ISSN 2389-8186
E-ISSN 2389-8194

Vol. 4, No. 2
Septiembre de 2017
doi: http://dx.doi.org/10.16967/rpe.v4n2a6

ARTÍCULOS ORIGINALES

To Impact of gender and social responsibility in corporate profitability when controlling structural and intangible resources

pp. 57-70

ISABEL BRUSCA-ALIJARDE[a],
MARGARITA LABRADOR-BARRAFÓN[b],
M. PILAR BLASCO-BURRIEL[c],
LUISA ESTEBAN-SALVADOR[d]

ABSTRACT This paper analyzes the positive impact of gender and social responsibility on business profitability when its structural and intangible resources are considered as control variables. By using the panel data methodology for a six-year time series and through the combination of economic information and data obtained through a questionnaire, the results show that the entrepreneurs' gender or the companies' social responsibility practices -with the exception of those related to gender equality-, are not statistically significant to explain differences in profitability. However, the application of equality measures is significant when considered individually, so the companies that show greater concern for equality policies may experience a positive effect on their own performance.

KEYWORDS corporate profitability, social responsibility, gender equality, structural resources, intangible resources.

HISTORY OF THIS PAPER
The original version of this paper was written in Spanish. This English version is published in order to reach a wider audience. To cite this paper, please refer to its original version, as follows:

HOW TO CITE THIS ARTICLE?:
Brusca-Alijarde, I., Labrador-Barrafón, M., Blasco-Burriel, M.P. & Esteban-Salvador, L. (2017). Impacto del género y la responsabilidad social en la rentabilidad empresarial cuando se controlan los recursos estructurales e intangibles. *Perspectiva Empresarial*, 4(2), 59-72. http://dx.doi.org/10.16967/rpe.v4n2a6

RECEIVED: July 31, 2017
APPROVED: August 28, 2017

CORRESPONDENCE:
Isabel Brusca Alijarde, Facultad de Economía y Empresa de la Universidad de Zaragoza. Gran Vía, nº 2. 50005-Zaragoza, España.

[a] *Doctora, catedrática en la Universidad de Zaragoza, España. Correo electrónico: ibrusca@unizar.es*
[b] *Doctora, Profesora titular en la Universidad de Zaragoza, España. Correo electrónico: labrador@unizar.es*
[c] *Doctora, Profesora titular en la Universidad de Zaragoza, España. Correo electrónico: mpblasco@unizar.es*
[d] *Doctora, Profesora titular en la Universidad de Zaragoza, España. Correo electrónico: luisaes@unizar.es*

ISSN 2389-8186
E-ISSN 2389-8194

Vol. 4, No. 2
Septiembre de 2017
doi: http://dx.doi.org/10.16967/rpe.v4n2a6

Impacto del género y la responsabilidad social en la rentabilidad empresarial cuando se controlan los recursos estructurales e intangibles

RESUMEN Este trabajo analiza en qué medida el género y la responsabilidad social de una empresa pueden tener efectos positivos sobre la rentabilidad, una vez se consideran como variables de control sus recursos estructurales e intangibles. Al utilizar la metodología de datos de panel para una serie temporal de seis años, en la que se combina información económica e información obtenida por medio de un cuestionario, los resultados constatan cómo ni el género de los empresarios, ni las prácticas de responsabilidad social —a excepción de las relativas a la igualdad de género—, son estadísticamente significativos para explicar las diferencias en la rentabilidad. Sin embargo, sí es significativa la aplicación de medidas de igualdad, considerada de forma individual, de modo que aquellas empresas que muestran mayor preocupación por las políticas de igualdad pueden tener un efecto positivo sobre su rendimiento.

PALABRAS CLAVE rentabilidad empresarial, responsabilidad social, equidad de género, recursos estructurales, recursos intangibles.

Impacto do gênero e da responsabilidade social na rentabilidade empresarial em caso de controle de recursos estruturais e intangíveis

RESUMO Este trabalho analisa em que medida o gênero e a responsabilidade social de uma empresa podem ter efeitos positivos sobre a rentabilidade, quando os seus recursos estruturais e intangíveis são considerados como variáveis de controle. Ao utilizar a metodologia de dados em painel para uma série temporal de seis anos, na qual é combinada informação econômica e informação obtida por meio de um questionário, os resultados constatam como nem o gênero dos empresários, nem as práticas de responsabilidade social — exceto das relativas à igualdade de gênero —, são estatisticamente significativos para explicar as diferenças na rentabilidade. Porém, a aplicação de medidas de igualdade é significativa, considerada de forma individual, de modo que essas empresas que mostram maior preocupação pelas políticas de igualdade podem ter um efeito positivo sobre o seu rendimento.

PALAVRAS CHAVE rentabilidade empresarial, responsabilidade social, equidade de gênero, recursos estruturais, recursos intangíveis.

HOW TO CITE THIS PAPER?
¿CÓMO CITO EL ARTÍCULO?

CHICAGO:
Brusca-Alijarde, Isabel, Labrador-Barrafón, Margarita, Blasco-Burriel, M. Pilar y Esteban-Salvador, Luisa. 2017. "Impacto del género y la responsabilidad social en la rentabilidad empresarial cuando se controlan los recursos estructurales e intangibles". *Perspectiva Empresarial* 4(2): 59-72. http://dx.doi.org/10.16967/rpe.v4n2a6

MLA:
Brusca-Alijarde, Isabel, Labrador-Barrafón, Margarita, Blasco-Burriel, M. Pilar y Esteban-Salvador, Luisa. "Impacto del género y la responsabilidad social en la rentabilidad empresarial cuando se controlan los recursos estructurales e intangibles". *Perspectiva Empresarial* 4.2 (2017): 59-72. Digital. http://dx.doi.org/10.16967/rpe.v4n2a6

Introduction

The literature has found that the profitability obtained by companies is the result of a set of factors and economic and financial characteristics that act on the company's operation in a specific way. Along with economic and financial variables, other variables that represent non-financial areas have been used in the last decade to analyze aspects such as gender, corporate responsibility, corporate governance structure, management style or intangible assets in order to study their effect on the company's creation of value.

Concerning gender, the literature has tried to link corporate profitability with the gender perspective in order to analyze whether there are differences caused by gender. The justifications come from different views, from greater risk aversion in women (Langowitz & Minniti, 2007), different levels of sensitivity in women (Brandstätter, 1997) and even different ways of managing the company (Helgesen, 1990; Ramos, Barberá & Sarrió, 2003) when compared to men. Startienè & Remeikienè (2008) point out that men value profitability more than women, since women are more concerned with social recognition than with obtaining economic benefit.

On the other hand, a possible positive effect of social responsibility policies on company value has been disseminated (Porter & Kramer, 2002). This has led to business strategies such as investing in social responsibility as a competitive advantage, which can generate long-term benefits.

This work combines economic, financial and non-financial aspects in order to analyze the variables or factors that can condition profitability from different company perspectives. In particular, it seeks to analyze the effect of gender and corporate social responsibility measures adopted by companies once structural resources and intangible assets are controlled. Among social responsibility measures, the company's attitude towards gender equality is analyzed independently, as it is considered one of the foundations of corporate social responsibility. In order to consider the effect of the company's structural and intangible resources, the following variables are used: indebtedness, organizational and human capital (which also has several variables), the entrepreneur's goals, networking, sector and number of employees. These aspects are considered control variables, since previous studies have studied their impact on corporate profitability. For this reason, this work is a novel contribution by jointly incorporating gender, social responsibility and structural and intangible variables in a model that allows explaining corporate profitability.

The article is organized as follows: after this introduction, the next section analyzes the literature on the relationship between gender and corporate profitability and between corporate social responsibility and profitability to then present the theoretical framework and the summary of the results, which allows to define the empirical work hypothesis. In the third section, the sample and the variables are described, as well as the methodology used. The fourth section presents the main results obtained and finally the most relevant conclusions are presented.

Literature review and hypothesis formulation

The influence of gender on corporate profitability

Many studies have linked gender and business activities from different perspectives. For example, there is a trend aimed at analyzing the differences between men and women in the development of the business activity. Differences have been found in different areas, from the number of women's companies to the motivations that lead them to become entrepreneurs (Cohoon, Wadhwa & Mitchell, 2010), the characteristics of the companies that they create and manage (Startienè & Remeikienè, 2008) or the adoption of new technologies and the implementation of electronic commerce (Ong, Habidin, Salleh & Fuzi, 2016). For example, Solarte, Campo & Vargas (2017) point out that women's companies have less female participation in their workforce, but greater participation in boards of directors. In the Latin American context, the gender gap persists in the business field, since there is inequality in the opportunities offered by companies led by men and women (Adame & García, 2016).

It should be noted that these differences reflect what happens in the labor market or society in general, since women have traditionally had an ancestral role (Camarena & Tunal, 2010) devoted to family care, even when they have positions of responsibility, as in the case of researchers. The reasons to explain the differences mention the existence of female stereotypes that has hampered equality between men and women. Greer & Greene (2003) mention, for example, how differences exist in education, work experiences, social relations and even access to capital when women want to become entrepreneurs. The truth is that the percentage of female entrepreneurs is lower than that of men, although there are some differences among countries.

In the case of Spain, it is estimated that men represent around 70% of the total number of entrepreneurs. The existing economic and social characteristics have undoubtedly promoted this situation and female entrepreneurs have to face an environment dominated by men. The differences are also perceived in the labor market, with a constantly higher female unemployment rate than that of men. In Spain, an equality law passed in 2007 focused on raising societal and institutional awareness of the need to advance policies and actions aimed at achieving gender equality in different areas, including business activities. However, gender differences in the business world persist even today and there are also differences even in the characteristics of the companies created by men and women. As pointed out by Hancock, Pérez-Quintana & Hormiga (2014), the characteristics of entrepreneurs are associated with male stereotypes and not with women.

Some authors have verified the existence of differences in the way men and women manage and lead companies, since women show greater concern for integration in the company. They are more concerned with the company's social recognition than with its economic benefits, unlike men. For example, Loden (1987) and Helgesen (1990) argue the existence of a female management style that differs from the traditional male management model. The female style is characterized by appealing both to rationality and emotions. Ramos et al. (2003) point out that the basic style of female managers is characterized by reduced control, understanding, collaboration and high performance levels, with the basic objective of achieving quality. However, the survey conducted by Castaño et al. (2009) with Spanish male and female managers does not allow the authors to conclude that there are different management styles between men and women.

Another line of research seeks to relate gender diversity and corporate profitability, in order to analyze whether diversity has positive or negative consequences on company performance. Most of the works in this line of research establish a relation between the composition of the board of directors and profitability. The results are not conclusive. While some studies point out the existence of this relationship (Carter, Simkins & Simpson, 2003; Catalyst, 2004) with mixed results (Milliken & Martins, 1996), others find no relationship between female participation and performance (Rose, 2007). Lenard, Yu, York & Wu (2014) state that differences in the composition of the board of directors imply management differences that suppose less risk for the company and lower variability of share profitability.

The theoretical framework to establish the relationship between the diversity of the board of directors and the company's performance is usually supported in the agency theory. The diversity of the board of directors could be based on some authors that allow to interpret better the management's control and supervision roles (Francoeur, Labelle & Sinclair-Desgagné, 2008; Jimeno & Redondo, 2011a). However, in a study that includes companies belonging to 16 European countries, Jimeno & Redondo (2011a) observe that the greater the diversity of the board, the lower the levels of profitability achieved.

In the Spanish context, Condor & Esteban (2009) do not find any incidence of the composition of the board of directors in corporate profitability. In the same vein, Gallego, García & Rodríguez (2010) note that companies with higher levels of gender diversity do not outperform others with lower levels in terms of accounting and market measures and ultimately gender diversity does not seem to influence business performance. However, Castaño et al. (2009) study the possible relationship between the presence of women in positions of corporate responsibility and corporate profitability and they confirm the existence of a certain positive relationship. More recently, Pucheta and Sánchez (2013) carry out an empirical study with companies included in the IBEX-35, trying to assess the impact of the board's composition on corporate profitability. The authors note that the presence of women in boards of directors is not statistically significant and therefore it does not influence the economic profitability of companies.

A few other works focus not on the composition of the board of directors, but on the ownership and management of the companies, with the purpose of demonstrating whether women's companies have different profitability than men's firms or not. In this area there is no consensus on the incidence of gender in corporate profitability, since contradictory results are found. Some studies show that the profitability of women's companies is lower than that of their male colleagues due to women's greater aversion to risk (Welch, Welch & Hewerdine, 2008), lower business experience (Fischer, 1992; Rosa, Carter & Hamilton, 1996) and the size or the sector where they operate (Carter & Show, 2006).

However, some works provide evidence of the advantage of women's businesses in terms of profitability, when compared to companies managed by men (Fischer, Reuber & Dyke, 1993). A final group of studies show that there are no differences between companies managed by men or women (Du Rietz & Henrekson, 2000; Kalleberg & Leitch, 1991).

The reasons for the different results found among studies could be explained if additional variables besides gender were considered, such as the structural resources and intangible assets available for both genders. Therefore, this work considers structural and intangible resources as control variables, understanding that they also have an impact on corporate profitability. In this regard, the work carried out by Díaz (2007) shows that although certain gender differences are observed in terms of business results, when other structural and resource factors are considered gender is not a determining factor. Similar conclusions were obtained by Díaz & Jiménez (2010), who point out that business results differences are explained by the size of the company and the human and financial resources used, which have a moderating effect on the relationship between gender and profitability.

Driga & Prior (2010) also try to find a reason to provide additional justification to the possible differences between companies managed by men and women. They talk about significant differences in the initial conditions of the companies, which can affect the profitability obtained by women and men. The authors note that companies run by women have fewer assets and a smaller number of employees, which explains at least partially their lower performance. Adame & García (2015) obtained similar results for the case of Mexico. They show that although assets and capital are lower in companies run by women, there are no other significant differences in terms of company performance by gender.

Therefore, although at first companies created by women could be expected to have different returns than those of their male counterparts, when the companies' structural resources and intangible assets are introduced through control variables the differences may be reduced. For this reason, the following hypothesis is put forward: the impact of the entrepreneur's gender is attenuated when the company's structural and intangible resources are controlled.

Social responsibility and corporate profitability

The investment in social responsibility has been considered one of the strategies that can be used for competitive and strategic improvement. In this sense, Porter & Kramer (2002) analyze the advantages of socially responsible practices. They consider that social responsibility may have positive effects on business value. This idea has gradually spread, as it can be seen in Moneva (2008). The stakeholder theory has been used as theoretical support, since satisfying the demands of groups of stakeholders is fundamental for profitability (Jones, 1995).

As a result, a line of research has emerged with the purpose to verify empirically if social responsibility actually has positive effects on the financial profitability of companies. The works carried out in this line of research also show mixed results. Among those that find a positive relationship between corporate social responsibility practices and the results obtained, the work of Waddock & Graves (1997) can be mentioned. On the other hand, Wright & Ferris (1997) show a negative or even non-existing relationship. The results obtained in the meta-analysis carried out by Orlitzky, Schmidt & Rynes (2003) show that there is a positive relationship between corporate responsibility and corporate profitability. Moneva, Rivera & Muñoz (2007) confirm that there is a positive relationship between information on sustainability, the strategic consistency index and financial profitability, although it is not significant.

One of the possible reasons for the differences found in the results may be cultural differences depending on the environment where the research has been carried out. In fact, Miras, Carrasco & Escobar (2012) demonstrate that the gender equality variable positively influences the relationship between social responsibility and financial profitability and also that this relationship is stronger in countries with high equality levels. Orlitzky (2008) mentions innovation and company size as variables that can enhance the effect of the relationship between social responsibility and profitability. On the other hand, Surroca, Tribó & Waddock (2010) show that the relationship between both variables is influenced by the company's intangible assets such as innovation, human capital or reputation.

Likewise, this work tries to contrast if the introduction of social responsibility practices has an effect on profitability at the individual level, so the following hypothesis has been proposed: the companies that have developed corporate responsibility measures have competitive advantages and obtain higher levels of economic and financial profitability. On the other hand, in order to consider the effect of structural resources and intangible assets, in line with what was pointed out by Surroca et al. (2010) some representative aspects of the structural and intangible assets are introduced in the model as control variables. They are human capital, quality management and networking. Therefore, the purpose is to verify whether corporate social responsibility is still significant when considering variables that represent the company's structural and intangible resources.

Gender equality policies have been considered part of the basic foundation for corporate social responsibility. Therefore, given the orientation of this work towards the gender perspective, the effect of these policies will be analyzed separately. In this sense, Jimeno & Redondo (2011b) show that there is a significant impact of the variables that measure the company's degree of gender diversity on its profitability. This framework considers equality measures as a predictive variable of the company's economic and financial profitability. Specifically, in line with the above, companies that have implemented gender equality policies are expected to experience a positive effect on their corporate profitability.

Empirical research design

Sample and data

In order to carry out this work, some companies led by women were selected from the SABI (Iberian Balance Sheet Analysis System) database, considering those companies that have a female executive director who is also a shareholder. Subsequently, the criteria used to select male peers were defined: same autonomous community, same industrial sector, same company size and male executive directors should have the same shareholding as their female counterparts. The number of companies selected in SABI was 1,166 companies managed by female entrepreneurs and 1,145 managed by male entrepreneurs. In addition to using the economic information available on SABI, the study required introducing factors that could measure the company's management from different points of view. A questionnaire was designed for this purpose, in order to obtain information regarding the company's structural resources, social responsibility and intangible assets available.

Since it has only been possible to use those surveys where the company can be identified, given the need to link questionnaire and economic-financial data, the database has been reduced to 126 companies. 83 of them are managed by women and 43 by men. The database is made up of data from the questionnaire and the economic and financial variables specific to each company, in the form of a time series from 2004 to 2009.

Methodology

First, a univariate analysis was carried out, since it allows to study the relationship between the three variables analyzed (gender, equality policies and other social responsibility measures) and the creation of value. For this purpose, the Student's t test was used to compare the means of independent samples. The objective is to show if there are differences in terms of corporate profitability between companies run by men and women according to the company's social responsibility practices and based on 2009 data, which allow a cross-sectional analysis.

Secondly, for the construction of an explanatory multivariate model of corporate profitability, a panel data model was used. In this design, the dependent variable is business success as measured through various variables: economic profitability, financial profitability, profit margin and sales evolution. For the panel data model, a panel corrected standards errors econometric model available in the Stata software was selected. This model allows to carry out the regression by controlling heteroscedasticity and autocorrelation problems, thanks to its different methodological options.

Variables

The dependent variables are the indicators that show the creation of value in the companies, in particular: economic profitability, financial profitability, profit margin and sales evolution.

The independent variables try to extract the most relevant elements that are considered to affect the evolution of profitability. They allow researchers to test the hypotheses proposed. In addition to those related to gender, social responsibility and equality policies, the company's structural and intangible resources are introduced as control variables, since they can also influence corporate profitability and control the effect of gender and social responsibility.

Finally, the following variables are considered representative of the company's structural and intangible resources: level of indebtedness (defined as the relationship between liabilities and net worth); entrepreneur's goals (it is a variable that analyzes the influence of motivations and reasons for creating the company and in order to transform it into a single variable a principal components analysis was applied); management style (it encompasses the set of questions that refers to the respondent's management style as perceived by him or herself); business quality management (it refers to the quality management tools used by the company); human capital (also based on questions of the survey that try to capture the entrepreneur's experience and dedication); networking (it is the result of those questions related to interpersonal relationships and the use of social networks to develop the business activity), sector (where the company's main activity belongs and its codification is based on the differentiation between industry, construction and services) and number of employees (it was obtained from the economic information of the companies). The management style, quality management and human capital variables represent the company's organizational and human capital.

In order to homogenize the effects of the variables and also avoid heteroscedasticity, instead of working with the values of the variables a logarithmic transformation was used.

Analysis of results

Gender and profitability

When comparing the average profitability of the companies run by men and women, it is observed that the average economic profitability is slightly higher in the case of companies run by men, while the situation is the opposite in terms of financial profitability, since companies run by women seem to obtain greater benefits in relation to their resources than those of their male colleagues. In any case, the results obtained in the Student's t test confirm that the differences in the average economic profitability of the companies when analyzed by manager gender are not statistically significant. As it can be seen in table 1, the same happens to financial profitability and sales margin, so none of them shows significant differences between companies run by men or women. This allows us to reject the hypothesis regarding the differences in profitability in terms of the gender of the companies' manager.

The only variable where there are differences is sales variation, which shows that the evolution of sales in 2009 compared to 2008 has been negative both for men's and women's companies, which demonstrates the effect of the economic crisis. In addition, the coefficient is higher for women's companies so they have experienced a sales reduction, which shows that they have suffered the most given the negative economic situation.

TABLE 1. Impact of gender on corporate profitability

	t	gl	SIGNIFICANCE
Economic profitability	0,510	108	0,611
Financial profitability	-0,135	113	0,892
Sales margin	0,118	108	0,906
Sales variation	2,031	112	0,045

Source: own elaboration.

The differences experienced when developing business activities and the difficulties found by women in the business environment, which has traditionally been dominated by men, could explain why women's companies suffer more in a negative context. In this regard, it should be mentioned that in Spain the number of women's companies is much lower than that of men's companies. In the social sphere, the differences between men and women persist for example in the labor market or in the incorporation of women in positions of responsibility. The number of unemployed people has increased because of the crisis, but the proportion of unemployed women is greater than that of men.

Social responsibility and profitability

In the first place, it was analyzed if the companies that adopt internal gender equality policies have any competitive advantage over those that are less concerned with gender equality. Gender equality policies were measured through the preparation of equality plans, the adoption of measures to reconcile work and family life, wage equality and equal promotional and training policies. Although it can be observed that companies with equality policies have an economic, financial and marginal profitability slightly higher on average than those companies that do not implement equality measures, the statistical results allow to verify that differences in terms of profitability are not statistically significant. Therefore, the hypothesis stating the impact of equality measures on corporate profitability cannot be accepted. This indicates that when companies propose the introduction of equality measures, they expect benefits other than purely economic. Thus, a question remains open for future research on the impact of equality measures adopted by a company within the non-economic sphere.

Similarly, the companies that adopt equality policies have also experienced an average decrease in sales, but it is lower than in companies that do not use mechanisms to implement gender equality, although the difference is not statistically significant. This reiterates the lack of impact of equality measures in the economic sphere and the need to investigate their consequences from other areas, mainly from the point of view of social benefits.

TABLE 2. Impact of equality policies on corporate profitability

	t	gl	SIGNIFICANCE
Economic profitability	0,228	108	0,820
Financial profitability	0,515	113	0,608
Sales margin	0,134	108	0,894
Sales variation	0,240	112	0,811

Source: own elaboration.

Secondly, the effect of adopting other social responsibility measures such as environmental management is considered. Companies that have introduced social responsibility measures have on average higher levels of economic profitability, financial profitability and sales margin, but statistically the differences are not significant either. Regarding the negative evolution of sales, in both cases it can be observed that sales have fallen more in companies that have not introduced social responsibility measures, so the effects of the crisis can be seen even more in this case, although the differences are not statistically significant either.

TABLE 3. Impact of other social responsibility measures on corporate profitability

	t	gl	SIGNIFICANCE
Economic profitability	1,504	108	0,136
Financial profitability	0,946	113	0,346
Sales margin	0,838	108	0,404
Sales variation	0,839	112	0,403

Source: own elaboration.

In short, and although the literature refers to the merits of social responsibility to increase the competitive advantages of companies, the results found do not support these hypotheses. However, large companies might use these measures to improve their profit, so a possible future research could contrast these results based exclusively on large companies.

Explanatory factors of corporate profitability

Economic stability

In the multivariate model for the analysis of economic profitability, as can be seen in table 4, it is observed that the variables introduced in the model can explain 82.29% of the variation in the dependent variable. There are four significant variables: business goals, business quality management, equality policies (a variable that represents the company's social responsibility in this area) and level of indebtedness. Three of these variables are part of the company's structural and intangible resources. The other one represents the company's social responsibility in terms of gender equality, one of the foundations of these actions.

In Spain, most companies have implemented equality measures since the approval of the equality law in 2007. The results show that these actions positively influenced the economic profitability of companies, as shown by the EP (equality policies) variable, if other variables are considered together. The adoption of measures for the management of business quality also affects economic profitability significantly and positively, while the level of indebtedness and the index derived from the questions about the objectives for company creation has a negative sign. This implies that a higher level of indebtedness has a negative impact on economic profitability, as greater benefits will be required in order to afford financial costs. Likewise, high goals set by the entrepreneur imply a highly negative effect and greater difficulties to increase economic profitability. This indicates that the environment where the business activity takes place and the motivations that led the entrepreneur to create the company have an impact on the profitability obtained. A future research could address individually the impact of these goals and motivations, in order to know what intrinsic characteristics of the entrepreneur can cause this effect.

In relation to the gender variable, it seems to have a positive influence on profitability, although it is not significant. Therefore, the results indicate that the fact of being a man or a woman does not have a positive or negative impact on profitability. A positive aspect is that despite the possible gender differences that women find in the business world, they do not affect their companies' success. The same is reflected for corporate social responsibility measures or networking policies used by the company, which affects both positively in terms of profitability.

Financial profitability

If financial profitability is studied as a dependent variable, the results obtained have some similarity with those of the previous model, with the exception of indebtedness, which significantly and positively affects the dependent, and the sector variable, which appears as significant. In this case, the explanatory variables explain 62.22% of the variation in financial profitability. Gender has a positive but not significant coefficient. This implies that there are no differences between the financial profitability of companies based on gender when structural and intangible resources are controlled. The differences in the size of the companies, the sector where they operate and even the way they carry out their business activity allow women to obtain profits that are similar to those of men. There is no positive impact of gender when controlling other resources.

Sales margin

The margin has been calculated as the quotient between the results before taxes and sales. In

TABLE 4. Explanatory factors of economic profitability

	Coef.	Std. Err.	z	P>z	[95 % Conf.	Interval]
Gender	0,0404701	0,0338076	1,20	0,231	-0,0257916	0,1067317
Goals	-0,199957	0,0814358	-2,46	0,014	-0,3595682	-0,0403458
Networking	0,1036892	0,1397229	0,74	0,458	-0,1701626	0,3775411
Manag. Style	0,0438772	0,0785297	0,56	0,576	-0,1100382	0,1977926
Qual. manag.	0,1926997	0,092119	2,09	0,036	0,0121497	0,3732496
Human cap.	-0,1547921	0,275356	-0,56	0,574	-0,6944801	0,3848958
EP	0,2587683	0,0717619	3,61	0,000	0,1181176	0,3994191
CSR	0,0315051	0,0418923	0,75	0,452	-0,0506022	0,1136124
Indebtedness	-0,2343154	0,0383226	-6,11	0,000	-0,3094263	-0,1592045
Sector	0,0492008	0,1023329	0,48	0,631	-0,151368	0,2497695
Nr of employ.	-0,0967853	0,0665221	-1,45	0,146	-0,2271663	0,0335956
Constant	-1,063071	0,1579357	-6,73	0,000	-1,372619	-0,7535229
R-squared	0,8229					

Source: own elaboration.

TABLE 5. Explanatory factors of financial profitability

	Coef.	Std. Err.	z	P>z	[95 % Conf.	Interval]
Gender	0,0848108	0,0556779	1,52	0,128	-0,0243158	0,1939374
Goals	-0,3622797	0,1078045	-3,36	0,001	-0,5735726	-0,1509869
Networking	-0,029043	0,1578047	-0,18	0,854	-0,3383345	0,2802484
Manag. style.	0,0729736	0,1106251	0,66	0,509	-0,1438476	0,2897948
Qual. manag.	0,3223566	0,1151626	2,80	0,005	0,0966421	0,548071
Human cap	0,0173121	0,3249686	0,05	0,958	-0,6196146	0,6542387
EP	0,2025521	0,0709583	2,85	0,004	0,0634764	0,3416278
CSR	0,0674783	0,0476274	1,42	0,157	-0,0258697	0,1608264
Indebtedness	0,4729077	0,1098384	4,31	0,000	0,2576284	0,6881869
Sector	0,3165671	0,1078169	2,94	0,003	0,1052499	0,5278843
Nr. of employ.	-0,1484831	0,0790784	-1,88	0,060	-0,3034738	0,0065077
Constant	-0,5016616	0,2014922	-2,49	0,013	-0,896579	-0,1067441
R-squared	0,6222					

Source: own elaboration.

this case, the significant variables of the model are goals, indebtedness and gender. Both goals and indebtedness show a negative influence on the margin of the companies. Unlike the two previous models, gender is significant but it has a negative sign, which indicates that women's companies have lower sales margins than men's firms. This may be due to differences in the attitude and organizational culture of women, who give greater importance to aspects that are not merely economic such as social recognition, as argued by the literature (Startienè & Remeikienè, 2008).

Sales variation

The objective of this model is to observe how the variables have affected sales evolution. For example, the number of employees and the management style have a negative effect. It means that the largest companies have had the greatest impact due to the negative evolution of sales in 2009, which may be due to their higher level of activities, possibly in national and international markets. The management of business quality affects the dependent variable in a positive way, as well as indebtedness. In this case, the effect of

TABLE 6. Explanatory factors of the sales margin

	Coef.	Std. Err.	z	P>z	[95 % Conf.	Interval]
Gender	-1,556894	0,0434596	-35,82	0,000	-1,642073	-1,471714
Goals	-0,2755144	.0899908	-3,06	0,002	-0,4518931	-0,0991357
Networking	0,0168468	0,1665668	0,10	0,919	-0,3096181	0,3433118
Manag. style	0,1831497	0,1744628	1,05	0,294	-0,1587912	0,5250905
Qual. manag.	0,0925177	0,1314012	0,70	0,481	-0,165024	0,3500593
Human cap.	-0,2320408	.3046231	-0,76	0,446	-0,829091	0,3650094
EP	0,0224509	0,0583914	0,38	0,701	-0,0919942	0,136896
CSR	-0,0479972	0,0549197	-0,87	0,382	-0,1556377	0,0596434
Indebtedness	-0,2780188	0,0852614	-3,26	0,001	-0,445128	-0,1109096
Sector	0,2410459	0,1346246	1,79	0,073	-0,0228136	0,5049053
Nr. of employ.	-0,0092777	0,062114	-0,15	0,881	-0,131019	0,1124636
Constant	0,6733318	0,1782503	3,78	0,000	0,3239677	1,022696
R-squared	0,9007					

Source: own elaboration.

TABLE 7. Explanatory factors of the relative sales variation

	Coef.	Std. Err.	z	P>z	[95 % Conf.	Interval]
Gender	0,0954138	0,1011369	0,94	0,345	-0,102811	0,2936385
Goals	-0,3465607	0,1828726	-1,90	0,058	-0,7049843	0,011863
Networking	-0,4919007	0,2842986	-1,73	0,084	-1,049116	0,0653143
Manag. style	-0,8682377	0,2824077	-3,07	0,002	-1,421747	-0,3147287
Qual. manag.	0,7587147	0,2491633	3,05	0,002	0,2703635	1,247066
Human cap.	-0,0361721	0,5874989	-0,06	0,951	-1,187649	1,115305
EP	-0,2246667	0,1654675	-1,36	0,175	-0,548977	0,0996436
CSR	0,0385993	0,0982328	0,39	0,694	-0,1539334	0,2311319
Indebtedness	0,7330081	0,2558194	2,87	0,004	0,2316114	1,234405
Sector	0,2906917	0,2307798	1,26	0,208	-0,1616283	0,7430118
Nr. of employ.	-0,4289928	0,1427691	-3,00	0,003	-0,7088152	-0,1491705
Constant	-0,0661157	0,5105971	-0,13	0,897	-1,066868	0,9346362
R-squared	0,5425					

Source: own elaboration.

the gender variable is positive but not significant. When considered with structural and intangible resources, the effect of the gender variable on sales evolution is attenuated and it is not a relevant variable anymore. The differences found when considering only the gender variable disappear, which indicates that they are compensated with other differences in the way of carrying out the business activity, such as networking, management style or quality management policies.

Discussion and conclusions

The literature review reveals a growing concern about issues related to gender diversity and corporate social responsibility. Both are the objective of many academic works and journalistic articles where they are addressed as current subjects. Therefore, this paper has sought to address both aspects from the perspective of corporate profitability.

The main motivation to carry out this work has been the lack of consensus in the literature on the impact of gender and social responsibility, since some authors mention a positive effect of gender (which varies between jobs), while others show that this difference is not significant (similar conclusions could be highlighted in the case of corporate responsibility). In addition, some recent studies have pointed out that the lack of uniformity may be due to disregarding some variables that may act together in one case or the other and may have a moderating effect.

When considering the existing debate on the impact of gender and corporate responsibility on the profitability of companies, besides analyzing both variables individually, a model was built to explain the economic and financial profitability of the organizations by jointly considering gender and social responsibility and also introducing representative variables of the company's structural and intangible resources, such as the motivations of entrepreneurs, the management styles used, the quality management policies or the use of networking as an entrepreneur.

The results of the empirical work developed provide conclusions that enrich the literature. In this work, neither gender nor corporate social responsibility are significant variables to explain corporate profitability, since the variables considered include a wide range of aspects that can condition the relationship between the dependent variable and the independent ones. In short, the effect of structural and intangible resources means that gender is not a variable that explains the profitability obtained, in the case of Spanish companies. This is positive, since at least it shows that female entrepreneurs do not experience a negative impact on their profitability just because they are women. By using structural and intangible resources, they can achieve the same profitability as men.

Regarding gender, although it is observed that the average profitability of women's companies is a bit higher than that of men, the results do not allow us to verify if these differences among companies run by men or women are significant, neither in terms of economic and financial profitability nor sales margin. This indicates that although the characteristics of women's companies are different, their way to manage and lead the company allows them to obtain similar profitability to that of men's firms. A positive aspect to highlight is that despite the fact that women encounter some difficulties because of their gender, the strategies developed contribute to avoiding lower profit.

The only variable with significant differences when considered individually is sales evolution, given that the effect of the negative economic situation has been greater in women's companies, while their sales have decreased more. This is possibly due to the difficulties found by female entrepreneurs in the business environment, which reflects the social differences that still persist. However, it can be highlighted that when introducing structural and intangible resources, the differences between men and women in terms of sales evolution disappear, since they are compensated by other strengths.

Corporate responsibility measures do not have a significant effect either on the different measures of profitability used, which may be due to the economic context or the lack of societal awareness in terms of the companies getting involved in the improvement of social and environmental conditions. However, the equality policies variable, when considered independently, has a positive effect on economic and financial profitability by showing how the companies concerned with achieving equality between men and women are more likely to obtain greater business returns. In other words, equality policies generate a positive effect on corporate profitability. This may be due to the increased motivation of employees and their identification with the company's objectives when the employers strive for equality rights.

The results of the explanatory model on corporate profitability indicate, first of all, that the R squared oscillates in an important way depending on the variable analyzed. Second, the gender and social responsibility variables are not significant in the model that explains economic or corporate profitability. They seem to be conditioned by the goals or reasons for company creation and the measures used for quality management, as well as the company's indebtedness. These results are in line with those previously obtained in literature, so it can be observed that structural and intangible resources can reduce the impact of gender, as well as social responsibility.

REFERENCES

Adame, M. E. C., & García, M. L. S. (2015). Diferencias en la competitividad de las empresas según el género del director. *Neumann Business Review*, *1*(2), 70-86.

Adame, M. E. C., & García, M. L. S. (2016). Un estudio de las pymes lideradas por mujeres en Latinoamérica. *Revista Universitaria Ruta*, *18*(1), 1-27.

Brandstätter, H. (1997). Becoming an entrepreneur-a question of personality structure? *Journal of Economic Psychology*, 18, 157-177.

Camarena, M. E., & Tunal, G. (2010). Género y visibilidad en las ciencias administrativas (el caso clase y Redalyc). *Cultura Tecnología y Patrimonio*, 9, 55-78.

Carter, A., Simkins, B. J., & Simpson, G. W. (2003). Corporate governance, board diversity and firm value. *Financial Review*, 38, 33-53.

Carter, S., & Shaw, E. (2006). Women's business ownership: recent research and policy development. Report to the small business service. Disponible en http://www.berr.gov.uk/files/file38330.pdf

Castaño, C., Laffarga, J., Iglesias, C., de Fuentes, P., Martín, . . ., & Martínez, J. L. (2009). *Mujeres y poder empresarial en España*. Madrid: Instituto de la Mujer.

Catalyst. (2004). *The Bottom Line: Connecting Corporate Performance and Gender Diversity*. Disponible en www.Catalystwomen.org

Cohoon, J. M., Wadhwa, V., & Mitchell, L. (2010). *Are successful women entrepreneurs different from men?* Kauffman, the Foundation of Entrepreneurship.

Condor, V., & Esteban, L. (2009). ¿Es el género una variable predictora de la rentabilidad? *Aequalitas*, 25, 51-59.

Díaz, M. C., & Jiménez, J. (2010). Recursos y resultado de las pequeñas empresas: nuevas perspectivas del efecto género. *Cuadernos de Economía y Dirección de la Empresa*, 42, 151-176.

Díaz, M. C. (2007). *Influencia del género en los recursos y resultados de las pequeñas empresas*. Madrid: Consejo Económico y Social.

Driga, O., & Prior, D. (2010). Start-up conditions and the performance of women —and men— controlled businesses in manufacturing industries. *Revista de Contabilidad*, *13*(1), 69-124.

Du Rietz, A., & Henrekson, M. (2000). Testing the female underperformance hypothesis. *Small Business Economics*, 1, 1-10.

Fischer, E. (1992). Sex differences and small business performance among canadian retailers and service providers. *Journal of Small Business and Entrepreneurship*, 36, 1-7.

Fischer, E., Reuber, A. R., & Dyke, L. S. (1993). A theoretical overview and extension of research on sex, gender, and entrepreneurship. *Journal of Business Venturing*, *8*(2), 151-168.

Francoeur, C., Labelle, R., & Sinclair-Desgagné, B. (2008). Gender diversity in corporate governance and top management. *Journal of Business Ethics*, *81*(1), 83-95.

Gallego, I., García, I., & Rodríguez, L. (2010). The influence of gender diversity on corporate performance. *Revista de Contabilidad*, *13*(1), 55-88.

Greer, M. J., & Greene, P. G. (2003). Feminist theory and the study of entrepreneurship. *New perspectives on women entrepreneurs*, 1-24.

Hancock, C., Pérez-Quintana, A., & Hormiga, E. (2014). Stereotypical notions of the entrepreneur: An analysis from a perspective of gender. *Journal of promotion management*, *20*(1), 82-94.

Helgesen, S. (1990). *La ventaja de ser mujer.* Barcelona: Ediciones Granica.

Jimeno, F., & Redondo, M. (2011a). Diversidad de género en los consejos de administración europeos y rentabilidad de la empresa. *Comunicación al XIV Encuentro de AECA*, Septiembre, Coimbra.

Jimeno, F., & Redondo, M. (2011b). Divulgación de Información corporativa concerniente a diversidad de género e influencia sobre la rentabilidad. *Comunicación al XIV Encuentro de AECA*, Septiembre, Coimbra.

Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of Management Review*, 404-437.

Kalleberg, A., & Leicht, K. (1991). Gender and organizational performance: determinants of small business survival and success. *Academy of Management Journal*, 34, 136-161.

Langowitz, N., & Minitti. M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 3, 341-364.

Lenard, M. J., Yu, B., York, A., & Wu, S. (2014). Impact of board gender diversity on firm risk. *Managerial Finance*, *40*(8), 787-803.

Loden, M. (1987). *Femenine leadership, or how to succeed in business without being one of the boys*. Londres: Times Books.

Milliken, F J., & Martins, L. L. (1996). Searching for common treads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Journal*, *21*(2), 402-433.

Miras, M. M., Carrasco, A., & Escobar, B. (2012). ¿Influye la característica cultural “igualdad de género” en la relación entre RSC y RF?. Análisis cross-cultural. *Comunicación Presentada al XV Encuentro de ASEPUC,* Junio, Cádiz.

Moneva, J. M. (2008). ¿Es la responsabilidad social corporativa rentable para la empresa? *Revista de Contabilidad y Dirección*, 7, 55-75.

Moneva, J. M., Rivera, J., & Muñoz, M. J. (2007). The corporate stakeholder commitment and social and financial performance. *Industrial Management & Data Systems*, *107*(1), 84-102.

Ong, S. Y. Y., Habidin, N. F., Salleh, M. I., & Fuzi, N. M. (2016). The relationship between ICT adoption and business performance in Malaysia and Indonesia. *Geografia-Malaysian Journal of Society and Space*, *12*(12), 40-49.

Orlitzky, M. (2008). Corporate social performance and financial performance: A research synthesis. En A., Crane, A., D., McWilliams, D. Matten, J. Moon & and D. S. Siegel (Eds.), *The Oxford Handbook of CSR*. Oxford: Oxford University Press, 113-136.

Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: a meta-analysis. *Organization Studies*, *24*(3), 403-433.

Pucheta, M. C., & Sánchez, P. (2013). Relación entre la diversidad de género y la rentabilidad económica de las empresas del IBEX 35. *La ventana. Revista de estudios de género*, *4*(38), 331-371.

Porter, M., & Kramer, M. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, *808*(12), 56-68.

Ramos, A., Barberá, E., & Sarrió, M. (2003). Mujeres directivas, espacio de poder y relaciones de género. *Anuario de Psicología*, *34*(2), 267-278.

Rosa, P., Carter, S., & Hamilton, D. (1996). Gender as a determinant of small business performance: insights from a British study. *Small Business Economics*, 8, 463-478.

Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. *Corporate Governance: An International Review*, *15*(2), 404-413.

Solarte, M. G., Campo, C. H. G., & Vargas, G. M. (2017). Características de las pymes según la gerencia sea hombre o mujer: caso empírico de Cali. *Revista EAN*, 82, 143-160.

Startienè, G., & Remeikienè, R. (2008). Gender Gap in Entrepreneurship. *Engineering economics*, *5*(60), 95-103.

Surroca, J., Tribó, J., & Waddock, S. (2010). Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal*, 31, 463-490.

Waddock, S., & Graves, S. (1997). The corporate social performance-financial performance link. *Strategic Management Journal*, *18*(4), 309-319.

Welch, C. L., Welch, D. E., & Hewerdine, L. (2008). Gender and export behaviour: evidence from women-owned enterprises. *Journal of Business Ethics*, 83, 113-126.

Wright, P., & Ferris, S. (1997). Agency conflict and corporate strategy: The effect of divestment on corporate value. *Strategic Management Journal*, *18*(1), 77-83.