 77–140.
41. Tajfel, H. Social Psychology of Intergroup Relations. *Annu. Rev. Psychol.* **1982**, *33*, 1–39. [\[CrossRef\]](#)
42. Kravitz, D.A. More Women in the Workplace: Is There a Payoff in Firm Performance? *Acad. Manag. Exec.* **2003**, *17*, 148–149. [\[CrossRef\]](#)
43. Pelled, L.H. Relational demography and perceptions of group conflict and performance: A field investigation. *Int. J. Confl. Manag.* **1996**, *7*, 230–246. [\[CrossRef\]](#)
44. Harrison, D.A.; Klein, K.J. What's the difference? Diversity constructs as separation, variety or disparity in organizations. *Acad. Manag. Rev.* **2007**, *32*, 1199–1228. [\[CrossRef\]](#)
45. Prieto, L.C.; Phipps, S.T.A.; Osiri, J.K. Linking Workplace Diversity to Organizational Performance: A Conceptual Framework. *J. Divers. Manag.* **2009**, *4*, 13–21. [\[CrossRef\]](#)
46. Barney, J.B. Firm Resources and Sustained Competitive Advantage. *J. Manag.* **1991**, *17*, 99–120. [\[CrossRef\]](#)
47. Hambrick, D.C.; Mason, P.A. Upper echelons: The organization as a reflection of its top managers. *Acad. Manag. Rev.* **1984**, *9*, 193–206. [\[CrossRef\]](#)
48. Byron, K.; Post, C. Women on boards of directors and corporate social performance: A meta-analysis. *Corp. Gov. An. Int. Rev.* **2016**, *24*, 428–442. [\[CrossRef\]](#)
49. Blau, P.M. *Inequality and Heterogeneity*; Free Press: New York, NY, USA, 1977.

50. Richard, O.C.; Barnett, T.; Dwyer, S.; Chadwick, K. Cultural diversity in management, firm performance, and the moderating role of entrepreneurial orientation dimensions. *Acad. Manag. J.* **2004**, *47*, 255–266.
51. Richard, O.C.; Murthi, B.P.S.; Ismail, K. The impact of racial diversity on intermediate and long-term performance: The moderating role of environmental context. *Strateg. Manag. J.* **2007**, *28*, 1213–1233. [[CrossRef](#)]
52. Nishii, L.; Gotte, A.; Raver, J. *Upper Echelon Theory Revisited: The Relationship Between Upper Echelon Diversity, The Adoption of Diversity Practices, and Organizational Performance*; CAHRS Working Paper #07-04; Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies: Ithaca, NY, USA, 2007; Available online: <http://digitalcommons.ilr.cornell.edu/cahrswp/461> (accessed on 6 February 2020).
53. Kurtulus, F.A.; Tomaskovic-Devey, D. Do Female Top Managers Help Women to Advance? A Panel Study Using EEO-1 Records. *Ann. Am. Acad. Polit. Soc. Sci.* **2012**, *639*, 173–198. [[CrossRef](#)]
54. Cohen, J.R.; Dalton, D.W.; Holder-Webb, L.L.; McMillan, J.J. An Analysis of Glass Ceiling Perceptions in the Accounting Profession. *J. Bus. Ethics* **2018**, 1–22. [[CrossRef](#)]
55. Skaggs, S.; Stainback, K.; Duncan, P. Shaking things up or business as usual? The influence of female corporate executives and board of directors on women's managerial representation. *Soc. Sci. Res.* **2012**, *41*, 936–948. [[CrossRef](#)]
56. Carter, D.A.; Simkins, B.J.; Simpson, W.G. Corporate governance, board diversity, and firm value. *Financ. Rev.* **2003**, *38*, 33–53. [[CrossRef](#)]
57. Fray, D.; Guillaume, Y. Team Diversity. In *International Encyclopedia Of Organization Studies*; Clegg, S., Bailey, J.R., Eds.; Sage: Thousand Oaks, CA, USA, 2007; pp. 1510–1513.
58. Krishnan, H.A.; Park, D. A Few Good Women-On Top Management Teams. *J. Bus. Res.* **2005**, *58*, 1712–1720. [[CrossRef](#)]
59. Bonn, I.; Toru, Y.; Phillip, H.P. Effects of board structure on firm performance: A comparison between Japan and Australia. *Asian Bus. Manag.* **2004**, *3*, 105–125. [[CrossRef](#)]
60. Rosener, J.B. *America's Competitive Secret: Utilizing Women as a Management Strategy*; Oxford University Press: New York, NY, USA, 1995.
61. Richard, O.; Kochan, T.; McMillan-Capehart, A. The impact of visible diversity on organizational effectiveness: Disclosing the contents in Pandora's black box. *J. Bus. Manag.* **2002**, *8*, 1–26.
62. Birindelli, G.; Dell'Atti, S.; Iannuzzi, A.P.; Savioli, M. Composition and Activity of the Board of Directors. Impact on ESG Performance in the Banking System. *Sustainability* **2018**, *10*, 4699. [[CrossRef](#)]
63. Leonard, J.S.; Levine, D.I. *Diversity, Discrimination, and Performance*; IIRUPS Working Paper 091-03; University of California Berkeley: Berkeley, CA, USA, 2003.
64. Martín, E.; Bachiller, A.; Bachiller, P. The restructuring of the Spanish banking system: Analysis of the efficiency of financial entities. *Manag. Decis.* **2018**, *56*, 474–487. [[CrossRef](#)]
65. Serrano, S.C. La reestructuración del Sistema bancario español tras la crisis y la solvencia de las entidades financieras. Consecuencias para las cajas de ahorro. *Span. Account. Rev.* **2013**, *16*, 136–146.
66. Richard, O. Racial diversity, business strategy, and firm performance: A resource-based view. *Acad. Manag. J.* **2000**, *43*, 164–177.
67. Becker, B.; Gerhart, B. The impact of Human Resource Management on organizational performance: Progress and prospects. *Acad. Manag. J.* **1996**, *39*, 779–801.
68. Hausman, J. Specification tests in Econometrics. *Econometrica* **1978**, *46*, 1251–1271. [[CrossRef](#)]
69. Certo, S.T.; Semadeni, M. Strategy research and panel data: Evidence and implications. *J. Manag.* **2006**, *32*, 449–471. [[CrossRef](#)]
70. Campbell, K.; Mínguez-Vera, A. Gender Diversity in the Boardroom and Firm Financial Performance. *J. Bus. Ethics* **2008**, *83*, 435–451. [[CrossRef](#)]
71. Wooldridge, J.M. *Econometric Analysis of Cross Section and Panel Data*; MIT Press: Cambridge, MA, USA, 2002.
72. Bartels, L.M. Panel Effects in the American National Election Studies. *Polit. Anal.* **1999**, *8*, 1–20. [[CrossRef](#)]
73. Huselid, M.A.; Jackson, S.E.; Schuler, R.S. Technical and strategic human resource management effectiveness as determinants of firm performance. *Acad. Manag. J.* **1997**, *40*, 171–188.
74. Konrad, A.; Kramer, V.; Erkut, S. Critical Mass: The Impact of Three or More Women on Corporate Boards. *Organ. Dyn.* **2008**, *37*, 145–164. [[CrossRef](#)]

75. Zimmerman, G.C. Factors Influencing Community Bank Performance in California. *Econ. Rev. Fed. Reserve Bank San Franc.* **1996**, *1*, 26–42.
76. Gospel, H.; Pendleton, A. Financial markets, corporate governance and the management of labour: A conceptual and comparative analysis. *Br. J. Ind. Relat.* **2003**, *41*, 557–582. [[CrossRef](#)]
77. Harrison, D.A.; Sin, H.P. What is Diversity and How Should it be Measured? In *Handbook of Workplace Diversity*; Konrad, A.M., Prasad, P., Pringle, J.K., Eds.; Sage: London, UK, 2006; pp. 191–216.



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).