Women on Boards and Corporate Financial Performance in Iberoamerica:
An exploratory study of firms listed on MILA and IBEX

Abstract

Purpose: The research examines how women's participation in corporate boards influences firm performance outcomes (EBIT and ROE) among companies listed on Iberoamerican stock markets after the 2008 crisis.

Design/methodology/approach: This article reports the analysis of a non-experimental design, longitudinal study based on annual panel data of 2093 companies from Chile, Colombia, Peru, Mexico (MILA group) and Spain (IBEX) in the period from 2009 to 2016.

Findings: The findings reveal differences within the region and industries analyzed. From a country perspective, the presence of women in Peruvian corporate boards reduces the negative operational results (i.e., positive impact). This also occurs in the Energy and Mining industry. Our results on EBIT by year, country and industry found evidence of "glass cliff" effect, with a short-term effect and appointment of women on boards. The more women proportion the better ROE in Mexico and the industry of Bank, supporting the hypothesis of women as equity-keeper.

Originality/value: This paper adds to the literature on "the business case for women in top management" in Iberoamerican countries, contributing to the discussion on a) the performance measurements in the field, and b) the duality of roles.

Keywords: *Women on Boards, Corporate Governance, Gender Diversity, Firm Performance, MILA, IBEX*

Introduction

Since the 1990s, a growing body of research has sought to quantify the relationship between women's representation in leadership positions and organizational financial performance (Hoobler, Masterson, Nkomo, & Michel, 2016). The idea of "having more women leaders is good for business" is commonly known as the "business case" for women's leadership. However, the pace of advancement for women –both as managers and as directors– continues to be slow and uneven in different countries and cultures (Barreto, Ryan, & Schmitt, 2009; Burke, 2009; Helfat, Harris, & Wolfson, 2006). The interest on this business case improved dramatically during the last decade.

There has been an increasing body of research on women in top management positions and a reinterpretation of the role of women in organizations since the announcement of the quota initiative of 40% women in boards of directors of public limited companies in Norway little before the global economic downturn of 2008. However, these studies have been mainly focused on developed economies contexts, becoming relevant the need to be more involved in emerging markets (Abdullah, Ku Ismail, & Nachum, 2016) such as Latin American countries (Heller & Gabaldón, 2018; Kuschel & Salvaj, 2018).

In addition, after the financial crisis of 2007-2008, some Latin American markets became more stable in order to be able to invest. This stability allowed an emerging consolidation of companies with complete and reliable information to date.

Then, how do firms with women on corporate boards perform after economic crisis? This research examines how women's participation in corporate boards influences firm performance outcomes (EBIT and ROE) among companies listed on Iberoamerican stock markets after the 2008 crisis and beyond.

Literature Review

The starting point: Quotas and the Norwegian case

The first board gender quota law (required boards of directors to have at least 40 percent representation of each sex) in the world was introduced by Norway (not an EU member), through amendments to the Norwegian Public Limited Liability Companies Act in 2006 (Du Plessis, Hargovan, Bagaric, & Harris, 2014). Gender quotas have been applied in the public sector in Norway since the 1980's, and women held a relatively equal share of management positions in publicly owned enterprises.

Quotas are affirmative action strategies that challenge vertical sex segregation. Moreover, the gender quota regulations have had many positive effects. This affirmative action improved women's presence on boards, it has professionalized the recruitment processes, the discussion has internationally spread out gender quotas arrangements, and it has generated a debate over male dominance in some industries.

"The business case" for women on corporate boards

The discussion about the impact of women on the financial performance of the company has monopolized the debate not only in the professional field but also in the academic literature in the last decade. Although the debate is still open — because of inconclusive results and several methodological limitations such as no consensus on firm performance measures (Kulik & Metz, 2015) and comparisons among countries with different legal and socio-cultural mechanisms affecting

women performance (Post & Byron, 2015)— most of the studies on "the business case" find that the presence of a female CEO is more likely to have a positive impact on firms' financial performance in more gender egalitarian cultures (Hoobler et al., 2016; Kulik & Metz, 2015; Noland, Moran, & Kotscwar, 2016). These overwhelming results lead us to conclude that economic arguments support the value of gender diversity at the top of the organization. However, previous studies also highlight that context, organizational and individual characteristics moderate the relationship between gender diversity on top management positions and firm performance. Those papers that include moderators such country culture or strategy innovation orientation find that they are key to explain the impact and so the success of women participation in top positions and ask for more research on the causes that affect women performance.

Theories supporting the results

There are many theoretical frameworks that have been used to interpret the findings. From the classic approach to the firm theory to more modern explanations. **Evolution of the firm theory** includes three main stages –barriers to entry creation, strategic boundaries definition, and limits to growth evaluation– (Chandler & Daems, 1980). The director of the firm, who is a leader, a catalyst, a believer, a visionary, is elected or appointed to the board of directors to achieve the firm's strategic business goals during the evolution of enterprise. The board of directors may vary according its characteristics (e.g., size, composition, structure and processes), as well as by the roles it assumes (e.g., control, strategic, coordination, relational). **Information theory firm** assumes that the attributes of the board impacts firm performance (Baysinger & Butler, 1985; Norburn, 1986).

According to the **agency theory** perspective women's participation has an effect on performance due to homogeneity of thinking linked to management control. Some previous studies, focused on masculine homogeneity, affirm that although there is a tendency to attract the discussion in deep on boards, there is always a tendency to look for disparate knowledge and information to be integrated. This is due to the homogeneity of participants, where it is necessary to create dynamics to not falling down into group-thinking.

Yet **resource dependence theory** demonstrates a heterogeneous construction of ideas that allow a collectivism and involvement more linked to the relation governance-management. Part of the studies state that the presence of women in the board of directors often employs cooperative decision making.

Gender diversity in the boardroom contributes to increase transparency of selection, by demonstrating to lower-level employees that the chance to fulfill highest positions in the firm depends only on their respective skills and qualifications rather than on other variables (Rose, 2007). However instead of **tokenism** —the practice of hiring/appointing someone from

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a minority group in order to prevent criticism against the company image and show fair treatment (Lückerath-Rovers, 2013)—, "a critical mass is necessary to realize fully the benefits of diversity on corporate boards" (Packel & Rhode, 2015: 409). And when there is just one woman or one member of a minority group in spaces of power, the token may feel isolation and pressure to adopt stereotyped roles (Terjesen et al., 2009).

Evidence showed that women have been appointed as board members in times of crisis, or when the company was experiencing hard times. This phenomenon has been called **glass cliff** (Kulich et al., 2015). A glass cliff describes the preferential selection of a female leader in a crisis, and only occurs if company's performance is attributed to bad leadership.

Corporate Governance in Iberoamerican countries

Despite Spain has been the second country to implement legislative actions to improve women's participation in corporate boards, the number of women remains below the European average. The last decade, some studies have tested the business case. In particular, Reguera-Alvarado, de Fuentes, and Laffarga (2017) support gender quotas by documenting a positive relationship between women on corporate boards and financial results based on a sample of 125 non-financial companies listed on the Madrid Stock Exchange during 2005-2009, a period that includes the economic crisis.

The stock market reacts positively in the short term to the announcement of female board appointments in Spain (Campbell & Minguez Vera, 2010). However, Gallego, García and Rodríguez (2010) claim that board gender diversity does not necessarily influence company performance. They used several market and accounting measures for a sample of the largest 117 Spanish firms, no significant relationship is observed.

Women in board of directors have been scarcely explored in Latin America (Heller & Gabaldón, 2018). Particularly in the Pacific Alliance, the four countries (Chile, Lima, Colombia and Mexico) represent 50% of the GDP in Latin America. These 4 countries have been well rated by the Big Three credit and risk rating agencies (Moody's, Standard & Poor's, and Fitch).

According to the CWDI Report (2012), women in Latin America occupy only 5.6% of corporate board positions in the 100 biggest companies. Egon Zehnder`s reported (2016) gender diversity is slowly gaining ground in Latin American boards of directors. Colombia leads the ranking with 14%, Chile 8%, Argentina 6% and Mexico 5%. A McKinsey study (2013) showed that 37% of companies have gender diversity as a top 10 issue in their strategic agendas. Yet women in the region are still greatly underrepresented in top management—even though they are more likely than men to say they want to advance their careers.

Methodology

Design and selection criteria

The study is a non-experimental longitudinal design based on panel data with companies listed on stock exchange markets from 2009 to 2015. The stock exchange markets used are the MILA group (Chile, Lima, Colombia and Mexico) and the IBEX (Spain). The MILA group was formed in 2009 after the creation of the Pacific Alliance. In addition, Spain is taken because it is the most influential country in the Latin American region with Spanish companies that not only has branches, but also local firms in the countries of the MILA group.

The selection criteria for the observations was, companies founded in their own country where they started their initial public offering, with complete information since the financial crisis, and belonged to common industries to the five countries.

These observations included four common industries in the studied countries, (a) Bank, Insurance and Pension Funds, (b) Agro-Food and Retail, (c) Energy and Mining, and (d) Infrastructure, Construction, Transport and Communications.

According to the design and criteria, the study initially obtained 2093 observations, being 874 the observations strongly balanced with presence of women in boards of directors (41.76%). From this, MILA group has 586 observations and IBEX, 288 observations.

Table 1: Summary of firms included in the study

year	Total	without WoB	with Women on Boards (WoB) by Industry				
			Total	(a)	(b)	(c)	(d)
2009	299	194	**105**	29	25	23	28
2010	299	185	**114**	29	29	26	30
2011	299	181	**118**	30	31	23	34
2012	299	174	**125**	33	33	24	35
2013	299	167	**132**	35	33	26	38
2014	299	161	**138**	36	36	30	36
2015	299	157	**142**	41	37	28	36
Total	2093	1219	**874**	233	224	180	237

Procedure & data collection

Regarding the procedure and data collection, initially the study carried out a review of company lists of each stock exchange by country. Likewise, it reviewed in each superintendence of stock exchange markets the existence of audited annual reports of each company by year. This resource allowed compiling information on corporate governance, financial statements and balance sheets. Additionally, the study used the Bloomberg and Thomson Reuters Eikon platforms to contrast the data.

From the collected data, the firm financial performance ratios are the earnings before interest and taxes (EBIT) and return on equity (ROE). These two accounting performance measures are the most representative for the study. While the EBIT allows understanding how the presence of women on boards could moderate the management of operational income in firms, the ROE allows understanding how the presence of women on boards could moderate the capital management.

Analysis

The procedure begins with a descriptive analysis. This analysis allows recognizing what data are quantitative or continuous, categorical and dummies. In the same way, we verified the normal distribution of quantitative independent variables with histograms and longitudinally. This step allowed standardizing some variables to natural logarithm. The variables transformed to natural logarithms were principally the EBIT to reduce the operative biases, the proportion of women on boards to use only the firms with this presence, and the control variable related to the firm size. Then, the study developed a general model to probe the effects of women on firm performance. This model included a direct effect and moderator effect.

$FirmPerformance_{it} = {}_i + 1leverage_{it} + 2ln\_assets_{it} + 3FirmPerformance_{it-1} + 4lnp\_bod\_fem_{it} + + 5(lnp\_bod\_fem_{it} \times FirmPerformance_{it-1}) + {}_i + {}_{it}$

According to the model, the first analyses were Ordinary Least Squares (OLS) with robust estimation of standard errors for estimating the parameter effects as linear regression model by year.

After that, the study performed Panel Data analysis with Random Effects and robust estimation of standard errors, to test the behavior of the proportional presence of women on boards on firm financial performance types (EBIT and ROE). Thus, the analysis developed two groups of test models (by stock exchanges market type and by industries) related to each firm performance. For the first group, the analysis considered the models of (1) MILA & IBEX, only (2) MILA, only (3) IBEX (or Spain), (4) Peru, (5) Chile, (6) Colombia and (7) Mexico. For the second group, the analysis considered the models of

(1) Bank, Insurance and Pension Funds, (2) Agro-Food and Retail, (3) Energy and Mining, and (4) Infrastructure, Construction, Transport and Communication.

Furthermore, the analysis developed tests of Differences in Mean by stock exchange market to determinate what firm financial performance and corporate governance variables are significant to compare groups without presence of women on boards between groups with this presence.

$$t = \frac{(\overline{x}_1 - \overline{x}_2) - (\mu_1 - \mu_2)}{\sqrt{\dfrac{s_1^2}{n_1} + \dfrac{s_2^2}{n_2}}}$$

Results

According to the results, the presence of women on boards of companies observed is greater in IBEX (Spain) than in MILA (Peru, Chile, Colombia and Mexico). After the financial crisis, the growth of the presence of women on boards in the total of firms has been sustained at the level of both groups. For the last year, in IBEX, the presence of women on boards represented around 90% of the total observed firms. While for MILA it has been around 39% of firms observed.

Moreover, taking the analysis at the level of stock exchanges by country, the growth of the presence of women on boards of total observed firms has been sustained in Peru (from 24% to 38%), Chile (from 21% to 32%) and Mexico (from 40% to 48%). However, in the case of Colombia, after the financial crisis, the presence of women on boards of total observed firms had a critical drop until 2012 (from 64% to 36%). Fortunately, this trend was reversed, growing again until reaching percentages that are comparatively similar to the other countries (from 36% to 45%).

Image 1: Enterprises with presence of Women on Boards by Country

Likewise, at the industry level, the results show a growing trend of the presence of women in the boards of total observed firms. The most outstanding industry is banking, insurance and pension fund from 39.2% to 55.4%, followed by agro-food and retail from 32.5% to 48.1%, then infrastructure, construction, transport and communications from 35.4% to 45.6% and, finally, energy and mining from 33.3% to 40.6%.

Image 2: Enterprises with presence of Women on Boards by Industry
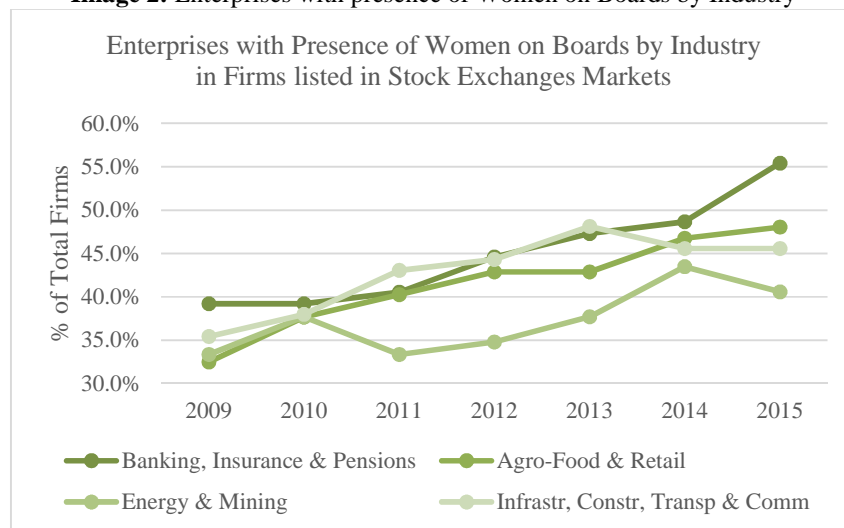
However, when the analysis moves to the proportion of participation in companies with the presence of women in the boards of directors, the results vary dramatically.

First of all, the average percentage of women in the composition of boards of directors does not exceed 19%. For IBEX (Spain), growth is continuous after the financial crisis, from 14.1% to 18.6%. While for MILA, after the financial crisis, the percentage fell from 16.5% to 15.7% in 2011, rising from 15.7% to 16.9% in 2014, to fall again to 16.2% in 2015.

**Image 3:** Average Percentage of Women on Boards Composition by Country
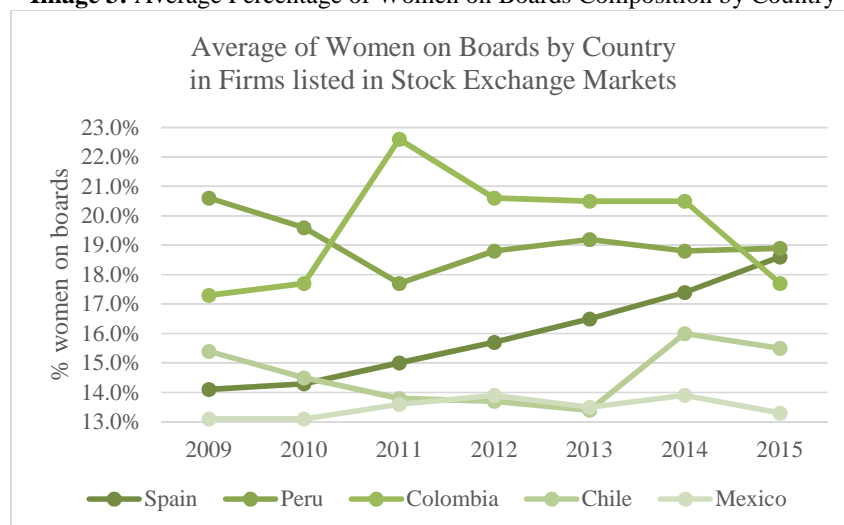
The results by country show trends that are more interesting. The country with the highest average percentage of women on boards' composition was Colombia in 2011 with 22.6%. Subsequently, this peak was decreasing until having percentages similar to those of 2009 around 17%. On the other hand, Peru had a decline after the crisis of 20.6% to 17.7% al 2011, which then grew to achieve 18.9% in 2015. Respect to Chile, the average percentage of women on boards composition decreased after the crisis from 15.4% to 13.4% until 2013, growing from that year to 15.5% in 2015. Finally, Mexico has maintained an average percentage of women on boards' composition between 13% and 14% across the years of study after the financial crisis.

In addition, the results at the industry level show interesting trends. After the financial crisis, the industry that has decreased the average percentage of women on boards' composition across the years is agro-food and retail from 19% to 16.5%. Despite to that industry, the other industries maintain optimistic growth. First, the Energy and Mining industry has grown its average percentage of women on boards' composition, going from 16.3% in 2009 to 19.6% in 2015. Second, the Infrastructure, construction, transport and communications industry grew from 15.2% in 2009 to 17.7% in 2015. Finally, the banking, insurance and pension fund industry grew from 13.1% in 2009 to 15% in 2015.

Image 4: Average Percentage of Women on Boards Composition by Industry
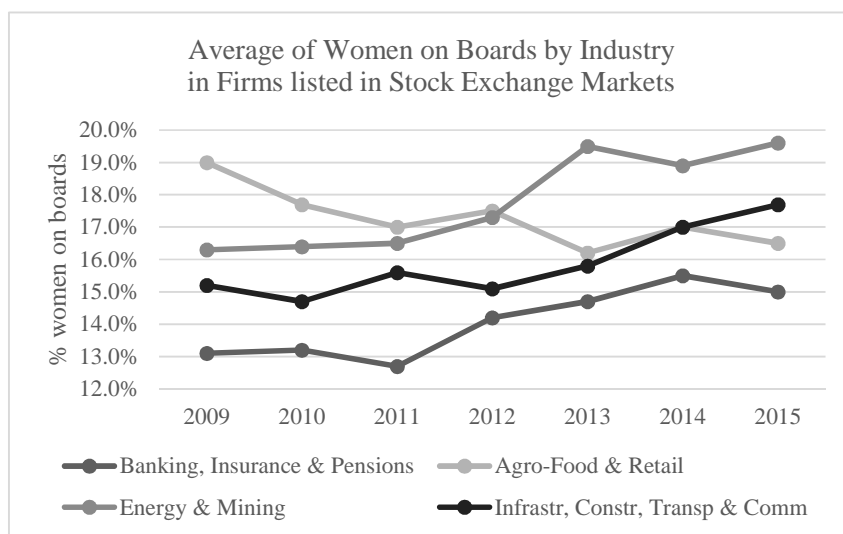
Effects of Women on Boards on Firm Financial Performance in Iberoamerican stock exchange markets

According to the results by years (Appendix 1.), the presence of women on boards has had a significant positive direct effect on EBIT variation in 2011. Likewise, its moderating effect was inverse with respect to negative prior EBIT. This last statement shows that the presence of women is appropriate over the decisions in the management of operating income.

Moreover, regarding stock exchanges by country, there is evidence of significant direct and moderator effects on this kind of financial performance in Peru. Related to that, the direct effect of women on boards on financial performance is positive and the moderating effect is inverse with respect to a negative prior EBIT, reaffirming the behavior on the management of operating income.

Likewise, by industry, the prior behavior is similar in the Energy and Mining industry. However, in the agro-food and retail industry the direct effect of proportion of women on boards is significant and negative. This effect is because related to the descriptive analysis, its proportionality on boards decreased across the years after the financial crisis. Therefore, it can be affirmed that the reduction of its participation on board composition affect negatively on firm financial performance.

On the other hand, considering the direct EBIT per year as financial performance (Appendix 2.), the direct effect of proportion of women on boards' composition is significant and positive in 2012 and 2015. However, the moderating effect is negative in the same years. Despite the prior results, the effects are opposite in 2014. While the direct effect is negative, the moderating effect is positive. These results show a potential reaction to the reduction (from 2011 to 2012 and from 2014 to 2015) and increase (from 2013 to 2014) in the proportion of women on boards' composition of the MILA group. These reactions show understandable behaviors of a short-term change. This result show a "glass cliff" effect; that is to say, in adverse firm circumstances, compared to favorable ones, increase the likelihood of women to be appointed as board member (Kulich et al., 2015; Mulcahy & Linehan, 2014).

Consequently, observing the results on the EBIT by country, the same significant reaction pattern is projected in Peru. While in the results by industry, the same significant reaction pattern has the banking, insurance and pension fund industry.

Finally, using the ROE variation as financial performance (Appendix 3.), the results provide significant positive effects related to the proportion of women on boards composition. While in stock exchange by country, Mexico shows a positive moderating effect, by industry, the banking, insurance and pension funds industry has the same effect. Furthermore, as direct effect, this presence has significant effect on returns of equity in the infrastructure, construction, transport and communications industry. These findings show that the presence of women on boards is allowing an appropriate decision regarding the capital management in firms, as patrimonial guardians, both by country level and by industry level.

Differences of firms with and without women on boards in Iberoamerica stock exchanges markets

In relation to the results of the tests of differences in mean (Appendix 4.), the study used the groups comparison of firms with and without presence of women on boards. In general, (MILA & IBEX), the firm performance variables such as EBIT and ROA have significant differences between both groups. In addition, regarding the control variables used, both the firm size defined by the logarithm of assets, as well as the leverage, present significant differences. Likewise, regarding the variables of corporate governance, the study used the boards size, as well as the board dependence (or insider member) and the proportion of board independence. All of them have significant differences comparing groups of companies with and without the presence of women on boards. It might also be observed, respect to variables of governance leadership structure, as CEO duality, the difference is significant. Nevertheless, respect to CEO turnover, there is no has evidence of significant levels. In the case of MILA group without IBEX, the significant differences are with the same variables tested.

However, when IBEX is analyzed, the significant differences respect to firm performance are with EBIT and ROE. While regarding corporate governance the significant differences is with board size. In addition, regarding the governance leadership structure the significant difference is with CEO duality.

On the other hand, the analysis by country of the MILA group shows different significant differences. In Peru, the differences are significant with EBIT, ROA and ROE for firm performance, as well as with the board size and the board dependence for corporate governance. However, for the other variables there is no evidence of significant differences. In Chile, the differences are significant with EBIT for firm performance, as well as with the firm size and the leverage respect to control variables. In addition, the differences are significant with the board independence and the CEO turnover for corporate governance. In Colombia, the differences is significant mainly with the board independence. It should be noted that in Chile and Colombia the CEO duality does not exist because it is not normatively allowed in the firms listed on their stock exchanges.

Finally, in Mexico, the differences are significant with EBIT as firm performance, as well as with firm age and firm size as control variables. In addition, the differences are significant with the board size, the board dependence and the board independence as part of corporate governance. Moreover, as governance leadership structure, the difference is significant with the CEO duality.

Conclusion

This research examines how women's participation in corporate boards influences firm performance outcomes (EBIT and ROE) among companies listed on Iberoamerican stock markets after the 2008 crisis and beyond.

The findings reveal differences within the region and industries analyzed. From a country perspective, the presence of women in Peruvian corporate boards reduces the negative operational results (i.e., positive impact). This also occurs in the Energy and Mining industry. Our results on EBIT by year, country and industry found evidence of "glass cliff" effect, with a short-term effect and appointment of women on boards. The more women proportion the better ROE in Mexico and the industry of Bank, supporting the hypothesis of women as equity-keeper.

One limitation of the study was the number of firms representing Colombia. Eventually, a larger number of companies with complete information may have had significant results, similar to Peru. We encourage academics to continue exploring Iberoamerican countries, beyond MILA group, and other industries. We have seen a rare phenomenon in the Agro-food and retail industry, observing a long-lasting decrease on their proportion of women on corporate boards. These observations serve as suggestions for future research.

Our findings illustrated in the table of differences in mean (see Appendix 4.) shed light on the potential effects of 1) firms age, 2) CEO duality, especially in Bank, Insurance and Pension Funds or Agro-Food and Retail industries, and 3) other structures of corporate governance, in the likelihood -and higher proportion- of women on boards in Iberoamerica. We need further exploration in order to test the new hypothesis of the non-existence of CEO duality in Chile and Colombia as a discriminatory practice for women.

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Appendixes

Appendix 1. Dependent Variable: EBIT variation (ln)

	(1) OLS2009	(2) OLS2010	(3) OLS2011	(4) OLS2012	(5) OLS2013	(6) OLS2014	(7) OLS2015
ln_assets	0.728***	0.207	0.437***	0.781***	0.297	0.744***	0.683***
	(0.21)	(0.29)	(0.16)	(0.17)	(0.18)	(0.11)	(0.12)
leverage	−0.087	0.020	0.035*	−0.085	0.012	−0.032	−0.260**
	(0.11)	(0.13)	(0.02)	(0.07)	(0.08)	(0.08)	(0.10)
ln_ebit$_{t-1}$	−0.993*	−0.357	−1.014***	−1.312***	−0.687*	−0.368	−1.131***
	(0.57)	(0.47)	(0.22)	(0.31)	(0.37)	(0.52)	(0.29)
lnp_bodfem	−1.219	−1.041	1.206**	0.536	0.422	−2.278	1.181
	(1.70)	(0.97)	(0.55)	(0.88)	(1.13)	(1.59)	(0.95)
ebit$_{t-1}$ x fem	0.163	0.119	−0.208**	−0.114	−0.082	0.364	−0.156
	(0.29)	(0.16)	(0.10)	(0.17)	(0.20)	(0.27)	(0.17)
_cons	−3.139	−1.979	0.509	−1.475	−0.847	−6.712**	−0.592
	(2.85)	(1.83)	(1.32)	(1.76)	(1.84)	(3.04)	(1.69)
N	38.000	65.000	71.000	57.000	72.000	66.000	47.000
r2_a	0.461	0.276	0.234	0.487	0.121	0.543	0.479

Standard errors in parentheses. Significance levels: * $p<0.1$, ** $p<0.05$, *** $p<0.01$

	(1) MILA_IBEX	(2) MILA	(3) Spain	(4) Peru	(5) Chile	(6) Colombia	(7) Mexico
ln_assets	0.665***	0.702***	0.622***	0.310	1.320***	0.627	0.677***
	(0.06)	(0.10)	(0.09)	(0.19)	(0.30)	(0.52)	(0.18)
leverage	−0.006	−0.127**	0.039*	−0.030	−0.373***	−0.020	−0.105*
	(0.03)	(0.05)	(0.02)	(0.14)	(0.09)	(0.30)	(0.06)
ln_ebit$_{t-1}$	−0.962***	−1.026***	−0.770**	−1.381***	−1.037	−1.959**	−0.959***
	(0.15)	(0.20)	(0.30)	(0.27)	(1.08)	(0.83)	(0.24)
lnp_bodfem	−0.005	0.139	−0.789	1.045**	−0.948	3.372	−0.241
	(0.41)	(0.50)	(0.81)	(0.51)	(3.71)	(3.33)	(0.76)
ebit$_{t-1}$ x fem	0.019	−0.013	0.135	−0.302*	0.332	−0.617	0.042
	(0.08)	(0.11)	(0.13)	(0.16)	(0.57)	(0.54)	(0.15)
_cons	−1.970**	−1.884*	−2.863	1.342	−5.317	3.636	−2.042
	(0.81)	(1.03)	(1.78)	(1.38)	(8.19)	(6.31)	(1.52)
N	416.000	285.000	131.000	102.000	63.000	25.000	95.000
r2_w	0.412	0.413	0.360	0.511	0.557	0.221	0.333
r2_b	0.340	0.274	0.514	0.240	0.267	0.282	0.576
r2_o	0.364	0.351	0.439	0.353	0.396	0.176	0.468

Standard errors in parentheses. Significance levels: * $p<0.1$, ** $p<0.05$, *** $p<0.01$

	(1) BankInsu	(2) AgroFood	(3) EnerMin	(4) InfrConst
ln_assets	0.753***	0.891***	0.806***	0.790***
	(0.10)	(0.16)	(0.19)	(0.08)
leverage	−0.040	0.061	0.107	0.017
	(0.07)	(0.04)	(0.35)	(0.03)
ln_ebit$_{t-1}$	−1.227***	−0.815***	−1.984***	−0.916***
	(0.19)	(0.30)	(0.43)	(0.30)
lnp_bodfem	0.764	−1.183*	2.370*	−0.056
	(0.59)	(0.65)	(1.42)	(0.56)
ebit$_{t-1}$ x fem	−0.054	0.174	−0.429*	0.047
	(0.10)	(0.13)	(0.22)	(0.13)
_cons	−1.034	−5.108***	2.438	−2.920**
	(1.23)	(1.07)	(2.72)	(1.20)
N	109.000	121.000	75.000	111.000
r2_w	0.588	0.327	0.366	0.318
r2_b	0.246	0.423	0.235	0.538
r2_o	0.391	0.317	0.355	0.421

Standard errors in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$

Appendix 2. Dependent Variable: EBIT$_t$ (ln)

	(1) OLS2009	(2) OLS2010	(3) OLS2011	(4) OLS2012	(5) OLS2013	(6) OLS2014	(7) OLS2015
ln_assets	0.360***	0.362**	0.105*	0.160*	0.070	0.217***	0.236***
	(0.13)	(0.15)	(0.06)	(0.09)	(0.06)	(0.07)	(0.06)
leverage	−0.166*	−0.102**	−0.000	−0.004	0.025	0.003	−0.049**
	(0.09)	(0.04)	(0.01)	(0.03)	(0.02)	(0.06)	(0.02)
ln_ebit$_{t-1}$	0.504***	0.766***	0.747***	0.413	0.929***	1.102***	0.490***
	(0.17)	(0.22)	(0.16)	(0.28)	(0.13)	(0.22)	(0.15)
lnp_bodfem	0.309	−0.418	0.187	1.224*	−0.048	−1.210*	0.805*
	(0.51)	(0.43)	(0.35)	(0.63)	(0.45)	(0.66)	(0.46)
ebit$_{t-1}$ x fem	−0.044	0.084	−0.027	−0.184*	−0.007	0.194*	−0.134*
	(0.08)	(0.07)	(0.05)	(0.10)	(0.07)	(0.10)	(0.07)
_cons	0.018	−1.387	0.705	2.155*	−0.442	−2.663**	0.922
	(0.94)	(0.96)	(0.75)	(1.09)	(0.80)	(1.14)	(0.86)
N	84.000	96.000	107.000	110.000	112.000	122.000	122.000
r2_a	0.825	0.888	0.947	0.813	0.906	0.858	0.918

Standard errors in parentheses. Significance levels: * p<0.1, ** p<0.05, *** p<0.01

	(1) MILA_IBEX	(2) MILA	(3) Spain	(4) Peru	(5) Chile	(6) Colombia	(7) Mexico
ln_assets	0.248***	0.329***	0.191***	0.244*	0.472***	0.169	0.512***
	(0.05)	(0.07)	(0.05)	(0.13)	(0.11)	(0.11)	(0.16)
leverage	−0.028	−0.075***	−0.000	−0.063	−0.155***	−0.056	−0.101**
	(0.02)	(0.02)	(0.02)	(0.06)	(0.05)	(0.07)	(0.04)
ln_ebit$_{t-1}$	0.656***	0.512***	0.780***	0.266	1.475*	0.838***	0.358
	(0.09)	(0.12)	(0.14)	(0.17)	(0.83)	(0.18)	(0.22)
lnp_bodfem	0.129	0.378	−0.279	1.033***	−3.457	−0.492	0.181
	(0.22)	(0.27)	(0.39)	(0.32)	(2.65)	(0.76)	(0.49)
ebit$_{t-1}$ x fem	−0.019	−0.074	0.051	−0.245***	0.548	0.039	−0.034
	(0.04)	(0.05)	(0.06)	(0.07)	(0.40)	(0.12)	(0.09)
_cons	−0.137	−0.051	−0.337	1.321***	−7.291	−0.811	−0.626
	(0.39)	(0.47)	(0.82)	(0.51)	(5.40)	(1.52)	(1.04)
N	753.000	504.000	249.000	181.000	118.000	40.000	165.000
r2_w	0.025	0.019	0.048	0.005	0.202	0.290	0.025
r2_b	0.958	0.948	0.952	0.929	0.926	0.982	0.889
r2_o	0.874	0.871	0.793	0.765	0.857	0.935	0.796

Standard errors in parentheses. Significance levels: * p<0.1, ** p<0.05, *** p<0.01

	(1) BankInsu	(2) AgroFood	(3) EnerMin	(4) InfrConst
ln_assets	0.448***	0.337**	0.341***	0.276***
	(0.10)	(0.16)	(0.11)	(0.06)
leverage	−0.038*	−0.006	−0.020	−0.008
	(0.02)	(0.03)	(0.11)	(0.02)
ln_ebit$_{t-1}$	0.103	0.836***	0.464**	0.562***
	(0.17)	(0.21)	(0.19)	(0.14)
lnp_bodfem	0.974**	−0.466	0.666	0.125
	(0.39)	(0.47)	(0.45)	(0.33)
ebit$_{t-1}$ x fem	−0.163***	0.070	−0.069	−0.042
	(0.06)	(0.08)	(0.06)	(0.06)
_cons	0.920	−1.896**	0.650	−0.135
	(0.74)	(0.89)	(0.79)	(0.57)
N	191.000	205.000	148.000	209.000
r2_w	0.030	0.128	0.045	0.031
r2_b	0.930	0.973	0.951	0.963
r2_o	0.881	0.931	0.871	0.834

Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01

Appendix 3. Dependent Variable: ROE Variation

	(1) OLS2009	(2) OLS2010	(3) OLS2011	(4) OLS2012	(5) OLS2013	(6) OLS2014	(7) OLS2015
ln_assets	−0.009	−1.290	−0.012	−0.027	−0.178	0.214***	0.970
	(0.05)	(1.33)	(0.06)	(0.23)	(0.31)	(0.08)	(0.96)
leverage	−0.045	−0.012	−0.015	0.193	0.011	0.054	−1.352***
	(0.14)	(0.01)	(0.08)	(0.13)	(0.11)	(0.20)	(0.03)
roe_{t-1}	−3.332	−1.219	1.114	−31.749	13.538	3.355	−19.240
	(3.48)	(7.52)	(2.07)	(26.05)	(8.22)	(4.73)	(17.82)
lnp_bodfem	0.016	−1.931	−0.070	5.226	1.612	−0.556	2.109
	(1.03)	(2.36)	(0.31)	(3.96)	(1.95)	(0.59)	(2.01)
roe_{t-1} x fem	−3.296	0.508	−0.058	−18.516	5.714	1.021	−8.642
	(2.09)	(3.32)	(0.68)	(14.10)	(3.49)	(2.69)	(8.62)
_cons	−0.352	8.341	−0.247	8.330	4.517	−2.996***	−2.876
	(1.72)	(8.57)	(0.68)	(5.93)	(6.34)	(1.08)	(9.54)
N	95	112	115	125	132	137	138
r2_a	0.132	−0.017	0.141	0.073	−0.012	0.031	0.301

Standard errors in parentheses. Significance levels: * $p<0.1$, ** $p<0.05$, *** $p<0.01$

	(1) MILA_IBEX	(2) MILA	(3) Spain	(4) Peru	(5) Chile	(6) Colombia	(7) Mexico
ln_assets	−0.007	−0.168	0.090	−0.802	0.333	−0.054	−0.391
	(0.32)	(0.48)	(0.20)	(1.45)	(0.38)	(0.20)	(0.57)
leverage	−0.705	−0.133	−0.731	−0.499	−0.165*	−0.120	0.007
	(0.46)	(0.10)	(0.48)	(0.72)	(0.09)	(0.19)	(0.12)
roe_{t-1}	−0.657	0.523	3.445	−2.215	5.265	9.626	43.747**
	(3.20)	(8.88)	(4.22)	(7.78)	(23.04)	(12.45)	(17.73)
lnp_bodfem	0.951	0.923	0.725	0.010	−0.498	−0.185	0.017
	(0.74)	(1.06)	(1.09)	(3.94)	(1.71)	(0.62)	(0.97)
roe_{t-1} x fem	−0.633	−0.358	1.600	1.331	0.064	3.758	13.949**
	(1.13)	(2.94)	(2.10)	(5.17)	(11.83)	(6.33)	(5.87)
_cons	2.635	3.127	1.284	5.950	−4.188	0.238	1.923
	(2.48)	(3.46)	(1.68)	(4.99)	(3.45)	(2.40)	(6.32)
N	854.000	566.000	288.000	212.000	141.000	40.000	173.000
r2_w	0.133	0.007	0.422	0.005	0.123	0.247	0.123
r2_b	0.055	0.004	0.623	0.028	0.130	0.102	0.056
r2_o	0.127	0.002	0.452	0.004	0.086	0.059	0.081

Standard errors in parentheses. Significance levels: * $p<0.1$, ** $p<0.05$, *** $p<0.01$

	(1) BankInsu	(2) AgroFood	(3) EnerMin	(4) InfrConst
ln_assets	−0.068	−1.235	0.002	0.009
	(0.07)	(2.21)	(0.22)	(0.41)
leverage	0.138	−0.428	−2.619	−0.742
	(0.12)	(0.40)	(1.84)	(0.48)
roe_{t-1}	10.952**	−3.176	8.032	0.373
	(5.21)	(7.72)	(6.07)	(3.11)
lnp_bodfem	−0.438	2.925	−0.512	3.065**
	(0.38)	(3.43)	(1.10)	(1.53)
roe_{t-1} x fem	4.556**	−4.113	10.787	−0.068
	(2.25)	(3.14)	(7.86)	(1.07)
_cons	−0.846	14.732	2.812	6.528
	(0.94)	(14.44)	(5.59)	(4.17)
N	224.000	219.000	179.000	232.000
r2_w	0.055	0.020	0.031	0.390
r2_b	0.090	0.019	0.062	0.498
r2_o	0.054	0.002	0.033	0.422

Standard errors in parentheses. * $p<0.1$, ** $p<0.05$, *** $p<0.01$

Appendix 4. Difference in Means: Women on Boards (Yes =1, No =0)

Variable	MILA_IBEX Diff	MILA Diff	Spain Diff	Peru Diff	Chile Diff	Colombia Diff	Mexico Diff
ln_ebit	0.737***	0.199**	0.486*	−0.463***	0.322**	−0.178	0.541***
	(0.086)	(0.095)	(0.279)	(0.138)	(0.161)	(0.242)	(0.167)
N	1905	1604	301	643	473	77	411
ln_ebit$_{t-1}$	0.764***	0.203**	0.533*	−0.350**	0.276*	−0.215	0.479***
	(0.088)	(0.097)	(0.285)	(0.141)	(0.163)	(0.259)	(0.168)
N	1886	1589	297	637	470	77	405
roa	−0.011***	−0.008**	0.019	−0.019***	0.004	0	0
	(0.004)	(0.004)	(0.012)	(0.007)	(0.010)	(0.007)	(0.005)
N	2080	1746	334	692	546	77	431
roa$_{t-1}$	−0.012***	−0.009*	0.014	−0.018**	0	−0.001	0
	(0.004)	(0.004)	(0.013)	(0.007)	(0.010)	(0.010)	(0.006)
N	2070	1736	334	689	544	77	426
roe	−0.023	−0.028	0.152	−0.060***	0.049	−0.023	−0.065
	(0.028)	(0.021)	(0.196)	(0.015)	(0.059)	(0.016)	(0.043)
N	2080	1746	334	692	546	77	431
roe$_{t-1}$	0.017	−0.013	0.351***	−0.053***	0.05	−0.025	−0.027
	(0.021)	(0.021)	(0.102)	(0.015)	(0.060)	(0.018)	(0.040)
N	2070	1736	334	689	544	77	426
ln_age	0.014	0.032	0.352**	−0.022	−0.071	−0.165	0.260***
	(0.038)	(0.040)	(0.175)	(0.070)	(0.078)	(0.167)	(0.062)
N	2077	1750	327	693	546	77	434
ln_assets	1.098***	0.398***	1.618***	−0.125	0.517***	−0.217	0.593***
	(0.084)	(0.086)	(0.326)	(0.118)	(0.151)	(0.227)	(0.134)
N	2082	1748	334	693	546	77	432
leverage	0.748***	0.292**	1.238	0.001	0.785*	0.141	0.028
	(0.235)	(0.137)	(1.839)	(0.069)	(0.405)	(0.197)	(0.235)
N	2063	1729	334	685	546	77	421
ln_bod_size	0.287***	0.166***	0.185***	0.163***	0.017	0.07	0.191***
	(0.017)	(0.018)	(0.046)	(0.030)	(0.017)	(0.051)	(0.030)
N	2084	1750	334	693	546	77	434
ln_bod_dep	0.183***	0.124***	−0.007	0.145***	−0.003	−0.016	0.291***
	(0.021)	(0.023)	(0.080)	(0.041)	(0.026)	(0.089)	(0.047)
N	2078	1744	334	688	545	77	434
lnp_bod_ind	0.195***	0.159***	0.072	0.044	0.162***	0.176*	−0.089**
	(0.027)	(0.032)	(0.081)	(0.053)	(0.055)	(0.095)	(0.037)
N	1737	1411	326	496	447	75	393
ceo_turnover	0.013	0.022	0.038	−0.003	0.089***	−0.004	0.027
	(0.014)	(0.016)	(0.042)	(0.029)	(0.031)	(0.051)	(0.026)
N	2092	1750	342	693	546	77	434
ceo_duality	0.321***	0.014	0.753***	−0.062	0	0	−0.211***
	(0.034)	(0.036)	(0.094)	(0.057)	(0.000)	(0.000)	(0.071)
N	2093	1750	343	693	546	77	434

Standard errors in parentheses. Significance levels: * p<0.1, ** p<0.05, *** p<0.01