



Research article

Disclosure of gender policies: do they affect business performance?

Sandra Escamilla-Solano, Jessica Paule-Vianez, Alicia Blanco-González*

Rey Juan Carlos University, Social Sciences and Law School, Paseo de los Artilleros s/n, 28032, Madrid, Spain



ARTICLE INFO

Keywords:

Gender equality
Disclosure
Corporate social responsibility
Performance

ABSTRACT

Disclosure of gender equality policies and their effect on business profitability is a relevant area of research due to the existence of a gap in the academic literature and the need to decrease the gender gap in companies (5th Sustainable Development Goal of the United Nations). To demonstrate the effect of disclosure of gender policies on business profitability, this study analyses the Social Responsibility Reports of 91 companies listed on the Spanish stock exchange for the period 2016–2018. Information on gender equality policies is extracted by using the content analysis technique. A positive association between disclosure of gender equality policies and the accounting profitability obtained by companies is confirmed by applying a panel data approach. Therefore, this research confirms that it is not only necessary to reduce inequalities, but it also has positive financial effects for companies and is a source of competitive advantage. The findings obtained have significant implications for business management.

1. Introduction

In the 21st century, women have a greater participation in social, labour, political and economic aspects (Goldin, 2006). Women perform management tasks in companies and play an important role as entrepreneurs (Tresierra Tanaka et al., 2016), but there is still much to be done, especially in some regions of the world (Obisesan and Olayide, 2021; Minyangu et al., 2021). Along these lines, the incorporation of gender equality and women's empowerment as 5th Sustainable Development Goals (SDG) highlights the importance of this objective in order to achieve a society where women's participation at all levels is a fact (Abou-Shouk et al., 2021).

In the academic field, there is no consensus on how to approach the analysis of gender equality: from a sociological perspective, from the perspective of equal rights or from the perspective of the benefits that this entails, among others (Kompa and Witkowska, 2018), as in the case of Corporate Social Responsibility (CSR) analysis. The World Health Organization (WHO) defines gender equality as “the roles, characteristics and opportunities defined by society that are considered appropriate for men, women, boys, girls and people with non-binary identities” (WHO, 2021) and considers it a dynamic concept over time. What is clear is that there is a growing interest in the study of gender equality and diversity (Setó-Pamies, 2015; Kompa and Witkowska, 2018). Gender equality is a concept that has been approached from different perspectives and theories, there is not unanimity about the definition of equality or gender

diversity (Blanco-González et al., 2020). In addition, social changes such as wage gaps (Christofides et al., 2010; García Martín and Herrero, 2019) or barriers to the development of professional careers (Hernández-Nicolás et al., 2016) result in disclosure of non-financial information related to gender equality acquiring a greater role (Cucari et al., 2017; Furlotti et al., 2019). For this reason, it is necessary to establish a theoretical framework on what gender equality policies are without entering into conflict, since the objective is to demonstrate that their disclosure is not only positive because it reduces inequalities, but because it also has an impact on the company's performance. In addition, this research aims to demonstrate the impact of these policies at all hierarchical levels in the company, and not only on management positions, which the previous literature analyses to a greater extent (Ekadah and Kiweu, 2012; Baixauli-Soler et al., 2016; Cucari et al., 2017; Romano et al., 2020; Gutiérrez-Fernández and Fernández-Torres, 2020).

The importance of disclosing CSR information has a positive impact on the on the company's transparency (Ioannou and Serafeim, 2011), commercial profits (Nekhili et al., 2017; Buallay et al., 2020) or stock prices (Reverte, 2016). However, the impact of the dissemination of gender equality policies has hardly been studied. Previous authors analyse women on boards of directors (Cabrera-Fernández et al., 2016; Nguyen et al., 2020), communication and legitimacy (Miotto and Vilajoana-Alejandre, 2019), governance and emotional intelligence (Báez et al., 2018), risk perception (Hernández-Nicolás et al., 2016), corporate reputation (Navarro-García et al., 2020), gender and social

* Corresponding author.

E-mail address: alicia.blanco@urjc.es (A. Blanco-González).

responsibility (Amorelli and García-Sánchez, 2021) and information disclosure (Pucheta-Martínez, Gallego-Álvarez and Bel-Oms, 2021). Although previous studies have suggested that disclosure of gender equality policies developed in the company is a source of competitive advantages (Brusca-Alijarde et al., 2017), not only economically, but as a sign of commitment to stakeholders (Escamilla-Solano et al., 2016; Faisal et al., 2020), no previous studies have been found that empirically link disclosure of gender equality policies with business profitability.

This study analyses the impact that disclosing gender equality policies developed in companies has on its profitability. To achieve this objective, a sample of 91 companies listed on the Spanish stock market from 2016 to 2018 were selected, extracting information on disclosure of gender equality policies from the companies' sustainability reports, and the economic-financial information from SABI database. By applying a panel data approach, we test that disclosure of gender equality policies has a positive impact on Return on Equity (ROE) and Return on Assets (ROA), demonstrating that gender equality policy disclosure contributes to accounting business performance. However, we have not found significant effects on stock market profitability. The main finding of this research is that the disclosure has no impact on the stock market profitability because it reflects the expectations of long-term income. However, disclosure generates competitive advantages that generate social value, which will indirectly impact profitability. Therefore, companies must disclose and implement gender equality policies.

The study is structured as follows: firstly, we present the review of the literature related to the study. Secondly, we present the sample and methodology applied to the empirical study. Finally, we explain the results and conclusions drawn from the study.

2. Literature review

The incorporation of women into the workplace and the social and economic environment took place gradually throughout the 20th century, becoming more clearly consolidated at the beginning of the 21st century (Goldin, 2006). According to Goldin (2006), 4 phases can be distinguished: the first ones are considered evolutionary and the last one, which begins at the end of the 1970s, is revolutionary as it involves a change of thought, going from mere incorporation to work to increasing women's education due to entering university. This means that women make decisions under two complementary concepts: "time horizon and investment in human capital" (Goldin, 2006: 2). Despite the incorporation of women into the labour market during all this time, this has not resulted in a greater presence of women in managerial positions (Blanco-González et al., 2020; Moreira et al., 2019). In 2020 in Spain women held 6.1% of managerial positions and 29.3% of positions on the director board (ine.es, 2021). The establishment of the so-called glass ceiling argues that there is a low promotion of women as they are more likely to have to interrupt their professional careers for family reasons (Hernández-Nicolás et al., 2016).

The popularity that this field of study is gaining is supported by greater concern by governments to establish minimum regulations, in which equality of opportunity, gender and non-discrimination is regulated in some way. In this regard, in Spain this is found in the Organic Law 3/2007, of 22 March, for the effective equality of women and men. Hence, until not so long ago, studies on gender diversity and equality policies were studied within CSR, since this field of study was defined within the social dimension of the company as a form of analysis of the company's human capital (Escamilla-Solano et al., 2016; Galbreath, 2018; Sial et al., 2018). Due to a growing interest in the governance of companies and the existing gap between men and women, both in terms of salary and access to a job or work resignation in the case of conciliation, numerous specific studies have emerged on whether gender equality and diversity affects business profitability.

The study of the relationship between gender equality and business profitability does not reach a clear consensus (Hernández-Ortiz et al., 2020), caused either by the choice of how to measure business

profitability, or by how the impact of gender on profitability can be approached from different theories: Stakeholder Theory, Agency Theory, Institutional Theory or the Resources and Capabilities Theory. Carter et al. (2003) and Catalyst (2004) analyse the companies included in the Fortune 500. The former finds a positive relationship between the percentage of female directors on boards and Tobin's q, and the latter reaches the same conclusion, but in this case, taking the Total Shareholder Return (TSR) and ROA as performance measures. Smith et al. (2006) use four profitability proxies to analyse a total of 2,500 Danish companies and find a positive relationship between the female share of seats on boards and the company's results. Campbell and Mínguez-Vera (2008) analyse non-financial companies listed in the Spanish continuous market, finding a positive relationship between the percentage of women holding seats on boards and Tobin's q. As in previous studies, Dezsö and Ross (2012) analyse 1,500 boards of directors of the companies in Standard & Poor's, finding a positive relationship between the presence of female board members and the company's profitability. Hernández-Ortiz et al. (2020) study the relationship between the participation of women on the boards of directors of Spanish agri-food cooperative societies and their profitability, which is measured by ROE and ROA, finding a positive effect between the quota of women on boards of directors and the company's profitability.

In contrast, Hambrick et al. (1996), who carry out an analysis of boards of directors in American airlines, where there is a presence of women, conclude that their presence has a negative effect on the profitability of these companies. Ryan and Haslam (2005) reach a similar conclusion to Hambrick et al. (1996) adding that, in the case of stock market drops, those companies with a high percentage of women on their boards of directors show the worst results. Adams and Ferreira (2009) carry out a study on Swedish companies, concluding that there is a greater market risk when the company is run by a woman. Ajaz et al. (2020) find a negative relationship between gender equality and business profitability. In addition, we found studies that determine that there is no relationship between gender equality in the company and its business profitability, such as Kochan et al. (2003), who study four Fortune 500 companies, analysing how gender diversity can affect business performance, taking several ratios referring to the company's sales and its productivity as a measure of performance. Their findings determine that the relationship between both variables will depend on the context and environment of the company.

In a study of Danish companies, Rose (2007) also found no significant relationship between gender equality and business profitability by taking Tobin's q as a profitability measure. Taking ROE and ROA as measures of business profitability by Marimuthu and Kolandaisamy (2009), they do not find conclusive results when analysing the impact of gender equality on this profitability. Ali et al. (2014) analyse a sample of 288 companies with more than 100 employees included in the Australian Securities Exchange (ASX) with information on gender and age of the boards of directors. Their study does not find a significant relationship between gender and profitability, taking ROA as a variable. Brusca-Alijarde et al. (2017) jointly analyse the effect of CSR and gender equality on the company's profitability by taking ROE, ROA, profit margin and sales evolution as a measure of the company's profitability. In their case, they do not find a significant relationship between gender and profitability either.

Several investigations (Navarro et al., 2010; Escamilla-Solano et al., 2016, 2019; Cucari et al., 2017; Furlotti et al., 2019) establish that companies within their exercise of transparency and commitment should disclose all information, both financial and non-financial, to their different stakeholders, in such a way that it will allow investors to have all the information to know where to put their money. If in addition to this, we include the scandals experienced in recent years in terms of transparency and governance, and society's demand for companies to be more sustainable, efficient and transparent in their management, this resulted in the Union approving Directive 95/2014/EU regarding disclosure of non-financial information and information on diversity by

specific large companies and groups, whose aim is to regulate the information that companies disclose about CSR actions and diversity management that they carry out. The transposition of the directive into Spanish legislation occurs in a first phase with Royal Decree-Law 18/2017, of November 24, and in a second phase with Law 11/2018, of December 28. Article 14 of our 1978 Constitution establishes equality between men and women and non-discrimination based on gender. Organic Law 1/2004, of December 28, on Comprehensive Protection Measures against Gender Violence was the pioneer in Europe, determining that violence is a structural problem of gender inequality. In Spain, the Institute for Women and its ongoing Plans for Equal Opportunities for Women were created, which has led to an important change in terms of equality since its creation. Organic Law 3/2007, of March 22, for the effective equality of women and men was an important turning point in our country, whose goal is to end discrimination against women and achieve equal treatment and opportunities between both genders. Royal Decree-Law 6/2019, of March 1, on urgent measures to guarantee equal treatment and opportunities between women and men in employment and occupation, from March 7, 2021 the companies that have the obligation to develop an equality plan are those that have more than 100 people in their workforce and, from March 7, 2022, it will be mandatory for all companies with a workforce of between 50 and 100 employees.

The application of this directive has opened a debate on whether or not companies do in fact comply with it and what the objective of this compliance is (Caputo and Pizzi, 2019; Dumay et al., 2019). In addition, several investigations have shown the importance of disclosing non-financial information for companies, not only due to complying with this directive, but also as a sign of a commitment to society (Navarro et al., 2010; Gamerschlag et al., 2011; Dhaliwal et al., 2012; Miralles-Quiros et al., 2021) and as a mechanism to reduce information asymmetries that occur in markets (Signal Theory) (Cheng et al., 2014; Saitua, 2015; Romito and Vurro, 2021). Disclosure helps the investor to understand the management of the company and know how these policies can affect their investments (Gershoni and Low, 2021; Martín et al., 2019). In addition, disclosure of non-financial information increases company legitimacy (Wilmshurst and Frost, 2000; Cho and Patten, 2007; Miotto et al., 2020).

A major issue is the impact that CSR policies disclosure can have on business performance. The aim of various studies has been to determine the possible impact of this disclosure on the profitability. Reverte (2016) examines whether companies with higher CSR disclosure ratings are more highly regarded by market participants. Their results show that CSR disclosure has a direct and indirect effect on the price of shares by modifying the relevance of the earnings and book value of shares. Nekhili et al. (2017) investigate the relationship between disclosure of CSR policies and the company's financial performance, measured by Tobin's q, considering the moderating role of family participation. Their findings show that the company's financial performance is positively related to disclosure of social responsibility policies for family businesses. However, in non-family businesses the relationship found is negative.

Chen et al. (2018) examine how mandatory CSR disclosure affects the company's performance (measured by ROE and ROA) and social externalities. They find that companies that submit mandatory social responsibility reports experience a reduction in their profitability after the mandate (García-Sánchez et al., 2020). However, they find a positive effect on the reduction of wastewater and sulphur dioxide. Escamilla-Solano et al. (2019) examine whether CSR disclosure influences the company's profitability. Their results show that disclosure of CSR measures in their social and economic dimension improves business profitability, finding no significant effect on their environmental dimension. Buallay et al. (2020) investigate the relationship between CSR disclosure and business profitability, measured by ROA, ROE, and Tobin's q, from the perspective of stakeholders. The results obtained indicated that CSR disclosure affects operating and market performance negatively but does not affect financial performance. Bovolini Pedron et al. (2021) analyse

whether the level of environmental information disclosure by companies affects their profitability and value. Their results demonstrate that environmental disclosure positively affects the value of companies and highlights the importance of the legitimacy theory and the cost of the ownership theory as part of the decision process regarding disclosure of environmental information.

Faisal et al. (2020) investigate, among other issues, whether the level of disclosure of companies' social and environmental responsibility is valued by investors, finding that the market positively values the information associated with the disclosure of companies' social and environmental responsibility. Gerged et al. (2021) examine the relationship between corporate environmental disclosure and the value of the company, finding that corporate environmental disclosure is significantly and positively related to the value of the company measured by Tobin's q. Sampong et al. (2021) investigate the relationship between voluntary disclosure of social performance and long-term profitability of companies from the perspective of international standards. Their findings show a positive relationship between voluntary disclosure of social performance and long-term profitability.

Different studies have analysed the impact of the establishment of gender equality policies in companies (Blanco-González et al., 2020). Other studies have shown the impact of disclosure of CSR policies on business performance (Bertrand et al., 2018; Fernández-Temprano and Tejerina-Gaite, 2020). However, there is not an analyse the relationship between disclosure of gender equality policies and business performance. This study aims to fill this gap found in the literature. We demonstrate whether disclosure of equality policies improves business performance. Therefore, the following hypotheses are proposed:

- *Hypothesis 1. Disclosure of equality policies has a positive impact on business profitability.*
- *Hypothesis 1.a. Disclosure of equality policies has a positive impact on Return on Assets (ROA).*
- *Hypothesis 1.b. Disclosure of equality policies has a positive impact on Return on Equity (ROE).*
- *Hypothesis 1.c. Disclosure of equality policies has a positive impact on Tobin's q.*

3. Sample and methodology

3.1. Sample

To analyse the effects of disclosure of gender equality policies on business profitability, companies listed on the Spanish Continuous Market were selected. Following Royal Decree Law 18/2017, these companies must present the not financial report. We select the companies whose economic-financial information is available in the SABI database, obtaining a sample of 91 companies for the period 2016–2018. The number of companies studied by sector can be seen in Table 1 according to BvD (Bureau van Dijk) sectors.

To measure disclosure of gender equality policies in companies, we analysed the content of the sustainability reports of the companies in the sample according to the Global Reporting Initiative (GRI) (Furlotti et al., 2019; Miotto et al., 2019; Escamilla-Solano et al., 2019; Creixans-Tenas et al., 2019; García-Sánchez et al., 2020). According to the GRI section "Standard of diversity and equal opportunity", companies have to disclose information on the level of diversity and the percentage of employees by job category in their sustainability reports. The disclosure of gender equality policies variable can take two possible values: 1 if the company does not disclose information on gender equality policies, and 2 if the company discloses information on gender equality policies.

The ratios ROA, ROE and Tobin's q (Table 2) were selected as the different business profitability measures for this study. The ROA measure was selected to represent the profitability generated by the company, regardless of how it is distributed. ROA has been the most widely used accounting performance measure to measure business performance

Table 1. Sample composition according to BvD sectors.

BvD Sector	Sample
Banking, Insurance & Financial Services	1
Biotechnology and Life Sciences	1
Business Services	7
Chemicals, Petroleum, Rubber & Plastic	7
Communications	5
Computer Software	1
Construction	6
Food & Tobacco Manufacturing	7
Industrial, Electric & Electronic Machinery	4
Leather, Stone, Clay & Glass products	1
Media & Broadcasting	2
Metals & Metal Products	6
Mining & Extraction	2
Printing & Publishing	1
Property Services	11
Public Administration, Education, Health Social Services	3
Retail	1
Textiles & Clothing Manufacturing	1
Transport Manufacturing	7
Travel, Personal & Leisure	4
Utilities	7
Wholesale	1
Wood, Furniture & Paper Manufacturing	5
Total	91

Table 2. Definition of the variables studied.

Variable	Acronym	Definition
Equality disclosure measures	Equality	Non-disclosure of equality policies (1) Disclosure of equality policies (2)
Economic Profitability (ROA)	ROA	Result before interest and taxes divided by total assets
Financial Profitability (ROE)	ROE	Net result divided by equity
Tobin Q	TobinQ	Market capitalization divided by total assets
Size	Size	Natural logarithm of total assets
Asset Turnover	Turnover	Sales divided by total assets
Liquidity Ratio	Liquidity	Current assets minus stock and divided by current liabilities
Financial Autonomy Ratio	Autonomy	Equity divided by total liabilities

because it is relatively difficult to be manipulated by the company's management (Gómez-Mejía and Palich, 1997). This ratio has been used, among others, by Bhattacharyya et al. (2019) and Escamilla-Solano et al. (2019). The ROE measure was selected to represent the accounting profitability obtained by shareholders. It is the most widely used measure of business accounting performance after ROA. ROE has been used, among others, by Kabir and Thai (2017) and Onofrei et al. (2019). And finally, we use Tobin's q, which compared to the previous measures that are based solely on accounting measures, it reflects the market value of the company (Kabir and Thai, 2017), allowing us to capture market perceptions about the present and future performance of companies. Tobin's q has been used as a business profitability measure, among others, by Giraldez-Puig and Berenguer (2018) and Kim and Lee (2020).

The following have been included as control variables in this study: size (Bhattacharyya et al., 2019; Kim and Lee, 2020), the asset turnover ratio (Bhattacharyya et al., 2019; Kim and Lee, 2020), the liquidity ratio (Giraldez-Puig and Berenguer, 2018; Onofrei et al., 2019) and the financial autonomy ratio (Giraldez-Puig and Berenguer, 2018;

Bhattacharyya et al., 2019) (Table 2). These measures and the profitability variables were obtained from the SABI database.

3.2. Methodology

To identify the influence of disclosure of gender equality policies on business profitability, in this study, we applied a descriptive analysis of the variables under study and a panel data analysis to establish causality. The panel data approach enables to evaluate the explanatory capacity of some variables over others when data that combine a temporal dimension with another transversal dimension are available, processing the data set of each unit of analysis independently over time, which is known as individual effects. Within the panel data analysis, we selected multiple regression analysis with weighted least squares as an estimator to deal with the heteroscedasticity problem. Due to the fact that heteroscedasticity tends to exist in regression analysis among companies, applying weighted least squares is adequate, while it also eliminates the need to fulfil the hypothesis of constant residual of regression analysis (Kleinbaum et al., 1988).

Thus, the models proposed in this study to analyse the impact of disclosure of gender equality policies on ROA, ROE and Tobin's q are the following:

$$ROA_{it} = \alpha + \beta_1 Equality_{it} + \beta_2 Size_{it} + \beta_3 Turnover_{it} + \beta_4 Liquidity_{it} + \beta_5 Autonomy_{it} + w_i + \epsilon_{it}, \quad t = 1, 2, \dots, T. \quad (1)$$

$$ROE_{it} = \alpha + \beta_1 Equality_{it} + \beta_2 Size_{it} + \beta_3 Turnover_{it} + \beta_4 Liquidity_{it} + \beta_5 Autonomy_{it} + w_i + \epsilon_{it}, \quad t = 1, 2, \dots, T. \quad (2)$$

$$TobinQ_{it} = \alpha + \beta_1 Equality_{it} + \beta_2 Size_{it} + \beta_3 Turnover_{it} + \beta_4 Liquidity_{it} + \beta_5 Autonomy_{it} + w_i + \epsilon_{it}, \quad t = 1, 2, \dots, T. \quad (3)$$

Where ROA_{it} , ROE_{it} and $TobinQ_{it}$ represent the profitability measures ROA, ROE and Tobin's q of company i in year t, α is the independent parameter of the model, β_k measures the influence of variable k on business profitability and $Equality_{it}$, $Size_{it}$, $Turnover_{it}$, $Liquidity_{it}$ and $Autonomy_{it}$ represent the value of the variables Equality, Size, Turnover, Liquidity and Autonomy of company i in year t, w_i is a random variable representative of the individual effects, and ϵ_{it} represents the error term.

4. Results

4.1. Descriptive analysis

According to the descriptive statistics of the variables under study (Table 3), most of the companies analysed apply gender equality policies (average 1.6081). The profitability measures take average values of 5.96% for ROA, 6.21% for ROE and 0.9372 for Tobin's q, with ROE being the profitability variable that shows the highest dispersion (C.V. = 9.0722). Regarding the control variables, it is found that the average size is 14,393, the average asset turnover is 1.1125, the average liquidity is

Table 3. Descriptive statistics of the variables studied.

Variable	Mean	Median	Minimum	Maximum	Std. Dev.	C.V.
Equality	1.6081	2.0000	1.0000	2.0000	0.4891	0.3041
ROA	0.0596	0.0446	-0.4103	0.7423	0.1073	1.8018
ROE	0.0621	0.0998	-8.2431	1.4199	0.5632	9.0722
TobinQ	0.9372	0.6050	0.0000	6.5930	1.0210	1.0894
Size	14.393	14.293	10.427	18.743	2.1050	0.1463
Turnover	1.1125	0.8320	0.0050	11.358	1.4315	1.2867
Liquidity	1.9593	1.0620	0.0260	82.206	5.9890	3.0568
Autonomy	0.5878	0.6132	0.0052	0.9816	0.2104	0.3580

1.9593 and the average level of financial autonomy is 0.5878, with the liquidity ratio being the most volatile control variable ($CV = 3.0568$).

Table 4 shows the bivariate correlations between the variables under study. It is shown that disclosure of gender equality policies is positively correlated with the size of the company, asset turnover and the level of leverage. Thus, larger, more efficient and less leveraged companies are more likely to implement and disclose equality policies.

Regarding the profitability variables, it is shown that they are positively and significantly correlated with each other. Considering the correlation between the three profitability measures and the control variables it is shown that ROA and Tobin's q are negatively and significantly correlated with size, and positively and significantly correlated with asset turnover. Regarding liquidity and financial autonomy, it is shown that the three profitability measures correlate positively and significantly with liquidity and negatively and significantly with financial autonomy. Thus, it is found that the smaller the size and the higher the turnover, the higher the economic and stock market profitability, while the higher the liquidity and the higher the leverage, the higher the business profitability.

And finally, when analysing the bivariate correlations between the control variables, it is shown that size is negatively and significantly correlated with liquidity and positively and significantly correlated with financial autonomy. In turn, asset turnover is negatively and significantly correlated with liquidity and positively and significantly correlated with financial autonomy. In addition, liquidity is negatively and significantly correlated with financial autonomy.

4.2. Panel data analysis

Table 5 shows that by controlling the effects of size, asset turnover, liquidity and financial autonomy, disclosure of gender equality policies has a positive and significant impact on ROA and ROE, especially on the latter (0.0066 vs. 0.0389). Likewise, when considering R^2 , it is shown that the specified models are adequate, finding that they have an explanatory capacity on ROA and ROE of 84% and 30%, respectively.

The results obtained when taking into account ROA and ROE allow us to accept hypothesis 1.a and hypothesis 1.b, as they show that disclosure of gender equality policies has benefits for the company's accounting profitability. This finding is consistent with what was obtained by studies that defend that gender equality in the business environment has positive impacts on the profitability of companies. However, when we consider the impact of disclosure of gender equality policies on stock market profitability by taking Tobin's q, no significant impact is found, rejecting hypothesis 1.c. Although the model has adequate explanatory power (41%), it shows that although size, asset turnover, liquidity and financial autonomy have a significant impact on Tobin's q, disclosure of gender equality policies does not have this impact. Therefore, we can conclude that disclosure of gender equality policies neither benefits nor harms stock profitability.

The discrepancies detected regarding the impact of disclosure of gender equality policies on economic and financial profitability, and

stock market profitability may explain the different effects found in previous studies that analyse gender equality on business profitability. One possible explanation that we propose in this study lies in the temporal scope of the profitability measures studied. Thus, while ROA and ROE reflect the profitability obtained by the company at a specific point in time, the stock market profitability measured by Tobin's q has a longer-term scope, with stock market capitalization variations reflecting both present and future market expectations in terms of the company's capability to generate revenue.

5. Implications

Women's changing role within the family and professionally has generated greater concern related both with equal opportunities within the company and in their salary level, observing a wage gap and discrimination when being promoted within the company (Amorelli and García-Sánchez, 2021). Hence, the importance that the implementation of gender equality policies within companies has acquired, which has been materialized in the proliferation of academic studies developed over the last two decades (Fernández-Temprano and Tejerina-Gaite, 2020). If we add to this that one of the priorities of the 2030 Sustainable Agenda is to reduce the gender gap and that governments have enacted regulations in favour of the establishment of gender equality policies (Miotto et al., 2020), these types of studies are more relevant both for companies and society itself.

Within the academic literature, the study of the implications that the implementation of gender equality policies has on business performance has received special interest (Gershoni and Low, 2021). The literature review carried out on whether gender equality policies have an impact on business profitability has shown that there is still much to be done, not finding a broad enough consensus that this impact is positive, which results in the need to carry out an in-depth analysis of the current context (Nguyen et al., 2020).

Another important factor is the role played by disclosure of non-financial information by companies, especially as a result of the approval of Directive 95/2014/EU, generating a debate on whether this disclosure leads to an improvement in the company's results. In this regard, previous studies have focused on the influence that disclosure of CSR policies has on business performance (Moreira et al., 2019). However, as far as we are aware of, no studies have been found that focus solely on disclosure on gender policies (Furlotti et al., 2019).

The relevance and novelty of this study lies in filling the gap found in the literature, pursuing the objective of demonstrating the possible impact of disclosure of gender equality policies on business profitability. To achieve the proposed objective, we selected a sample of 91 companies listed on the Spanish stock market during the period 2016–2018. To determine whether these companies disclose information regarding the implementation of gender equality policies, a content analysis of the sustainability reports of these companies was performed (García-Sánchez et al., 2020). And as representative measures of business profitability, ROA and ROE were taken to evaluate the impact of disclosure of gender

Table 4. Matrix of bivariate correlations of the variables studied.

Variable	Equality	ROA	ROE	TobinQ	Size	Turnover	Liquidity	Autonomy
Equality	1							
ROA	-0.017 (0.780)	1						
ROE	0.084 (0.167)	0.552*** (0.000)	1					
TobinQ	-0.079 (0.196)	0.674*** (0.000)	0.162*** (0.007)	1				
Size	0.545*** (0.000)	-0.143** (0.018)	0.042 (0.486)	-0.259*** (0.000)	1			
Turnover	0.132** (0.030)	0.156*** (0.010)	0.084 (0.169)	0.128** (0.035)	-0.021 (0.726)	1		
Liquidity	-0.060 (0.322)	0.087 (0.151)	0.015 (0.805)	0.078 (0.201)	-0.074 (0.225)	-0.110* (0.071)	1	
Autonomy	0.170*** (0.005)	-0.373*** (0.000)	-0.152** (0.012)	-0.343*** (0.000)	0.328*** (0.000)	0.227*** (0.000)	-0.346*** (0.000)	1

Note: ***, ** and * indicate the significance at 1%, 5% and 10% levels, respectively.

Table 5. Influence of disclosure of equality policies on business profitability using panel data analysis with weighted least squares.

Variable	ROA _t		ROE _t		TobinQ _t	
	Coef. (p value)	Std. Dev.	Coef. (p value)	Std. Dev.	Coef. (p value)	Std. Dev.
Const.	0.1530*** (0.000)	0.0137	-0.0303 (0.478)	0.0426	2.3642*** (0.000)	0.1658
Equality _t	0.0066* (0.070)	0.0036	0.0389*** (0.004)	0.0133	0.0622 (0.301)	0.0600
Size _t	0.0010 (0.404)	0.0012	0.0153*** (0.000)	0.0037	-0.0708*** (0.000)	0.0138
Turnover _t	0.0118*** (0.000)	0.0025	0.0286*** (0.000)	0.0042	0.1028*** (0.000)	0.0227
Liquidity _t	-0.0011** (0.016)	0.0005	-0.0011 (0.537)	0.0017	-0.0146* (0.094)	0.0087
Autonomy _t	-0.2234*** (0.000)	0.0078	-0.3306*** (0.000)	0.0339	-1.2689*** (0.000)	0.1245
F Statistic (p value)	282.4381*** (0.000)		23.6964*** (0.000)		37.5375*** (0.000)	
R ²	0.8410		0.3074		0.4128	
R ² corr.	0.8380		0.2944		0.4018	

*p < 0.05; **p < 0.01; ***p < 0.001.

equality policies on accounting profitability, and Tobin's q was taken to analyse this impact on stock market profitability.

The results obtained by applying a panel data approach show that disclosure of gender equality policies has a positive and significant impact on ROA (hypothesis 1.a) and ROE (hypothesis 1.b), showing, therefore, that disclosure of gender equality policies has benefits for companies in terms of accounting profitability. Thus, it is shown that disclosure of gender equality policies results in an increase in the profitability of companies without considering their financing and an increase in shareholder profitability. However, when considering the stock market profitability measured by Tobin's q, a significant impact of disclosure of gender equality policies has not been found on this measure. A possible explanation for the latter may lie in the fact that stock market profitability reflects long-term income expectations (hypothesis 1.c).

The results show that disclosure of gender equality policies does not have negative impacts on the profitability of companies, dispelling myths as to the possible "damages" of the incorporation of gender equality policies in companies. In addition, we demonstrate how in accounting terms, disclosure of gender equality policies contributes to increasing business profitability, so disclosure of these measures is in turn, a source of competitive advantage.

The results have significant implications for business management. The fact that disclosure of gender equality policies has a positive impact on the company's accounting results shows that establishing gender equality policies not only contributes to reducing social inequalities, but their disclosure also has an economic benefit for the company. Even when focusing on stock market performance, although it has not been possible to demonstrate that disclosure of gender equality policies has an impact on an increase in the stock market value of companies, no damage has been shown towards it, so there are no reasons against the implementation and disclosure of gender equality policies in companies. The main implications of the study are the following: (1) although there is no significant impact of the disclosure of gender equality policies on stock market profitability, there are no impediments to betting on the disclosure of these policies because it has an impact on the accounting profitability; and (2) the disclosure of this type of information is a source of competitive advantage with respect to those companies that do not bet on the disclosure of CSR information and, therefore, of the company's gender equality policies.

Finally, we are aware of the limitations of this study, since the sample is made up of 91 listed companies of one country. This lack of diversity in the sample encourages future researchers to investigate and compare the results obtained in this study by considering a larger sample of companies, including companies from other countries, analysing KPI and GRI's DMAs or by extending the years studied. In the latter case, it would be interesting for future studies to evaluate the role that the Covid-19 crisis may have had in the relationship found. On the other hand, the different results obtained regarding the impact of disclosure of gender equality policies on accounting and stock market profitability motivate

further research on the valuation that investors assign to the information provided by companies regarding the establishment of gender equality policies.

Declarations

Author contribution statement

Sandra Escamilla-Solano and Jessica Paule-Vianez: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Alicia Blanco-González: Conceived and designed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Funding statement

This work was supported by Ayuda Puente 2019, URJC.

Data availability statement

The authors do not have permission to share data.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

Acknowledgements

AYUDA PUENTE 2019, URJC.

References

- Abou-Shouk, M.A., Taha, M., Elbaz, A.M., 2021. Women's empowerment and tourism development: a cross-country study. *Tourism Management Perspectives*. *Tourism Manag. Perspect.* 37, 100782.
- Adams, R.B., Ferreira, D., 2009. Women in the boardroom and their impact on governance and performance. *J. Financ. Econ.* 94 (2), 291–309.
- Ajaz, A., Shenbei, Z., Sarfraz, M., 2020. Delineating the influence of boardroom gender diversity on corporate social responsibility, financial performance, and reputation. *LogForum* 16 (1), 61–74.
- Ali, M., Ng, Y.L., Kulik, C.T., 2014. Board age and gender diversity: a test of competing linear and curvilinear predictions. *J. Bus. Ethics* 125 (3), 497–512.
- Amorelli, M.F., García-Sánchez, I.M., 2021. Trends in the dynamic evolution of board gender diversity and corporate social responsibility. *Corp. Soc. Responsib. Environ. Manag.*

- Baixaui-Soler, J.S., Lucas-Perez, M.E., Martin-Ugedo, J.F., Mínguez-Vera, A., Sanchez-Marin, G., 2016. Executive directors' compensation and monitoring: the influence of gender diversity on Spanish boards. *J. Bus. Econ.* 17 (6), 1133–1154.
- Báez, A.B., Báez-García, A.J., Flores-Muñoz, F., Gutiérrez-Barroso, J., 2018. Gender diversity, corporate governance and firm behavior: the challenge of emotional management. *Eur. Res. Manag. Bus. Econ.* 24 (3), 121–129.
- Bertrand, M., Black, S.E., Jensen, S., Lleras-Muney, A., 2018. Breaking the glass ceiling? The effect of board quotas on female labour market outcomes in Norway. *Rev. Econ. Stud.* 86 (1), 191–239.
- Bhattacharyya, A., Wright, S., Rahman, M.L., 2019. Is better banking performance associated with financial inclusion and mandated CSR expenditure in a developing country? *Account. Finance* 61 (1), 125–161.
- Blanco-González, A., Miotto, G., Díez-Martín, F., Prado-Román, C., 2020. Relationship between equality policies and moral legitimacy according to experts' perceptions. *Tripodos* 48, 103–116.
- Bovolini Pedron, A.P., Macagnan, C.B., Souza, D.S., Vancin, D.F., 2021. Environmental disclosure effects on returns and market value. *Environ. Dev. Sustain.* 23, 1–20.
- Brusca-Alijarde, I., Labrador-Barrafon, 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.
- Buallay, A., Kukreja, G., Aldhaen, E., Al Mubarak, M., Hamdan, A.M., 2020. Corporate social responsibility disclosure and firms' performance in Mediterranean countries: a stakeholders' perspective. *EuroMed J. Bus.* 15 (3), 361–375.
- Cabrera-Fernández, A.L., Martínez-Jiménez, R., Hernández-Ortiz, M.J., 2016. Women's participation on boards of directors: a review of the literature. *Int. J. Gen. Entrepreneurship* 8 (1), 69–89.
- Campbell, K., Mínguez-Vera, A., 2008. Gender diversity in the boardroom and firm financial performance. *J. Bus. Ethics* 83 (3), 435–451.
- Caputo, F., Pizzi, S., 2019. Ethical firms and web reporting: empirical evidence about the voluntary adoption of the Italian "legality rating". *Int. J. Bus. Manag.* 14, 36–45.
- Carter, D.A., Simkins, B.J., Simpson, W.G., 2003. Corporate governance, board diversity, and firm value. *Financ. Rev.* 38 (1), 33–53.
- Catalyst, 2004. *The Bottom Line: Connecting Corporate Performance and Gender Diversity*. Catalyst, New York. Retrieved from: www.catalystwomen.org.
- Chen, Y.C., Hung, M., Wang, Y., 2018. The effect of mandatory CSR disclosure on firm profitability and social externalities: evidence from China. *J. Account. Econ.* 65 (1), 169–190.
- Cheng, B., Ioannou, I., Serafeim, G., 2014. Corporate social responsibility and access to finance. *Strateg. Manag.* 35 (1), 1–23.
- Cho, C.H., Patten, D.M., 2007. The role of environmental disclosures as tools of legitimacy: a research note. *Account. Org. Soc.* 32 (7–8), 639–647.
- Christofides, L.N., Polycarou, A., Vrachimis, K., 2010. *The Gender Wage Gaps, Sticky Floors' And/glass Ceilings' of the European Union*. IZA Discussion Paper No. 5044, Available at SSRN: <https://ssrn.com/abstract=1638480>.
- Creixans-Tenas, J., Coenders, G., Arimany-Serrat, N., 2019. Corporate social responsibility and financial profile of Spanish private hospitals. *Heliyon* 5 (10), e02623.
- Cucari, N., Esposito, S., Orlando, B., 2017. Diversity of board of directors and environmental social governance: evidence from Italian listed companies. *Corp. Soc. Responsib. Environ. Manag.* 25 (3), 250–266.
- Dezsö, C.L., Ross, D.G., 2012. Does female representation in top management improve firm performance? A panel data investigation. *Strat. Manag. J.* 33 (9), 1072–1089.
- Dhaliwal, D.S., Radhakrishnan, S., Tsang, A., Yang, Y.G., 2012. Divulgación no financiera y precisión del pronóstico del analista: evidencia internacional sobre divulgación de responsabilidad social corporativa. *Account. Rev.* 87 (3), 723–759.
- Dumay, J., La Torre, M., Farneti, F., 2019. Developing trust through stewardship: implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU. *Intellect. Cap* 20 (1), 11–39.
- Ekadah, J.W., Kiweu, J.M., 2012. Effect of board gender diversity on the performance of commercial banks in Kenya. *Eur. Sci. J.* 8 (7), 128–148.
- Escamilla-Solano, S., Fernández-Portillo, A., Paule-Vianez, J., Plaza-Casado, P., 2019. Effect of the disclosure of corporate social responsibility on business profitability. A dimensional analysis in the Spanish stock market. *Sustainability* 11 (23), 6732.
- Escamilla-Solano, S., Plaza-Casado, P., Flores-Ureba, S., 2016. Análisis de la divulgación de la información sobre la responsabilidad social corporativa en las empresas de transporte público urbano en España. *Spanish Account. Rev.* 19 (2), 195–203.
- Faisal, F., Situmorang, L.S., Achmad, T., Prastiwi, A., 2020. The role of government regulations in enhancing corporate social responsibility disclosure and firm value. *J. Asian Fin. Econ. Bus.* 7 (8), 509–518.
- Fernández-Temprano, M.A., Tejerina-Gaite, F., 2020. Types of director, board diversity and firm performance. *Corp. Govern.: Int. J. Bus. Soc.* 20 (2), 324–342.
- Furlotti, K., Mazza, T., Tibiletti, V., Triani, S., 2019. Women in top positions on boards of directors: gender policies disclosed in Italian sustainability reporting. *Corp. Soc. Responsib. Environ. Manag.* 26 (1), 57–70.
- Galbreath, J., 2018. Is board gender diversity linked to financial performance? The mediating mechanism of CSR. *Bus. Soc.* 57 (5), 863–889.
- Gamerschlag, R., Möller, K., Verbeeten, F., 2011. Determinants of voluntary CSR disclosure: empirical evidence from Germany. *Rev. Manag. Sci.* 5 (2–3), 233–262.
- García Martín, C.J., Herrero, B., 2019. La mujer en los consejos de administración: evidencia para el mercado bursátil español. *Trimestre Económico* 86 (342), 235–264.
- García-Sánchez, I., Oliveira, M.C., Martínez-Ferrero, J., 2020. Female directors and gender issues reporting: the impact of stakeholder engagement at country level. *Corp. Soc. Responsib. Environ. Manag.* 27 (1), 369–382.
- Gerged, A.M., Beddewela, E., Cowton, C.J., 2021. Is corporate environmental disclosure associated with firm value? A multicountry study of Gulf Cooperation Council firms. *Bus. Strat. Environ.* 30 (1), 185–203.
- Gershoni, N., Low, C., 2021. The power of time: the impact of free IVF on Women's human capital investments. *Eur. Econ. Rev.* 133, 103645.
- Giraldez-Puig, P., Berenguer, E., 2018. Family female executives and firm financial performance. *Sustainability* 10 (11), 4163.
- Goldin, C., 2006. The quiet revolution that transformed women's employment, education, and family. *Am. Econ. Rev.* 96 (2), 1–21.
- Gómez-Mejía, L.R., Palich, L.E., 1997. Cultural diversity and the performance of multinational firms. *J. Int. Bus. Stud.* 28 (2), 309–335.
- Gutiérrez-Fernández, M., Fernández-Torres, Y., 2020. Does gender diversity influence business efficiency? An analysis from the social perspective of CSR. *Sustainability* 12 (9), 3865.
- Hambrick, D.C., Cho, T.S., Chen, M.J., 1996. The influence of top management team heterogeneity on firms' competitive moves. *Adm. Sci.* 41, 659–684.
- Hernández-Nicolás, C.M., Martín Ugedo, J.F., Mínguez Vera, A., 2016. La influencia del género en la dirección de las sociedades cooperativas españolas sobre la rentabilidad y el endeudamiento: un análisis empírico. *Revesco* 122, 135–164.
- Hernández-Ortiz, M.J., García-Martí, E., Martínez-Jiménez, R., Pedosa-Ortega, C., Ruiz-Jiménez, C., 2020. El efecto de la diversidad de género sobre el rendimiento de las sociedades cooperativas agroalimentarias españolas. *Revesco* 133, 51–60.
- Ioannou, I., Serafeim, G., 2011. *The Consequences of Mandatory Corporate Sustainability Reporting*. Harvard Business School. Working Paper 11-100. Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1799589.
- Kabir, R., Thai, H.M., 2017. Does corporate governance shape the relationship between corporate social responsibility and financial performance? *Pacific Account. Rev.* 29 (1), 227–258.
- Kim, B., Lee, S., 2020. The impact of material and immaterial sustainability on firm performance: the moderating role of franchising strategy. *Tourism Manag.* 77, 103999.
- Kleinbaum, D.G., Kupper, L.L., Muller, K.E., 1988. *Applied Regression Analysis and Other Multivariate Methods*, second ed. PWS-Kent, Boston, MA.
- Kochan, T., Bezrukova, K., Ely, R., Jackson, S., Joshi, A., Jehn, K., Thomas, D., 2003. The effects of diversity on business performance: report of the diversity research network. *Hum. Resour. Manag.* 42 (1), 3–21.
- Kompa, K., Witkowska, D., 2018. Factors affecting men's and women's earnings in Poland. *Econ. Res-Ekon Istraz* 31 (1), 252–269.
- Marimuthu, M., Kolandaisamy, I., 2009. Ethnic and gender diversity in boards of directors and their relevance to financial performance of Malaysian companies. *Sustain. Dev.* 2 (3), 139–148.
- Martín, I.M., García, P., Granada, M.C., Rodríguez-Ariza, L., 2019. La divulgación de información no financiera en España. *Gestion: Rev. Econ.* 69, 15–19.
- Minyangu, M.P., Ngeuzet, P.M.D., Masirika, S.A., Adeniyi, A., Olayide, O.E., Kaghoma, C.K., 2021. Understanding gender-based differences in the engagement of the youth in agribusiness in South-Kivu province, Democratic Republic of Congo. *Bus. Strat. Environ.* 4 (1), 11–21.
- Miotto, G., Blanco-González, A., Díez-Martín, 2020. Top business school's legitimacy quest through the Sustainable Development Goals. *Heliyon* 6 (11), e05395.
- Miotto, G., Polo López, M., Rom Rodríguez, J., 2019. Gender equality and UN sustainable development goals: priorities and correlations in the top business schools' communication and legitimation strategies. *Sustainability* 11 (2), 302.
- Miralles Quiros, M.M., Miralles Quiros, J.L., Daza Izquierdo, J., 2021. The assurance of sustainability reports and their impact on stock market prices. *Manag. Lett.* 21 (1), 47–60.
- Moreira, J., Marques, C.S., Braga, A., Ratten, V., 2019. A systematic review of women's entrepreneurship and internationalization literature. *Thunderbird Int. Bus. Rev.* 61 (4), 635–648.
- Navarro, A., Alcaraz, F.J., Ortiz, D., 2010. La divulgación de información sobre responsabilidad corporativa en administraciones públicas: un estudio empírico en gobiernos locales. *Spanish Account. Rev.* 13 (2), 285–314.
- Navarro-García, J.C., Ramón-Llorens, M.C., García-Meca, E., 2020. Female directors and corporate reputation. *BRQ Bus. Res. Q.*
- Nekhili, M., Nagati, H., Chtioui, T., Rebolledo, C., 2017. Corporate social responsibility disclosure and market value: family versus nonfamily firms. *J. Bus. Res.* 77, 41–52.
- Nguyen, T.H.H., Ntim, C.G., Malagila, J.K., 2020. Women on corporate boards and corporate financial and non-financial performance: a systematic literature review and future research agenda. *Int. Rev. Financ. Anal.* 7, 101554.
- Obisesan, O.O., Olayide, O.E., 2021. Asymmetric information, business environment, and transactions costs among business owners in Nigeria: implications for female entrepreneurial sustainability transitions. *Bus. Strat. Environ.* 4 (1), 34–40.
- Onofrei, M., Firtescu, B.-N., Terinte, P.-A., 2019. CEO quality and firm profitability. Evidence from emerging Europe. *Rom. Stat. Rev.* (2), 85–102.
- Pucheta-Martínez, M.C., Gallego-Álvarez, I., Bel-Oms, I., 2021. Corporate social and environmental disclosure as a sustainable development tool provided by board sub-committees: do women directors play a relevant moderating role? *Bus. Strat. Environ.*
- Reverte, C., 2016. Corporate social responsibility disclosure and market valuation: evidence from Spanish listed firms. *Rev. Manag. Sci.* 10 (2), 411–435.
- Romano, M., Cirillo, A., Favino, C., Netti, A., 2020. ESG (environmental, social and governance) performance and board gender diversity: the moderating role of CEO quality. *Sustainability* 12, 9298.
- Romito, S., Vurro, C., 2021. Non-financial disclosure and information asymmetry: a stakeholder view on US listed firms. *Corp. Soc. Responsib. Environ. Manag.* 28 (2), 595–605.
- Rose, C., 2007. Does female board representation influence firm performance? The Danish evidence. *Corp. Govern. Int. Rev.* 15 (2), 404–413.

- Ryan, M.K., Haslam, S.A., 2005. The glass cliff: evidence that women are over-represented in precarious leadership positions. *Br. J. Manag.* 16 (2), 81–90.
- Saitua, A., 2015. Incorporación de La perspectiva de género en La información No financiera: una cuestión pendiente. *Revista Iberoamericana de Contabilidad de Gestión* 13 (26), 169–187.
- Sampong, F., Song, N., Amoako, G.K., Boahene, K.O., 2021. Voluntary social performance disclosure and firm profitability of South African listed firms: examining the complementary role of board independence and managerial ownership. *S. Afr. J. Econ. Manag. Sci.* 24 (1), 1–12.
- Setó-Pamies, D., 2015. The relationship between women directors and corporate social responsibility. *Corp. Soc. Responsib. Environ. Manag.* 22 (6), 334–345.
- Sial, M., Zheng, C., Cherian, J., Gulzar, M.A., Thu, P.A., Khan, T., Khuong, N.V., 2018. Does corporate social responsibility mediate the relation between boardroom gender diversity and firm performance of Chinese listed companies? *Sustainability* 10 (10), 3591.
- Smith, N., Smith, V., Verner, M., 2006. Do women in top management affect firm performance? A panel study of 2,500 Danish firms. *Int. J. Prod. Perform. Manag.* 55 (7), 569–593.
- Tresierra Tanaka, Á.E., Flores Parodi, C.M., Samamé Monje, X.A., 2016. La presencia de la mujer en el directorio y su relación con el desempeño financiero de la empresa. *Innovar: Revista de Ciencias Administrativas y Sociales* 26 (59), 101–118.
- World Health Organization, 2021. Gender Equality Definition. Retrieved from. <https://www.who.int/es/news-room/fact-sheets/detail/gender>.
- Wilmshurst, T., Frost, G., 2000. Corporate environmental reporting. A test of legitimacy theory. *Account Audit. Account. J.* 13 (1), 10–26.