

DOCTORAL THESIS

**BOARD GENDER DIVERSITY AND
SUSTAINABILITY
PERFORMANCE & DISCLOSURE**

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ABSTRACT

ABSTRACT

More than 40 years have passed since Marilyn Loden, an American consultant and writer, used the term *glass ceiling* to refer to the invisible barriers that conditioned women's aspirations (BBC Mundo 2017). With this term, she used to describe the existence of obstacles that make it difficult for female professionals, with equal or higher qualifications, abilities and merits, to occupy positions of power that are held by their male colleagues.

There are various causes that make the glass ceiling remain, despite the efforts that different institutions and organizations have been making and that have led to the normative appearance of gender quotas that try to guarantee the presence of women on boards of directors. Either setting a minimum number of female directors or establishing the obligation for boards to be balanced on gender issues. In boards, decisions are made about strategy and organizational design of the companies, exercise control over their execution, among other multiple responsibilities. The interest in increasing female presence is determined by the innumerable advantages that gender diversity entails.

In this sense, this doctoral thesis aims to analyse the effects of the presence of women on the board of directors on the commitment to sustainability and business transparency. For this purpose, this work is structured in three chapters linked to three interrelated investigations that seek to determine the state of the art and the gaps to which to respond. Addressing, based on accumulated knowledge, the most current demands regarding the influence that a minority group can play within large companies.

Specifically, the first chapter reviews the existing literature on corporate governance and sustainability or corporate responsibility (CSR), particularly on gender diversity on boards of directors and its relationship with social performance and sustainability disclosure, looking to provide an overview of the state of the art to propose future lines of research.

The second chapter studies the effects that gender diversity on the board of directors has on social and environmental disclosure, focusing on the critical mass of this minority group and, second, on the moderating role of the human capital of board members.

The third chapter analyses the effects of a greater female presence in the decisions that companies have made in terms of sustainability in a context of uncertainty and recession, studying the impact of Covid-19 on different sustainable initiatives and how these business commitments differ according to the **directors'** social identity determined by their gender.

RESUMEN

RESUMEN

Han transcurrido más de 40 años desde que Marilyn Loden, consultora y escritora estadounidense, utilizase el término *techo de cristal* para referirse a las barreras invisibles que condicionaban las aspiraciones de las mujeres (BBC Mundo 2017). Con ese término describía la existencia de obstáculos que dificultan que las profesionales, con igual o superior cualificación, capacidades y méritos, puedan ocupar los puestos de poder que se encuentran en manos de sus colegas masculinos.

Son muy diferentes las causas que mantienen vigente el techo de cristal, a pesar de los esfuerzos que diferentes instituciones y organismos vienen realizando y que han dado lugar a la aparición normativa de cuotas de género que tratan de garantizar la presencia de mujeres en los consejos de administración. Bien fijando un número mínimo de consejeras o estableciendo la obligación de que este órgano esté balanceado en temas de género. En este órgano se toman decisiones sobre la estrategia y el diseño organizativo de las compañías, ejercen el control sobre su ejecución, entre otras múltiples responsabilidades. El interés por incrementar la presencia femenina viene determinado por las innumerables ventajas que la diversidad de género lleva aparejadas.

En esta línea, esta tesis doctoral tiene como objetivo analizar los efectos de la presencia de mujeres en el consejo de administración en el compromiso con la sostenibilidad y la transparencia empresarial. Para ello, este trabajo se estructura en tres capítulos vinculados a tres investigaciones interrelacionadas que pretenden determinar el estado de la cuestión y las brechas a las que dar respuesta. Abordando, a partir del conocimiento acumulado, las demandas más actuales respecto a la influencia que un grupo minoritario puede desempeñar en el seno de grandes compañías.

Más concretamente, en el primer capítulo se revisa la literatura existente sobre gobierno corporativo y sostenibilidad o responsabilidad empresarial (RSC), en particular sobre la diversidad de género en los consejos de administración y su relación con el desempeño social y la divulgación de información relacionada con la sostenibilidad, buscando proporcionar una visión general del estado del arte para proponer futuras líneas de investigación.

En el segundo capítulo se estudian los efectos que la diversidad de género en el consejo de administración tiene en la divulgación de información social y medioambiental, centrándonos en la masa crítica de este grupo minoritario y en el rol moderador del capital humano de los miembros del consejo.

En el tercer capítulo se analizan los efectos de una mayor presencia femenina en las decisiones que las compañías han tomado en materia de sostenibilidad en un contexto de incertidumbre y recesión, estudiando el impacto de la Covid-19 sobre diferentes iniciativas sostenibles y cómo estos compromisos empresariales difieren según la identidad social de los consejeros determinada por su género.

INTRODUCTION

INTRODUCTION

In the modern business world, the leading companies are immersed in contributing to sustainable development by establishing sustainability strategies that seek to balance the social, environmental and economic impacts of their activities. In this context, the responsible corporate behaviour (CSR) and information transparency are essential elements (García-Sánchez et al., 2018). Companies must include responsible policies and actions, integrating the needs of the various stakeholders into the business strategy, i.e. workers, community and environment (Cook & Glass, 2017; Al-Najjar & Salama, 2022). These strategies need to be communicated with the release of more detailed reports and involve stakeholders (Johnsen et al., 2017).

Disclosure of social and environmental information allows the different stakeholders to know in detail **companies'** commitment to sustainability. CSR and disclosure of sustainable practices entail a series of benefits for organizations, among which are highlighted a better financial performance (Wang & Sarkis, 2017), better corporate reputation (Bear, Rahman, & Post, 2010), for the best performance and to obtain long-term competitive advantages (McGuinness et al., 2017; Shaukat et al., 2016, Birindelli, et al., 2018). By disclosing these practices, they achieve greater credibility with stakeholders (Fernandez-Feijoo et al., 2014; Amran et al., 2014).

This approach assumes that business concerns go beyond the benefit of shareholders, in favour of other interest groups, and that **companies'** contributions to society are broader than what is established in legal regulations. Under this altruistic version of the business world, sustainability strategies oriented towards sustainable development and social good are configured, being a source of competitive advantages (Christensen et al., 2014). However, not all companies are equally concerned about the interests and information demands of stakeholders, and there is a considerable difference in the quantity and quality of CSR information disclosed (Moratis & Brandt, 2017; Boiral & Henri, 2017). Given this heterogeneity, corporate governance mechanisms must be designed with the objective of satisfying the needs of a variety of interest groups, including individuals and society, as well as the environment.

In this scenario, the study of the board of directors has acquired special importance since it is considered one of the main mechanisms of relevant corporate governance in the supervision of management actions (Fama & Jensen, 1983) and also, it is the body where

decisions with an impact on the strategic objectives of organizations are made, among which are those related to responsible social behaviour and sustainability (Nielsen & Huse, 2010; Setó-Pamies, 2015; Shaukat et al., 2016; Uyar, Kuzey, Kilic, & Karaman, 2021), playing a relevant role in decisions on the voluntary disclosure policy.

The effectiveness of this body is strongly associated with its composition. This is addressed in academic research from different views such as the existence of the CEO-chairman duality (Giannarakis, Konteos, & Sariannidis, 2014; Gavana, Gottardo, & Moisello, 2023), the independence of its members (Wonsuk & Abebe, 2016) and gender diversity (Nadeem, Zaman, & Saleem, 2017), among others.

Currently, organizations face increasing pressure from stakeholders to make decisions aimed at improving their social and environmental performance. Furthermore, government initiatives promote integrating more women on their boards of directors in order to have a balanced proportion of men and women (Li et al., 2017). A clear example is the gender quota legislation that has been adopted in many countries of the European Union and the gender mainstream that has emerged internationally to achieve equality (Lee-Gosselin, Briere, & Hawo, 2013).

This context has become the focus of attention of many researchers, focusing especially on the analysis of the role that the board of directors can play in this regard (Cuadrado-Ballesteros, Martínez-Ferrero, & García-Sánchez, 2017; Hafsi & Turgut, 2013; Harjoto, Laksmana, & Lee, 2015; Shaukat et al., 2016; Menicucci & Paolucci, 2022). In this line, the academy is interested in analysing the effect that gender diversity has on the business world in general, trying to prove if its presence explains why some firms perform better in CSR than others, or why they tend to adopt best disclosure practices. In this sense, recent research has recognized the influence of the role of women on the board of directors (Rao & Tilt, 2016), evidencing that women tend to be especially sensitive to social and environmental problems (Boulouta, 2013).

Empirical research on gender diversity on the board of directors, CSR and information transparency has grown exponentially in the last decade (Amorelli & García-Sánchez, 2021).

The most recent research has associated the presence of women on the board of directors and corporate performance with a broader concept than economics (i.e., Rao & Tilt, 2016; Nadeem et al., 2017; Gulzar et al. 2019; Gutiérrez-Fernández, Gallego-Sosa, & Fernández-Torres, 2023), considering the implementation of sustainability practices in relation to environmental, social and ethical aspects of business behaviour (Kirsch, 2018). Thus,

literature argues multiple reasons for gender diversity on boards of directors, among which are highlighted that women have stronger moral standards and are more socially sensitive, emotional and empathetic than men (Boulouta, 2013; Liao et al., 2015; Cook & Glass, 2017; Rodríguez-Ariza et al., 2017; Macaulay et al., 2018).

Under these theoretical foundations, in general, the vast majority of empirical evidence suggests a positive relationship between the presence of women on the board of directors, sustainability and corporate responsibility (Byron & Post, 2016; Cook & Glass, 2017; Zhuang et al., 2018; Francoeur et al., 2019; Beji et al., 2021; Rehman et al., 2020; Saheed Olanrewaju et al., 2020; Romano et al., 2020; Uyar et al., 2020; Govindan et al., 2021; Nerantzidis, Tzeremes, Koutoupis, & Pourgias, 2022) and greater disclosure of CSR practices (Amorelli & García-Sánchez, 2020; Arayssi et al., 2016; I.-M. García-Sánchez et al., 2019; Rodríguez-Ariza et al., 2014; Guping et al., 2020). Despite these findings, there is research that arrive to non-significant or negative results (Francoeur et al., 2019; Yang et al., 2019; Zhuang et al., 2018; Pucheta-Martínez et al., 2019; García-Sánchez et al., 2020; Fakir & Jusoh, 2020; Bristy et al., 2020; Orazalin & Baydauletov, 2020; Fan, Qian, & Wang, 2023), presenting divergences in favour of the economic dimensions over the social and environmental ones (Nadeem et al., 2020; Nguyen et al., 2021). In addition, there may be a temporary effect that indicates changes in the role that female directors play, since a change in the interest they show regarding the adoption of policies and the ethical management of the firm's activities has been observed (i.e., Nadeem et al., 2017; Gulzar et al., 2019; Monteiro et al., 2021), something that did not happen in earlier times (i.e., Rodríguez-Domínguez et al., 2009; García-Sánchez et al., 2015).

The inconclusive results have motivated various authors to argue that the positive link between gender diversity on the board and CSR or information transparency is conditioned by the existence of a critical mass of women on the board (Ben-Amar et al., 2017; Post et al., 2011).

Currently, despite women having made significant progress in terms of their representation, the integration of the main strategic bodies continues to be dominated by men (Birindelli et al., 2019). Under these circumstances, some academic studies refer to the Critical Mass Theory, as one of the explanations for the impact of female representation on boards and CSR issues (Atif et al., 2020; Cabeza-García et al., 2018; Jia & Zhang, 2013; Wei et al., 2017; Cambrea, Paolone, & Cucari, 2023). This theory suggests that the influence of a subgroup depends on its size. When the minority group reaches a critical mass, the nature of group interactions changes and the degree of influence of subgroups increases (Torchia, Calabrò,

& Huse, 2011). These arguments are mainly based on the fact that minority groups are often considered “tokens”, who are generally ignored and may encounter barriers to expressing their opinions. The Token Theory (Kanter, 1977) exposes the difficulties women face in organizations and suggests that female behaviour in these traditionally male-dominated environments is due to their numerical representation. One or two women on boards face the potential risk of “tokenism”: being stereotyped, ignored, and having to work hard to be heard (Konrad et al., 2008).

To overcome these constraints, recent studies suggest that the critical mass of women on the boards is reached when they have at least three women (Konrad, Kramer, & Erkut, 2008; Torchia et al., 2011). In these contexts, gender is no longer a barrier and women will feel more comfortable and freer to express their opinions and are more likely to be heard and supported by the majority, exerting a greater influence on the results (Cook & Glass, 2017; Schwartz-Ziv, 2017).

Based on the above arguments, the positive consequences of women’s presence are obtained if it reaches a minimum number of three, enough for their influence to generate significant changes and to influence the decisions made within the board (Ben-Amar et al. al., 2017; Fernandez-Feijoo et al., 2014; Post et al., 2011; Yarram & Adapa, 2021). Thus, academic studies give relevance to the numerical representation of women on boards so that they influence the strategic decisions of companies. When the board of directors has only one or two women, there is no significant impact on corporate environmental investment (McGuinness, Vieito, & Wang, 2017) or corporate philanthropy (Jia & Zhang, 2013). Greater female representation on the board is associated with a significant improvement in CSR commitment (Cook & Glass, 2017), achieving better social and environmental performance with greater gender diversity (Kassinis et al. 2016; Cambrea et al., 2023).

In sum, a minimum of three women on the board is enough for them to generate significant changes, there will be a greater probability that their opinions will be heard and supported by the majority, generating an impact on the firm's commitment to greater disclosure of CSR information (Amorelli & García-Sánchez, 2020). The probability of voluntary disclosure increases when the percentage of women in decision-making bodies increases.

Although in general the findings positively associate a greater number of women on boards with corporate responsibility and sustainability; some studies do not support these results (Post, Rahman, & Rubow, 2011; Fernández-Torres, Gutiérrez-Fernández, & Gallego-Sosa, 2021) or suggest that even including just one woman is enough to promote better social

performance (Cook & Glass, 2017; Gulzar et al. 2019; Naveed, Voinea, Ali, Rauf, & Fratostiteanu, 2021). Other studies do not support the Critical Mass Theory and suggest that after reaching it, an increasing presence of female directors does not necessarily have a positive impact on sustainability (Birindelli et al., 2018).

In order to contribute to current knowledge, this doctoral thesis is structured into three research papers whose objective is to study the role played by female directors in relation to the business sustainability strategy, specifically focusing on knowing its impact on the **company's level of commitment** to its stakeholders and corporate transparency. The implications of the results obtained allow us to respond to the knowledge gaps related to the role that a minority group can play within large companies, considering the moderate effects of the internal and external context in which they occur.

Therefore, in the first chapter, a bibliometric and bibliographic review is carried out to determine the effect that gender diversity of the board of directors has on the level of business commitment to sustainability and the involvement with various stakeholders through the disclosure of social and environmental information. The review included 89 articles published in the 66 most prestigious business, management, ethical, and environmental science journals as reported by journal citations on ISI Web of Knowledge. Spectacular growth has been observed in this line of research since 2016, being led by Spanish and American researchers. There is currently a paradigm change in the theoretical frameworks that support these investigations by examining the organizational and institutional environments that favour the advantages associated with the presence of women in the bodies responsible for business strategy. Additionally, a complementary annex to this chapter is presented that extends the analysis period until April 2023. This update includes 52 articles into the research, reaching a total of 141 academic articles analysed that meet the aforementioned parameters published in the period between 2000 and April 2023. It is observed that the interest of academics in this line of research maintains the growing trend, observing an exponential growth in the last three years.

The second chapter examines two closely related issues: first, the effect of the presence of women directors on the disclosure of information on sustainability, focusing on the existence of a critical mass of this minority group; and, secondly, the moderation effect of the human capital of the board members - determined by their background, skills and experience - which could favour the intrinsic characteristics of the female directors through the cognitive effect of the boards equality. For an international sample of companies of 9.744 observations for the period 2007 to 2016, different panel data regressions are proposed. The findings reveal a

positive impact of board gender diversity on corporate disclosure when the presence of women on the board is at least three. In addition, we observe that this effect is enhanced when the rest of the board members show greater levels of background, skills and experience. As a complementary analysis, the evidence shows that the female role is not maintained when the woman reaches the position of president; that is, female directors adopt a masculine stereotype in terms of voluntary disclosure of information when they are also board presidents, regardless of the human capital of the board members. This chapter presents an annex that updates the latest academic findings in this field of study.

In the third chapter, given the effects that the Covid-19 pandemic entails from an economic point of view and with respect to the health and socio-economic effects that affected the companies' stakeholders to different degrees, it is relevant to know if they developed sustainable initiatives that allowed them to satisfy the needs of their stakeholders. Decisions that were made and implemented in a recessionary environment in which companies are debating whether it is economically reasonable to promote them and whether they can afford not to. In this research, based on the Social Identity Theory, we argue that these business commitments will have been promoted in companies with boards of directors that have a greater female presence. The results obtained for a sample of 4,821 international companies confirm that the impact of incidental affect on the social identity of the in-group of female directors has partially slowed the setback that business sustainability has suffered due to the pandemic, especially important with respect to good governance policies and practices, guaranteed the social and environmental commitment of previous years.

Finally, the conclusions of this doctoral thesis are presented, discussing the implications of the analysis, both from the theoretical and practical point of view, identifying the limitations of the research conducted and presenting research opportunities.

INTRODUCCIÓN

INTRODUCCIÓN

En el mundo de los negocios modernos, las principales compañías del mundo están inmersas en la contribución al desarrollo sostenible mediante el establecimiento de estrategias de sostenibilidad que persiguen el equilibrio de los impactos sociales, medioambientales y económicos de sus actividades. En este contexto, el comportamiento corporativo responsable (RSC) y la transparencia informativa son elementos esenciales (García-Sánchez et al., 2018). Las empresas deben incorporar políticas y acciones responsables, integrando a la estrategia empresarial las necesidades de los diversos stakeholders, i.e. los trabajadores, comunidad y medioambiente (Cook & Glass, 2017; Al-Najjar & Salama, 2022). Estas estrategias deben ser comunicadas con la divulgación de informes más detallados e involucrar a las partes interesadas (Johnsen et al., 2017).

La divulgación de información social y medioambiental permite que los diferentes grupos de interés conozcan en detalle el compromiso de las empresas con la sostenibilidad. La RSC y la comunicación de las prácticas sostenibles conllevan una serie de beneficios para las organizaciones, entre los que se destacan una mayor performance financiera (Wang & Sarkis, 2017), mejor reputación corporativa (Bear, Rahman, & Post, 2010), obteniendo las organizaciones un mejor desempeño y una ventaja competitiva a largo plazo (McGuinness et al., 2017; Shaukat et al., 2016, Birindelli, et al., 2018). Con la divulgación de estas prácticas, logran alcanzar una mayor credibilidad ante los grupos de interés (Fernandez-Feijoo et al., 2014; Amran et al., 2014).

Este enfoque supone que las preocupaciones empresariales van más allá del beneficio de los accionistas, a favor de otros grupos de interés, y que las contribuciones de la empresa a la sociedad son más amplias que lo establecido en las normas legales. Bajo esta versión más altruista del mundo empresarial, se configuran estrategias de sostenibilidad orientadas al desarrollo sostenible y al bien social, siendo fuente de ventajas competitivas (Christensen et al., 2014). Sin embargo, no todas las empresas se preocupan de igual manera por los intereses y las demandas de información de los stakeholders, existiendo una diferencia considerable en la cantidad y calidad de la información de RSC divulgada (Moratis & Brandt, 2017; Boiral & Henri, 2017). Bajo esta heterogeneidad, los mecanismos de gobierno corporativo deben diseñarse con el objetivo de satisfacer las necesidades de una variedad de grupos de interés, incluyendo a los individuos y la sociedad, así como también el medioambiente.

En este escenario, el estudio del consejo de administración ha adquirido especial preeminencia pues no solo es considerado como uno de los principales mecanismos de gobierno corporativo relevante en la supervisión de las acciones gerenciales (Fama & Jensen, 1983) sino que también, es el órgano donde se toman decisiones de impacto en los objetivos estratégicos de las organizaciones, entre las cuales se encuentran las relacionadas con el comportamiento social responsable y la sostenibilidad (Nielsen & Huse, 2010; Setó-Pamies, 2015; Shaukat et al., 2016; Uyar et al., 2021), desempeñando un rol relevante en la política de divulgación voluntaria de información. (Uyar et al., 2021)

La eficacia de este órgano está fuertemente asociada a su composición y es abordada en las investigaciones académicas desde diferentes aspectos como la existencia de dualidad de funciones en la figura del CEO-chairman (Giannarakis, Konteos, & Sariannidis, 2014; Gavana et al, 2023), la independencia de sus miembros (Wonsuk & Abebe, 2016) y la diversidad de género (Nadeem, Zaman, & Saleem, 2017), entre otros.

En la actualidad, las organizaciones se enfrentan a una creciente presión por parte de los grupos de interés de tomar decisiones tendientes a mejorar su desempeño social y medioambiental, a su vez las iniciativas gubernamentales promueven integrar más mujeres en sus consejos de administración con el fin de que exista una proporción equilibrada de hombres y mujeres (Li et al., 2017). Un claro ejemplo es la legislación de cuota de género que ha sido adoptada en muchos países de la Unión Europea y la corriente de género que ha surgido internacionalmente para lograr la equidad (Lee-Gosselin, Briere, & Hawo, 2013).

Este contexto se ha convertido en el foco de atención de muchos investigadores, centrandose especialmente su atención en el análisis del papel que el consejo de administración puede desempeñar al respecto (Cuadrado-Ballesteros, Martínez-Ferrero, & García-Sánchez, 2017; Hafsi & Turgut, 2013; Harjoto, Laksmana, & Lee, 2015; Shaukat et al., 2016; Menicucci & Paolucci, 2022). En esta línea, la academia está interesada en analizar el efecto que la diversidad de género supone en el mundo de los negocios en general, tratando demostrar si su presencia explica por qué algunas firmas obtienen un mejor desempeño en RSC que otras o por qué tienden a adoptar mejores prácticas de divulgación. En este sentido, recientes investigaciones han reconocido la influencia del rol de las mujeres en el consejo de administración (Rao & Tilt, 2016) evidenciando que las mujeres tienden a ser especialmente sensibles a los problemas sociales y medioambientales (Boulouta, 2013).

La investigación empírica sobre la diversidad de género en el consejo de administración, la RSC y la transparencia informativa ha crecido exponencialmente en la última década (Amorelli & García-Sánchez, 2021).

Las investigaciones más recientes han asociado la presencia de mujeres en el consejo de administración y un desempeño corporativo con un concepto más amplio que el económico (i.e., Rao & Tilt, 2016; Nadeem et al., 2017; Gulzar et al. 2019; Gutiérrez-Fernández et al., 2023), contemplando la implementación de prácticas de sostenibilidad en relación con aspectos medioambientales, sociales y éticos del comportamiento empresarial (Kirsch, 2018). Así, la literatura argumenta múltiples razones para la diversidad de género en los consejos de administración, entre las que se destacan que las mujeres poseen estándares morales más fuertes y son socialmente más sensibles, emocionales y empáticas que los hombres (Boulouta, 2013; Liao et al., 2015; Cook & Glass, 2017; Rodríguez-Ariza et al., 2017; Macaulay et al., 2018).

Bajo estos fundamentos teóricos, en general, la gran mayoría de la evidencia empírica sugiere una relación positiva entre la presencia de mujeres en el consejo de administración, la sostenibilidad y la responsabilidad empresarial (Byron & Post, 2016; Cook & Glass, 2017; Zhuang et al., 2018; Francoeur et al., 2019; Beji et al., 2021; Rehman et al., 2020; Saheed Olanrewaju et al., 2020; Romano et al., 2020; Uyar et al., 2020; Govindan et al., 2021; Nerantzidis et al., 2022) y una mayor divulgación de las prácticas de RSC (Amorelli & García-Sánchez, 2020; Arayssi et al., 2016; I.-M. García-Sánchez et al., 2019; Rodríguez-Ariza et al., 2014; Guping et al., 2020). A pesar de estos hallazgos, encontramos también investigaciones que arrojan resultados no-significativos o negativos (Francoeur et al., 2019; Yang et al., 2019; Zhuang et al., 2018; Prado-Lorenzo & Garcia-Sanchez, 2010; Pucheta-Martínez et al., 2019; García-Sánchez et al., 2020; Fakir & Jusoh, 2020; Bristy et al., 2020; Orazalin & Baydauletov, 2020; Fan, Qian, & Wang, 2023), presentando divergencias a favor de las dimensiones económicas frente a las sociales y medioambientales (Nadeem et al., 2020; Nguyen et al., 2021). Además, puede existir un efecto temporal que indica cambios en el papel que las consejeras desempeñan, pues se ha observado un cambio en el interés que muestran respecto a la adopción de políticas y la gestión ética de las actividades de la firma (i.e., Nadeem et al., 2017; Gulzar et al., 2019; Monteiro et al., 2021), algo que no ocurría en épocas anteriores (i.e., Rodríguez-Domínguez et al., 2009; García-Sánchez et al. 2015).

Los resultados no concluyentes han motivado a diversos autores a argumentar que el vínculo positivo entre la diversidad de género en el consejo y la RSC o la transparencia informativa

está condicionada a la existencia de una masa crítica de mujeres en el consejo (Ben-Amar et al., 2017; Post et al., 2011).

En la actualidad, a pesar de que las mujeres han logrado importantes avances en lo que se refiere a su representación, la integración de los principales órganos estratégicos continúa siendo dominada por hombres (Birindelli et al., 2019). Bajo estas circunstancias, algunos estudios académicos hacen referencia a la Teoría de la Masa Crítica, como una de las explicaciones para el impacto de la representación femenina en los consejos y las cuestiones de RSC (Atif et al., 2020; Cabeza-García et al., 2018; Jia & Zhang, 2013; Wei et al., 2017; Cambrea et al., 2023). Esta teoría sugiere que la influencia de un subgrupo depende de su tamaño. Cuando el grupo minoritario alcanza una masa crítica, la naturaleza de las interacciones grupales cambia y el grado de influencia de los subgrupos aumenta (Torchia, Calabrò, & Huse, 2011). Estos argumentos se basan principalmente en que los grupos minoritarios son a menudo considerados “tokens” y son generalmente ignorados y pueden encontrar barreras para expresar sus opiniones. La Teoría Token (Kanter, 1977) expone las dificultades a las que se enfrentan las mujeres en las organizaciones y sugiere que el comportamiento femenino en estos entornos tradicionalmente dominados por hombres se debe a su representación numérica. Una o dos mujeres en los consejos de administración enfrentan los posibles riesgos de “tokenismo”: ser estereotipadas, ignoradas y tener que trabajar duro para ser escuchadas (Konrad et al., 2008).

Para superar estas limitaciones, estudios recientes sugieren que la masa crítica de mujeres en el consejo de administración se alcanza cuando poseen al menos tres mujeres (Konrad, Kramer, & Erkut, 2008; Torchia et al., 2011). En estos contextos, el género ya no es una barrera y las mujeres se sentirán más cómodas y libres para expresar sus opiniones y es más probable que sean escuchadas y apoyadas por la mayoría, ejerciendo una mayor influencia en los resultados (Cook & Glass, 2017; Schwartz-Ziv, 2017).

En base a los argumentos anteriores, las consecuencias positivas de la presencia de mujeres se obtienen si alcanza un número mínimo de tres, suficiente para que su influencia genere cambios significativos y puedan influir en las decisiones tomadas en el seno del consejo (Ben-Amar et al., 2017; Fernandez-Feijoo et al., 2014; Post et al., 2011; Yarram & Adapa, 2021). Así, los estudios académicos dan relevancia a la representación numérica de las mujeres en los consejos para que las mismas influyan en las decisiones estratégicas de las empresas. Cuando el consejo de administración cuenta solo con una o dos mujeres, no hay un impacto significativo en la inversión medioambiental corporativa (McGuinness, Vieito, & Wang, 2017) o en la filantropía corporativa (Jia & Zhang, 2013). Una mayor representación

femenina en el consejo se asocia con una mejora significativa del compromiso de RSC (Cook & Glass, 2017), alcanzando con una mayor diversidad de género un mejor desempeño social y medioambiental (Kassinis et al. 2016; Cambrea et al., 2023).

En suma, un mínimo de tres mujeres en el consejo es suficiente para que puedan generar cambios significativos, habrá mayor probabilidad que sus opiniones sean escuchadas y respaldadas por la mayoría, generando un impacto en el compromiso de la firma con una mayor transparencia en la divulgación de información sobre RSC (Amorelli & García-Sánchez, 2020). La probabilidad de divulgación voluntaria aumenta cuando aumenta el porcentaje de mujeres en los órganos de decisión.

Si bien en general los hallazgos asocian positivamente una mayor número de mujeres en los consejos con la responsabilidad empresarial y la sostenibilidad; algunos estudios no respaldan estos resultados (Post, Rahman, & Rubow, 2011; Fernández-Torres et al., 2021) o sugieren que incluso incluir solo una mujer es suficiente para promover un mejor desempeño social (Cook & Glass, 2017; Gulzar et al. 2019; Naveed et al., 2021). Otros estudios no respaldan la Teoría de la masa crítica y sugieren que después de alcanzarla, una presencia creciente de consejeras no necesariamente tiene un impacto positivo en la sostenibilidad (Birindelli et al., 2018).

Con el fin de contribuir al conocimiento actual, esta tesis doctoral se estructura en tres trabajos de investigación que tiene como objetivo el estudio del papel que las consejeras desempeñan en relación con la estrategia de sostenibilidad empresarial, enfocándose específicamente en conocer su impacto en el nivel de compromiso de las compañías con sus grupos de interés y la transparencia corporativa. Las implicaciones de los resultados obtenidos permiten dar respuesta a las brechas de conocimiento relativas al papel que un grupo minoritario puede desempeñar en el seno de grandes compañías, considerando los efectos moderados del contexto interno y externo en el que se producen.

Así, en el primer capítulo, se realiza una revisión bibliométrica y bibliográfica para determinar el efecto que la diversidad de género del consejo de administración tiene en el nivel de compromiso empresarial con la sostenibilidad y el involucramiento con diversos grupos de interés a través de la divulgación de información social y ambiental. La revisión incluyó 89 artículos publicados en las 66 revistas más prestigiosas sobre negocios, administración, ética y ciencias ambientales según los informes de citas de revistas en ISI Web of Knowledge. Se observa un crecimiento espectacular de esta línea de investigación desde 2016, siendo liderada por investigadores españoles y estadounidenses. Actualmente existe un cambio de

paradigma en los marcos teóricos que sustentan estas investigaciones al examinar los entornos organizacionales e institucionales que favorecen las ventajas asociadas a la presencia de mujeres en los órganos responsables de la estrategia empresarial. Adicionalmente, se presenta un anexo complementario a este capítulo que extiende el periodo de análisis hasta abril de 2023. La actualización incorpora a la investigación 52 artículos, llegando a un total de 141 artículos académicos analizados que cumplen con los parámetros anteriormente mencionados publicados en el periodo comprendido entre 2000 y abril de 2023. Se observa que el interés de los académicos en esta línea de investigación mantiene la tendencia creciente, observándose un crecimiento exponencial en los últimos tres años.

En el segundo capítulo se examinan dos cuestiones estrechamente relacionadas: primera, el efecto de la presencia de mujeres consejeras sobre la divulgación de información en materia de sostenibilidad, centrándonos en la existencia de una masa crítica de este grupo minoritario; y, en segundo lugar, el efecto moderador del capital humano de los miembros del consejo – determinado por su formación, competencias y experiencia- que podría favorecer las características intrínsecas de las consejeras a través del efecto cognitivo de la igualdad de los consejos. Para una muestra de compañías internacionales configurada por 9.744 observaciones para el periodo 2007 a 2016, se proponen diferentes regresiones de datos de panel. Los hallazgos revelan un impacto positivo de la diversidad de género en la transparencia corporativa con la presencia de al menos tres mujeres en el consejo. Además, observamos que este efecto se potencia con mayores niveles de formación, habilidades y experiencia del resto de consejeros. Como análisis complementario, la evidencia muestra que el rol femenino no se mantiene cuando la mujer alcanza el cargo de presidente; es decir, las mujeres adoptan un estereotipo masculino en cuanto a la divulgación voluntaria de información cuando también son presidentas del consejo, independientemente del capital humano de los miembros del consejo. Este capítulo presenta un anexo que actualiza los últimos hallazgos académicos en este campo de estudio.

En el tercer capítulo, ante los efectos que la pandemia Covid-19 conlleva tanto desde el punto de vista económico como respecto a los efectos sanitarios y socioeconómicos que afectaron en diversa medida a los stakeholders de las compañías, resulta relevante conocer si éstas desarrollaron iniciativas sostenibles que permitieron satisfacer las necesidades de sus grupos de interés. Decisiones que fueron tomadas e implementadas en un entorno de recesión en el que las empresas se debaten sobre si económicamente es razonablemente impulsar las mismas y si pueden permitirse no hacerlo. En esta investigación, basándonos en la teoría de la identidad social, argumentamos que estos compromisos empresariales habrán sido

promovidos en empresas con consejos de administración que cuentan con una mayor presencia femenina. Los resultados obtenidos para una muestra de 4.821 firmas internacionales permiten confirmar que la incidencia del afecto incidental sobre la identidad social del endogrupo de consejeras ha frenado parcialmente el retroceso que la sostenibilidad empresarial ha sufrido por la pandemia, especialmente importante respecto a políticas y prácticas de buen gobierno, garantizado el compromiso social y medioambiental de ejercicios previos.

Finalmente, se presentan las conclusiones de esta tesis doctoral, discutiendo las implicaciones del análisis, tanto desde el punto de vista teórico como práctico, identificando las limitaciones de la investigación realizada y presentando oportunidades de investigación.

CHAPTER I

CHAPTER I

THE STATE OF THE ART

Summary

A bibliometric and bibliographic review was carried out to determine the effect that gender diversity in a board of directors has on the level of business commitment to sustainable development and stakeholder engagement through the dissemination of social and environmental information. The review included 89 articles published in the 66 most prestigious journals on business, management, ethics and environmental sciences according to the journal citation reports on the ISI Web of Knowledge.

There has been spectacular growth in this line of research since 2016, led by Spanish and American researchers. There is currently a paradigm shift in the theoretical frameworks that support these investigations in examining the organizational and institutional environments that favour the advantages associated with the presence of women in bodies responsible for business strategy. However, the latest papers are based on the use of the Critical Mass Theory and moderating factors in order to explaining the divergence of results.

Keywords: bibliographic review, bibliometric review, board of directors, corporate social responsibility, female directors, gender diversity, stakeholder engagement, sustainable development

Reference: Amorelli, M-F, & García-Sánchez, I-M. (2021). Trends in the dynamic evolution of board gender diversity and corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 28: 537– 554. <https://doi.org/10.1002/csr.2079>

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Wiley Top Cited Article (1 January 2021 – 15 December 2022)

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1.1. RESUMEN CAPÍTULO I EN ESPAÑOL

En este trabajo se busca entender el estado del arte de las investigaciones académicas en materia de diversidad de género en los consejos de administración y como los diferentes autores han estudiado su relación con las practicas sostenibles y políticas de transparencia corporativa. Se realizó una revisión bibliométrica y bibliográfica del efecto que tiene la diversidad de género en el consejo de administración en el nivel de compromiso empresarial con la sostenibilidad y la divulgación de información de naturaleza social y medioambiental.

Esta revisión se basó en el análisis de artículos sobre mujeres en el consejo de administración, RSC y divulgación de información relacionada con la sostenibilidad publicados en las revistas más prestigiosos sobre “Business”, “Management”, “Ethics”; and “Environmental Sciences” de acuerdo con el Journal Citation Reports de la base de datos ISI Web of Knowledge entre el 2000 y 2020, periodo en el cual el número de artículos académicos publicados sobre estos temas han proliferado notablemente. Se analizaron en total 89 artículos académicos.

De la revisión bibliométrica y bibliográfica se observa un crecimiento espectacular de esta línea de investigación a partir de 2016. De hecho el 74% de las publicaciones académicas se realizaron entre los años 2016 y 2020, sugiriendo una tendencia creciente. En la revisión de contenido se analizaron también algunos detalles adicionales, se identifican los objetivos propios de cada publicación y los hallazgos abordados al estudiar la relación entre la presencia de mujeres en el consejo de administración y la RSC y/o divulgación de la RSC. Asimismo, se estudió la evolución y trayectoria de las publicaciones sobre diversidad de género en el consejo de administración, desempeño y divulgación de la RSC, clasificando los artículos publicados por año, por revista y por país del primer autor. Se observa una tendencia creciente que es liderada por investigadores españoles y estadounidenses.

Aunque existe predominio en considerar la RSC como un constructo global, debe tenerse en cuenta que la RSC es un concepto multidimensional, por lo que los académicos han utilizado diferentes constructos para medirla. Al no existir un enfoque único, el análisis de contenido realizado identifica también las múltiples variables dependientes utilizadas para medirla. Entre ellas se destacan, responsabilidad social corporativa o desempeño social o desempeño en sustentabilidad, (Beji et al., 2021; Cruz et al., 2019; Francoeur et al., 2019; I. M. García-Sánchez et al., 2018), desempeño ambiental (Cordeiro et al., 2020; Birindelli et al., 2019; Lu & Herremans, 2019), inversión ambiental (Atif et al., 2020; Jiang & Akbar, 2018; Wei et al., 2017), demandas ambientales (Liu, 2018), filantropía corporativa o contribuciones caritativas (Campopiano et al., 2019; Jia & Zhang, 2013; Williams, 2003), entre otros. El uso de medidas

alternativas a un score o puntaje sobre el desempeño de la RSC tiene diversas justificaciones. Liu (2018) analiza el número de demandas medioambientales presentadas contra las firmas de S&P 1500 en Tribunales federales en USA entre 2000–2015, argumentando que las demandas medioambientales constituyen el proxy más directo de la mala conducta medioambiental corporativa y que a diferencia de los ratings de RSC no son susceptibles de la manipulación empresarial. Por su parte, Haque (2017), examina los efectos de las características del consejo de administración en la implementación de iniciativas que reduzcan la emisión de carbón y emisiones de gas efecto invernadero (GEI). Sus resultados sugieren una asociación positiva entre la presencia de mujeres en el consejo y la implementación de iniciativas que reduzcan las emisiones de carbón, sin embargo no encuentra los mismos resultados para emisiones de GEI.

Estas divergencias también se identifican en las investigaciones sobre la relación entre la diversidad de género del consejo y la transparencia corporativa de información social y medioambiental. Si bien, la mayoría de las publicaciones académicas miden la divulgación de RSC como informes sociales y/o ambientales, o puntajes como la variable ESG de Thomson Reuters, más recientemente los investigadores han comenzado a desarrollar medidas propias para medir la calidad de los informes de sostenibilidad (Al-Shaer & Zaman, 2016; Amran et al., 2014; García-Sánchez et al., 2019) con el fin de corregir las deficiencias y sesgos de las medidas previas. En general, estos trabajos concluyen en que la presencia de consejeras favorece la transparencia empresarial en materia de RSC. Así, García-Sánchez et al. (2019) analizan la relación entre la presencia de mujeres en el consejo y la calidad de los informes de sostenibilidad y sugiere que una mayor presencia femenina mejora la gestión de la divulgación de la sostenibilidad. Las mujeres se asocian a informes de sostenibilidad más fiables. Francoeur et al. (2019) argumenta que el impacto de las consejeras en el desempeño social corporativo varía de una dimensión de RSC a otra, en este sentido, el estudio de la relación entre la diversidad de género y la divulgación específica de determinada información social y/o medioambiental, y su impacto sobre las diferentes dimensiones de la sostenibilidad corporativa es un área relativamente inexplorada (Mahmood et al., 2018). Ello podría ser debido a que, de acuerdo con Lu & Herremans (2019), cada dimensión involucra conceptos distintos y deben ser estudiadas por separado si deseamos conocer la realidad para alcanzar la mejor performance de cada una.

En lo que se refiere a los resultados de nuestro análisis, más del 75% de los estudios sugieren un efecto positivo en la relación de mujeres consejeras, RSC y las prácticas de divulgación de RSC. A pesar de que la gran mayoría de las publicaciones académicas encuentran una

asociación positiva al estudiar la antedicha relación, encontramos investigaciones que arrojan resultados no-significativos o negativos (Azmat & Rentschler, 2017; Francoeur, et al., 2019; Khan, 2010), por lo que en general los resultados no son totalmente concluyentes.

A través de nuestro análisis de contenido, encontramos que hay tres marcos teóricos principales que guían la investigación empírica en la relación entre el gobierno corporativo en general, la presencia de mujeres en los consejos de administración en particular y la RSC: la Teoría de agencia, la Teoría de los stakeholders y la Teoría de dependencia de recursos. Aunque se visualiza una tendencia a quedar en desuso a favor de teorías más enfocadas en determinar la composición ideal del consejo de administración, las mismas han proporcionado el marco teórico mayoritariamente utilizado en las investigaciones empíricas para sustentar cómo la composición del consejo de administración y la diversidad de género pueden afectar el compromiso organizacional con temas sociales y medioambientales y la divulgación de información relacionada con la RSC y la sostenibilidad (Bear et al., 2010; Setó-Pamies, 2015).

Desde la perspectiva de la Teoría de la Agencia, el consejo de administración es considerado como un mecanismo relevante en la supervisión y control de las acciones gerenciales para garantizar los intereses de los accionistas (Fama & Jensen, 1983). La Teoría de la Agencia suele combinarse con los fundamentos de la Teoría de los Stakeholders (Freeman, 1984) determinando el marco de la mayoría de las investigaciones sobre diversidad de género y RSC. La misma extiende el problema de la agencia a una relación multilateral con diversos stakeholders (Prado-Lorenzo & García-Sánchez, 2010). La independencia de los miembros se aborda como consecuencia de la diversidad de género, que mejora la gestión de las relaciones con los diferentes stakeholders. Adicionalmente, un número significativo de investigaciones hacen referencia a la Teoría de dependencia de recursos (Pfeffer & Salancik, 1978) para predecir la relación entre la presencia de mujeres en el consejo y la RSC. Desde esta perspectiva, la diversidad de género aporta diferentes perspectivas, habilidades y recursos a los consejos (e.g. atributos personales, experiencias y valores) que mejoran su desempeño. A mayor diversidad en el consejo, mejor acceso a recursos, minimizando la dependencia de los recursos del entorno, proporcionando diferentes puntos de vista, asesoramiento, legitimidad, contactos empresariales y canales de información (Terjesen et al., 2009; Pfeffer & Salancik, 1978) que desembocan en una mejora de la dinámica en la toma de decisiones con respecto a la adopción de políticas de RSC (Cullinan, Mahoney, & Roush, 2019).

Adicionalmente, si bien los investigadores han comenzado a centrar sus investigaciones en los fundamentos de la Teoría de la Masa Crítica para explicar el impacto de la diversidad de

género en los consejos de administración y las cuestiones de RSC (Atif et al., 2020; Wei et al., 2017), los resultados no son concluyentes.

Si bien ha surgido la Teoría de la masa crítica como paradigma que da respuesta a la divergencia de resultados, los investigadores han comenzado a centrarse en identificar factores moderadores en la relación diversidad de género en el consejo de administración y la sostenibilidad, concretando nuevas áreas de especialización dentro de esta línea de investigación. La inconsistencia en la evidencia empírica puede atribuirse a moderadores, como factores de contexto organizacional e institucional, que podrían disminuir o potenciar los efectos positivos de la representación femenina en los consejos (Fernandez et al., 2019). En este sentido, los investigadores han considerado diferentes variables como moderadoras de dicha relación. Factores institucionales como la regulación y protección del inversor en el sector bancario (García-Sánchez et al., 2018) pueden jugar un papel significativo en el efecto de la diversidad de género en el compromiso con la RSC. Resultados similares obtienen Byron & Post (2016) considerando diversas características a nivel país. Asimismo, el contexto en el que opera una empresa también podría moderar la relación positiva entre la diversidad de género y las políticas sociales y medioambientales de las empresas. Así, una variable moderadora medida en términos de probabilidad de creación de contaminación (Li et al., 2017) tendría un efecto negativo sobre dicha relación. Otros autores sugieren que la composición y estructura del consejo de administración también podrían moderar la influencia que ejerce la presencia de mujeres sobre la responsabilidad empresarial. Si la estructura del consejo es diversa, en cuanto a su tamaño, independencia, directores externos y dualidad de liderazgo, se obtiene un efecto positivo de la presencia de mujeres en el consejo y la performance social de las empresas (Hafsi & Turgut, 2013). Una mayor presencia de directores externos se asocia con resultados sociales más favorables (Post et al., 2011) y podría reforzar positivamente la contribución de las mujeres en el desempeño social corporativo (Macaulay et al., 2018). También, el impacto positivo de la presencia de al menos tres mujeres en el consejo sobre la calidad de la divulgación de RSC se ve reforzado cuanto mayor sea el bagaje educacional, habilidades y experiencia de sus miembros (Amorelli & García-Sánchez, 2020).

De esta manera, podemos concluir que actualmente se está produciendo un cambio de paradigma en los marcos teóricos que sustentan estas investigaciones con el fin de profundizar en los entornos organizacionales e institucionales que favorecen las ventajas asociadas a la presencia de mujeres en el órgano responsable de la estrategia empresarial.

1.2. INTRODUCTION

Corporate social responsibility (CSR) refers to the practices and policies of a company in response to the needs of various stakeholders, such as workers, community and environment (Cook & Glass, 2017), also including ethical governance and information transparency (García-Sánchez et al., 2018; Rodríguez-Gómez et al., 2020). Pressure from the main stakeholders has led companies to make decisions to improve their corporate performance, as a way of achieving social legitimacy (Zhang et al., 2013; García-Sánchez, 2021), and disclosing these practices to achieve greater credibility with interest groups (Fernandez-Feijoo et al., 2014; Amran et al., 2014; Raucci and Tarquinio, 2020).

CSR and the disclosure of related information are now essential elements in the modern business world and must be integrated into business strategy for the best performance and to obtain long-term competitive advantages (McGuinness et al., 2017; Shaukat et al., 2016). In this scenario, studying boards of directors has acquired special prominence, since they are not only one of the main corporate governance mechanisms in the supervision of managerial actions (Fama & Jensen, 1983) but also the body where decisions are made on the strategic objectives of organizations, including those related to CSR (Nielsen & Huse, 2010; Setó-Pamies, 2015; Shaukat et al., 2016). Also, the responsibility of a board of directors is to ensure the company works in not just the interests of shareholders, but those of other stakeholders” (Prado-Lorenzo and García-Sánchez, 2010).

The effectiveness of a board is strongly associated with its composition, addressed in academic research from aspects such as the existence of dual functions in the figure of the CEO-chairman (Giannarakis et al., 2014), the independence of its members (Wonsuk & Abebe, 2016) and the plurality of traits associated with demographic diversity (Zhang, 2012) and gender diversity (Nadeem et al., 2017).

Today, organizations are facing increasing pressure from interest groups and government initiatives to include more women in their boards of directors in order to achieve a balanced gender ratio among their members (Li et al., 2017; Atena and Tiron-Tudor, 2020). Researchers offer multiple reasons for incorporating female directors, mainly related to the contribution of new perspectives, and different values in the decision-making processes (Byron & Post, 2016; Wieczorek-Szymańska, 2020).

Various studies have examined the effects of gender diversity on decision-making by boards (Nielsen & Huse, 2010) and on financial results (Byron & Post, 2016; Terjesen et al., 2009). Similarly, more recent research has associated the presence of women on boards and in

corporate performance with a broader concept than simply economics (Rao & Tilt, 2016; Nadeem et al., 2017; Gulzar et al., 2019; Macaulay et al., 2018), contemplating the implementation of sustainability practices in relation to the environmental, social and ethical aspects of business behaviour (Kirsch, 2018).

Empirical research into gender diversity in boards of directors and CSR has grown exponentially in the last decade. Many studies emphasize CSR performance, while others focus on the communication that companies use regarding their practices. Despite the fact that most previous studies find a positive association between gender diversity, CSR and its disclosure, however, there are researchers who find non-significant relationships (Azmat & Rentschler, 2017; Francoeur et al., 2019; Khan, 2010), so the results are not entirely conclusive, and it is necessary to examine the reasons for these differences.

This paper thus aims to review the existing literature on corporate governance and CSR, and in particular gender diversity on boards and its relationship with CSR and CSR disclosures, seeking to provide an overview of the state of the art to facilitate future lines of investigation. A bibliometric and bibliographic, or content, analysis was thus performed using 89 articles about women in boardrooms, CSR performance and disclosure published in the main academic journals according to the Journal Citation Reports of the ISI Web of Knowledge from 2000 to 2020.

The bibliometric review reveals the exponential growth of this line of research since 2016 (2019) in the case of gender diversity and performance in CSR (dissemination of information on CSR), mainly published in the *Journal of Business Ethics* and *Corporate Social Responsibility, and Environmental Management* and carried out by Spanish and American researchers.

Our content analysis revealed three main theoretical frameworks that guide empirical research into the relationship between corporate governance in general, and gender diversity on boards in particular, and CSR: Agency Theory, Stakeholder Theory and Resource Dependence Theory. These theories are usually complemented by theory of care approaches without it being explicitly specified. Critical mass theory has recently emerged as a paradigm responding to the divergence of results. Researchers have also begun to focus on identifying moderating factors in the gender diversity relationship in boards and CSR, specifying new areas of specialization within this line of research.

13. REVISION FRAMEWORK: OBJECTIVES AND METHODOLOGY

The objective of this paper is to review the existing literature on corporate governance and CSR, in particular gender diversity on boards of directors and its relationship with performance in CSR and the disclosure of information related to sustainability, seeking to provide an overview of the state of the art to facilitate future lines of research.

Unlike Kirsch (2016) and Rao and Tilt (2016), a bibliometric and bibliographic or content analysis of the research on women in boardrooms, CSR and CSR disclosure published in academic journals from the ISI Web of Science (ISI WOS) database is used to achieve this objective. Papers published in the 66 main journals in the following journal citation reports categories will first be considered: Business, Finance (Accounting); Management; Ethics; and Environmental Sciences.

We then used the editorial database to access our targeted journals and searched for relevant articles including the phrase “female directors” or “women directors” or “gender diversity” plus “corporate social responsibility” or “corporate social performance” or “corporate social disclosure” or “corporate social reporting” or “sustainability disclosure” or “sustainability reporting” in titles, abstracts, subjects, or keywords. We focused on articles and excluded book reviews, replies, and introductions to special issues.

Thirdly, the period of analysis was defined as 2000 to 2020, the period in which the number of articles on these topics has proliferated remarkably. Seventy-seven studies were examined in total. Table 2 summarizes the empirical work on board gender diversity and CSR included in this review, published between 2000 and 2020 taken from the ISI WOS database. This table also provides some additional details about the studies, such as the objectives of each investigation and findings related explicitly to the effect of the relationship between female directors and CSR/CSR disclosure.

More than 75% of the studies demonstrate a positive effect on the relationship between female directors and CSR, or CSR disclosure, however, we found non-significant or negative relationships between the presence of women and CSR performance and CSR reporting practices, with divergences in results in the same study, and therefore, in general, the results are not totally conclusive.

Table 1 presents the list of journals examined in this review.

Table 1 – List of Journals examined	
Management	Business, Finance (Accounting)
Academy of Management Journal	Abacus
Academy of Management Review	Accounting and Business Research
Administrative Science Quarterly	Accounting and Finance
Business and Society	Accounting Horizons
Business Research Quarterly	Accounting, Auditing & Accountability Journal
Business Strategy and the Environment	Accounting, Organizations & Society
Corporate Governance: An International Review	Auditing: A Journal of Practice & Theory
Corporate Social Responsibility & Environmental Management	Australian Accounting Review
European Management Journal	British Accounting Review
European Management Review	Contemporary Accounting Review
Gender Work and Organization	Critical Perspective on Accounting
Human Relations	Emerging Markets Finance and Trade
International Business Review	Entrepreneurship Theory and Practice
International Journal of Management Reviews	European Accounting Review
Journal of Enterprise Information Management	International Review of Financial Analysis
Journal of International Business Studies	Journal of Accounting & Economics
Journal of Management	Journal of Accounting and Public Policy
Journal of Management Studies	Journal of Accounting Research
Leadership & Organization Development Journal	Journal of Business Finance & Accounting
Long Range Planning	Journal of Business Research
Management Decision	Journal of Contemporary Accounting & Economics
Organization & Environment	Journal of Corporate Finance
Organization Science	Management Accounting Research
Organization Studies	Review of Accounting Studies
Strategic Management Journal	Review of Managerial Science
The Leadership Quarterly	Revista de Contabilidad-Spanish Accounting Review
Tourism Management Perspectives	Sustainability Accounting Management and Policy Journal
	The Accounting Review
Ethics	Others
Business Ethics-A European Review	Ecological Economics
Business Ethics Quarterly	Ecological Indicators
Electronic Journal of Business Ethics and Organization Studies	Environmental Policy and Governance
Journal of Business Ethics	International Journal of Climate Change Strategies and Management
	Journal of Cleaner Production
	Sustainability
	Sustainable Development

Table 2 - Articles examined			
Nº	Authors	Objective	Relationship
1	Al-Qahtani, M., & Elgharbawy, A. (2020)	Investigates the association between board diversity characteristics and the level of disclosure of GHG information (UK)	positive
2	Atif, M., Alam, M. S., & Hossain, M. (2020)	Examine the impact of female directors on firm sustainable investment (USA)	positive
3	Beji, R., Yousfi, O., Loukil, N., & Omri, A. (2021)	Analyses how the board's characteristics could be associated with CSR	positive
4	Cordeiro, J. J., Profumo, G., & Tutore, I. (2020)	Study the relationship between ownership control and female board diversity in influencing corporate environmental performance (USA)	positive
5	García-Sánchez, I. M., Oliveira, M. C., & Martínez-Ferrero, J. (2020)	Examine how female directors on boards behave towards gender issues reporting (International)	positive
6	Orazalin, N., & Baydauletov, M. (2020)	Examine the effects of CSR strategy and board gender diversity on environmental and social performance (Europe)	positive
7	Pucheta-Martínez, M. C., Olcina-Sempere, G., & López-Zamora, B. (2020)	Explore whether board gender diversity (female institutional directors) improves CSR disclosure (Spain)	positive
8	Ramon-Llorens, M. C., Garcia-Meca, E., & Pucheta-Martínez, M. C. (2020)	Analyse the role of the social and human capital of female directors on CSR disclosure (Spain)	positive/ negative
9	Tingbani, I., Chithambo, L., Tauringana, V., & Papanikolaou, N. (2020)	Explore the impact of gender diversity and environmental committees on GHG voluntary disclosures	positive
10	Uyar, A., Kilic, M., Koseoglu, M. A., Kuzey, C., & Karaman, A. S., 2020	Explore whether board characteristics (sustainability committee, board independence, board diversity, and board diligence) lead to greater CSP (International)	positive
11	Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Qureshi, M. I., & Jan, A. (2020)	Examine the impact of boardroom gender diversity, Malaysian Code on Corporate Governance and firms' specific characteristics (age, size, and profitability) on corporate sustainability disclosures (Malaysia).	positive
12	Amorelli, M. F., & García-Sánchez, I. M. (2020)	Effect of the presence of female directors on boards on CSR disclosure and the moderation of the human capital of board members (International)	positive
13	Birindelli, G., Iannuzzi, A. P., & Savioli, M. (2019)	Impact of women leaders (in terms of both a critical mass of female directors and female CEOs) and the environmental performance of banks (EMEA)	positive/ negative
14	Campopiano, G., Rinaldi, F. R., Sciascia, S., & De Massis, A. (2019).	How the presence of women, either family members or not, on the board of directors of family firms affects firm engagement in CSR (International)	positive/ negative
15	Cruz, C., Justo, R., Larraza-Kintana, M., & Garcés-Galdeano, L. (2019)	Influence of gender board diversity on firms' CSR in the context of publicly held family firms (USA)	positive/ non-significant

Table 2 (continued)			
16	Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019)	Explore how organizational context moderates the relationship between the representation of women on boards and CSR (USA)	positive
17	Francoeur, C., Labelle, R., Balti, S., & Bouzaidi, S. E. (2019)	Influence of gender diversity boards on five CSR categories of stakeholders: environment, employees, contractors, customers, and the community (USA)	positive/ non-significant
18	Furlotti, K., Mazza, T., Tibiletti, V., & Triani, S. (2019)	Whether the presence of women on board of directors is associated with gender policies disclosed in CSR or sustainability reports (Italy)	positive
19	García-Sánchez, I. M., Suárez-Fernández, O., & Martínez-Ferrero, J. (2019)	Examine the relationship between board diversity and the quality of sustainability reporting (International)	positive
20	Gulzar, M. A., Cherian, J., Hwang, J., Jiang, Y., & Sial, M. S. (2019)	Impact of board gender diversity and foreign institutional investors on the CSR engagement (China)	positive
21	Harjoto, M. A., & Rossi, F. (2019)	Relationships between religiosity and CSR and between the presence of female directors and CSR (Italy)	positive
22	Hollindale, J., Kent, P., Routledge, J., & Chapple, L. (2019)	Examines the relation between women on boards and company GHG emission-related disclosure (Australia)	positive
23	Kılıç, M., & Kuzey, C. (2019)	Investigate whether corporate governance characteristics impact the voluntary disclosure of carbon emissions (Turkey)	non-significant
24	Lu, J., & Herremans, I. M. (2019)	Whether gender diversity on the board of directors is associated with firms' environmental performance (USA)	positive
25	Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019)	Examine the effect of board composition (board size, board independence, board gender diversity, CEO duality, CSR committee) on CSR reporting (Spain)	positive
26	Pucheta-Martínez, M. C., Bel-Oms, I., & Nekhili, M. (2019).	Examine the effect of board composition (board size, board independence, board gender diversity, CEO duality, and CSR board committee) on CSR reporting (Spain)	positive
27	Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2019)	How disclosure of CSR information is affected by independent and institutional women directors (Spain)	positive/ negative
28	Yang, W., Yang, J., & Gao, Z. (2019)	Based on Critical mass theory, study the relationship between the number and background characteristics of female directors and CSR (China)	non-significant
29	Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018)	Impact of a critical mass of female directors on ESG performance (Europe and USA)	positive/ negative
30	Cabeza-García, L., Fernández-Gago, R., & Nieto, M. (2018)	Relationship between board gender diversity and the disclosure of CSR information (Spain)	positive
31	Cook, A., & Glass, C. (2017)	Analyses the representational thresholds that facilitate women's leadership in the area of CSR (USA)	positive

Table 2 (continued)			
32	Elmagrhi, M. H., Ntim, C. G., Elamer, A. A., & Zhang, Q. (2018)	Investigate the extent to which corporate board gender diversity (proportion, age, and level of education of female directors) affects environmental performance (China)	positive
33	García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2018)	Study boards of directors and CSR practices in the banking industry (International)	positive
34	Jiang, X., & Akbar, A. (2018)	Investigate the influence of female executives on corporate environmental investment (China)	positive
35	Kirsch, A. (2018)	Literature review	-
36	Liao, L., Lin, T. P., & Zhang, Y. (2018)	Association between board characteristics and CSR assurance (China)	positive
37	Liu, C. (2018)	Examined whether gender diversity reduces the level of corporate environmental violations (USA)	positive
38	Macaulay, C. D., Richard, O. C., Peng, M. W., & Hasenhuttl, M. (2018)	How alliance network centrality and board composition affect CSR (USA)	positive
39	Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., & Salman, T. (2018)	Understand the impact of corporate governance on economic, social, and environmental sustainability disclosures (Pakistan)	positive
40	Zhang, J., Han, J., & Yin, M. (2018)	Examines whether and how women directors influence firms' CSR activities (China)	positive
41	Zhuang, Y., Chang, X., & Lee, Y. (2018)	Investigate the relationship between board composition (i.e. political experience, academic affiliations, overseas background, and gender diversity) and CSR performance of Chinese firms (China)	non-significant
42	Azmat, F., & Rentschler, R. (2017)	Relationships between corporate responsibility and ethnicity and gender diversity on arts boards (Australia)	positive/ negative
43	Ben-Amar, W., Chang, M., & McIlkenny, P. (2017)	Investigates the effect of female representation on the board of directors on public reporting about climate change-related risks (Canada)	positive
44	Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017)	Link between board characteristics and the level of social responsibility performance (USA)	positive
45	Ekara Helfaya, A. N., & Moussa, T. (2017)	Investigates the impact of board's CSR strategy and CSR-oriented directors on environmental sustainability disclosure (UK)	positive
46	Fuente, J. A., García-Sánchez, I. M., & Lozano, M. B. (2017)	Analyse the role that the board of directors plays in relation to the disclosure of socially responsible information (Spain)	positive
47	Haque, F. (2017)	Examines the effects of board characteristics and sustainable compensation policy on carbon reduction initiatives and greenhouse gas (GHG) emissions of a firm (UK)	positive/non-significant
48	Jizi, M. (2017)	Examine how board composition relates to a firm's social and environmental disclosure (UK)	positive

Table 2 (continued)			
49	Li, J., Zhao, F., Chen, S., Jiang, W., Liu, T., & Shi, S. (2017)	Relationship between gender diversity on boards and firms' environmental policy (USA)	positive
50	McGuinness, P. B., Vieito, J. P., & Wang, M. (2017)	Examines whether greater gender balance in top-management and board gender diversity supports stronger CSR (China)	positive
51	Nadeem, M., Zaman, R., & Saleem, I. (2017)	Investigate the impact of boardroom gender diversity on corporate sustainability practices (Australia)	positive
52	Rodríguez-Ariza, L., Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017)	Compares the role of female directors in family and non-family firms in promoting responsible practices (International)	non-significant for family firms
53	Tamimi, N., & Sebastianelli, R. (2017)	Study governance factors (board size, board gender diversity, CEO duality, and linking executive compensation to ESG disclosure) on the ESG disclosure score (USA)	positive
54	Wei, F., Ding, B., & Kong, Y. (2017)	Study the impact of female directors on environmental investment (China)	positive
55	Yasser, Q. R., Al Mamun, A., & Ahmed, I. (2017)	Relationships between board gender diversity and enhanced CSP (Malaysia, Pakistan, and Thailand)	positive
56	Al-Shaer, H., & Zaman, M. (2016)	Examines the effect of board gender diversity on sustainability reporting quality (UK)	positive
57	Arayssi, M., Dah, M., & Jizi, M. (2016)	Investigate the effect of gender-diverse boards on the association between sustainability reporting (UK)	positive
58	Byron, K., & Post, C. (2016)	Examines whether and how women directors influence firms' engagement in socially responsible business practices and social reputation (International)	positive
59	Cha, W., & Abebe, M. A. (2016)	Relationship between corporate philanthropy, board of director composition and industry membership (USA)	positive
60	Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2016)	Relationships between CSR, board composition, and firm performance (Spain)	positive
61	Hyun, E., Yang, D., Jung, H., & Hong, K. (2016)	Examined the female directors-CSR performance relationship (USA)	positive
62	Kassinis, G., Panayiotou, A., Dimou, A., & Katsifaraki, G. (2016)	Relationship between gender and environmental sustainability (USA)	positive
63	Landry, E. E., Bernardi, R. A., & Bosco, S. M. (2016)	Relationship between female board representation and CSR (USA)	positive
64	Rao & Tilt (2016)	Literature review	-
65	Shaukat, A., Qiu, Y., & Trojanowski, G. (2016)	Links between a firm's CSR related board attributes, its board CSR strategy, and its environmental and social performance (UK)	positive

Table 2 (continued)			
66	Harjoto, M., Laksmana, I., & Lee, R. (2015)	Examines the impact of board diversity on firms' CSR (USA)	positive
67	Liao, L., Luo, L., & Tang, Q. (2015)	Examine the impact of corporate board's characteristics on the voluntary disclosure of GHG emissions (UK)	positive
68	Setó-Pamies, D. (2015)	Analyse the role that women directors can play as driving forces behind the development of CSR (International)	positive
69	Amran, A., Lee, S. P., & Devi, S. S. (2014)	Examine the role of the board of directors in sustainability reporting quality (Asia-Pacific)	non-significant
70	Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2014)	Explores the relationship between sustainability reporting and the existence of at least three women on the board of directors (International)	positive
71	Giannarakis, G., Konteos, G., & Sariannidis, N. (2014)	Investigate the determinants on the extent of CSR disclosure (USA)	non-significant
72	Rodríguez-Ariza, L., Aceituno, J. V. F., & Rubio, R. G. (2014)	Analyse the role that certain characteristics of the board (size, level of activity, independence and diversity) have in the CSR reporting (Europe)	positive
73	Upadhyay, A., & Zeng, H. (2014)	Whether gender and ethnic diversity of directors impacts corporate opacity/transparency (USA)	positive
74	Boulouta, I. (2013)	Examines whether and how female board directors may affect CSR (USA)	positive
75	Frias-Aceituno, J. V., Rodriguez-Ariza, L., & Garcia-Sanchez, I. M. (2013)	Demonstrate the influence played by certain features of the board of directors in the dissemination of integrated CSR (International)	positive
76	Hafsi, T., & Turgut, G. (2013)	Relationship between boardroom diversity and CSR (USA)	positive
77	Jia, M., & Zhang, Z. (2013)	Evaluate how women directors influence corporate philanthropic disaster response (China)	positive
78	Mallin, C., Michelon, G., & Raggi, D. (2013)	Investigate the effects of the corporate governance model on social and environmental disclosure (USA)	non-significant
79	Zhang, J. Q., Zhu, H., & Ding, H. B. (2013)	Examines the presence of outside directors and of women directors and their relationship with CSR performance (USA)	positive
80	Walls, J. L., Berrone, P., & Phan, P. H. (2012)	Explores the link between corporate governance and environmental performance (USA)	positive
81	Bernardi, R. A., & Threadgill, V. H. (2011)	Whether gender has an effect on corporate social behaviour (USA)	positive
82	Galbreath, J. (2011)	Study the link between women on boards of directors and corporate sustainability (Australia)	positive/ non-significant
83	Jo, H., & Harjoto, M. A. (2011)	Effects of corporate governance and monitoring mechanisms on the choice of CSR engagement and the value of firms engaging in CSR activities (USA)	positive
84	Mallin, C. A., & Michelon, G. (2011)	Investigate the relationship between board reputation and CSR (USA)	positive

Table 2 (continued)			
85	Post, C., Rahman, N., & Rubow, E. (2011)	Relationship between boards of directors' composition and environmental corporate social responsibility (USA)	positive
86	Bear, S., Rahman, N., & Post, C. (2010)	Explores how the diversity of board resources and the number of women on boards affect firms' CSR ratings (USA)	positive
87	Prado-Lorenzo, J. M., & Garcia-Sanchez, I. M. (2010)	Study the role that companies' boards of directors play in the reporting of environmental information (International)	non-significant/ positive
88	Rodriguez-Dominguez, L., Gallego-Alvarez, I., & Garcia-Sanchez, I. M. (2009)	Determine the influence of board characteristics (outside directors, board stock ownership and female directors) in terms of promoting the creation of a code of ethics (International)	non-significant
89	Williams, R. J. (2003)	Relationship between the proportion of women on firms' boards and the extent to which firms engaged in charitable giving activities (USA)	positive

14. EVOLUTION AND TRAJECTORIES IN BOARD GENDER DIVERSITY AND CORPORATE SOCIAL RESPONSIBILITY RESEARCH: A BIBLIOMETRIC APPROACH

We considered the total number of articles that met the search parameters and classified them by year, by journal and by country of the first author in order to analyse the dynamic evolution and trajectories of publications in board gender diversity and CSR performance and disclosure.

14.1. Publications by year

In the period of analysis, from 2000 to 2009, we found only one empirical study considering the relationship between the proportion of women on a firm's boards and CSR practices - in 2003 - however, as of 2010, we identified 88 articles that meet the aforementioned criteria. The number of articles in these topics has proliferated remarkably since 2016. As shown in Figure 1, 74% of the articles were published between 2016 and 2020, suggesting an increasing trend.

Figure 1 presents the number of publications on board gender diversity and CSR by year.

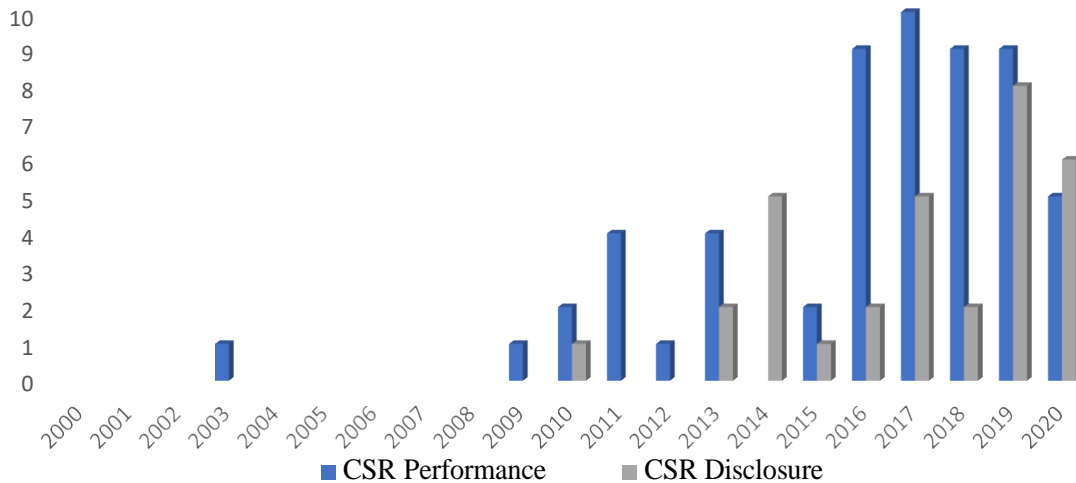


Figure 1. Number of articles on board gender diversity and CSR performance or CSR disclosure published from 2000 to 2020, taken from the ISI WOS database.

Most empirical research emphasizes the effect of board diversity on CSR performance, and, except in 2014, fewer papers focus on the role they play with regard to the corporate communication policies of these practices. Specifically, 65% of the articles analyse the impact of gender diversity on CSR performance compared to 35% that do so in the information disclosures. This trend is changing, however, and the number of published academic articles that associate board gender diversity and CSR disclosure has grown notably in 2019 and 2020, without this growth implying a setback in the research on women in boardrooms and CSR performance since the interest of researchers has been constant since 2016.

1.4.2. Publications by journal

The articles that met the search parameters appeared in 34 of the 66 journals considered in the bibliometric revision. Fifty per cent of the top journals indexed in Business, Management, Ethics and Environmental Studies thus demonstrate a special interest in these research topics. The journals with the most publications on board gender diversity and CSR, or CSR disclosure, are the Journal of Business Ethics, Corporate Social Responsibility & Environmental Management, Sustainability, Business Strategy and the Environment, Journal of Cleaner Production and Management Decision.

Table 3 lists the journals that included articles on board gender diversity and CSR performance and disclosure.

Table 3. Articles by journal	
Name of Journal	N° of articles
Journal of Business Ethics	19
Corporate Social Responsibility & Environmental Management	13
Business Strategy and the Environment	9
Sustainability	7
Journal of Cleaner Production	4
Management Decision	3
British Accounting Review	2
Business Ethics-A European Review	2
Journal of Business Research	2
Journal of Corporate Finance	2
Sustainability Accounting Management and Policy Journal	2
Sustainable Development	2
Accounting and Business Research	1
Accounting and Finance	1
Australian Accounting Review	1
Business and Society	1
Corporate Governance: An International Review	1
Electronic Journal of Business Ethics and Organization Studies	1
Emerging Markets Finance and Trade	1
European Management Review	1
Entrepreneurship Theory and Practice	1
Human Relations	1
International Business Review	1
International Journal of Climate Change Strategies and Management	1
International Review of Financial Analysis	1
Journal of Contemporary Accounting & Economics	1
Journal of Enterprise Information Management	1
Journal of Management and Organization	1
Leadership & Organization Development Journal	1
Revista de Contabilidad-Spanish Accounting Review	1
Review of Managerial Science	1
Strategic Management Journal	1
The Leadership Quarterly	1
Tourism Management Perspectives	1

1.4.3. Publications by country

We list articles according to the country of the first author so as to analyse the publication trajectories in board gender diversity and CSR performance and disclosure by country. Research into women in boardrooms and CSR aroused the interest of researchers from 22 countries. Table 4 lists the countries publishing on board gender diversity and CSR or CSR disclosure. As shown in the table, the leading countries are the Spain, USA and the UK.

Table 4. Articles by country	
Publishing countries	N° of articles
Spain	20
USA	19
UK	9
China	7
Australia	6
Canada	5
Italy	3
Pakistan	3
France	2
Lebanon	2
New Zeland	2
Cyprus	1
Germany	1
Grece	1
Hong Kong	1
Kazakhstan	1
Korea	1
Malasya	1
Qatar	1
Turkey	1
United Arab Emirates	1
Uruguay	1

1.4.4. Publications by author

According to the data from the ISI WOS database, 214 authors published articles on board gender diversity and CSR or CSR disclosure. Table 5 lists the authors who published more than one article between 2000 to 2020. The author who has contributed the most is Isabel-Maria Garcia-Sanchez from the University of Salamanca, who published ten articles on board gender diversity, and CSR performance and disclosure.

Table 5. Articles by Authors		
Top publishing by authors	Organization	Nº of articles
García-Sánchez, Isabel-María	University of Salamanca	10
Martínez-Ferrero, Jennifer	University of Salamanca	5
Pucheta-Martínez, María Consuelo	Universidad Jaume I	5
Harjoto, Maretno	Pepperdine University	3
Post, Corinne	Lehigh University	3
Rodriguez-Ariza, Lazaro	University of Granada	3
Bel-Oms, Inmaculada	University Jaume I	2
Bernardi, Richard A.	Roger Williams University	2
Birindelli, Giuliana	University of Chieti-Pescara	2
Cabeza-García, Laura	University of León	2
Cuadrado-Ballesteros, Beatriz	University of Salamanca	2
Fernández-Gago, Roberto	University of León	2
Frías Aceituno, José V.	University of Granada	2
Gallego-Alvarez, Isabel	University of Salamanca	2
Garcia-Meca, Emma	University of Cartagena	2
Iannuzzi, Antonia Patrizia	University of Bari "A. Moro"	2
Jizi, Mohammad	Lebanese American University	2
Kuzey, Cemil	Murray State University	2
Liao, Lin	Southwestern University of Finance and Economics	2
Mallin, Christine	University of Birmingham	2
Michelon, Giovanna	University of Padov	2
Nekhili, Mehdi	University of Maine	2
Nieto, Mariano	University of León	2
Olcina-Sempere, Gustau	Universidad Jaume I	2
Rahman, Noushi	Pace University	2
Savioli, Marco	University of Salento	2

15. DISCOURSE AND TRENDS IN BOARD GENDER DIVERSITY AND CORPORATE SOCIAL RESPONSIBILITY: A BIBLIOGRAPHIC APPROACH

15.1. What are the researcher's measures? Corporate social responsibility performance and disclosure constructs

CSR entails a series of benefits for organizations, among which are better financial performance (Wang & Sarkis, 2017) and better corporate reputation (Bear et al., 2010), all of which lead to a long-term competitive advantage (Birindelli et al., 2018).

Similarly, pressure from the main stakeholders has led companies to make decisions to improve both their social and environmental performance, which has become the focus of attention for many researchers, and especially analysis of the role that can be played by the board of directors (Cuadrado-Ballesteros et al., 2017; Hafsi & Turgut, 2013; Harjoto et al., 2015; Shaukat et al., 2016), considering the possibility that given the multidimensionality of CSR, this role varies from one dimension of CSR to another (Francoeur et al., 2019).

There is no single approach to CSR (Gulzar et al., 2019), perhaps as a reflection of the different initiatives that firms have implemented (Shaukat et al., 2016) to meet stakeholder expectations for economic, environmental, and social responsibility (Zhuang et al., 2018). This multidimensionality has led academics to use different constructs to measure (Zhang, Zhu, & Ding, 2013) and name it (Lu & Herremans, 2019), although the patterns are common as they are oriented towards sustainable development (Amor-Esteban et al., 2019), which means that this diversity does not imply heterogeneity in the results achieved (Amor-Esteban et al., 2020).

The articles included in this review study the relationship between the diversity of the board of directors and the CSR using multiple dependent variables, as can be seen in Figure 2. The following stand out among them: CSR as social responsibility, social performance or sustainability performance (Bear et al., 2010; Beji et al., 2021; Boulouta, 2013; Byron & Post, 2016; Cruz et al., 2019; Fernandez et al., 2019; Francoeur et al., 2019; García-Sánchez et al., 2018; Hafsi & Turgut, 2013; M. A. Harjoto & Rossi, 2019; Landry et al., 2016; Macaulay et al., 2018; McGuinness et al., 2017; Setó-Pamies, 2015; Uyar et al., 2020; J. Q. Zhang et al., 2013; Zhuang et al., 2018), environmental performance (Birindelli et al., 2019; Cordeiro et al., 2020; Elmagrhi et al., 2018; Lu & Herremans, 2019; Walls et al., 2012), environmental investment (Atif et al., 2020; Jiang & Akbar, 2018; Wei et al., 2017), environmental lawsuits (Liu, 2018), corporate philanthropy or charitable contributions (Campopiano et al., 2019; Jia

& Zhang, 2013; Williams, 2003; Wonsuk & Abebe, 2016; Zhang et al., 2018) and CSR assurance (Liao et al., 2018). Rodriguez-Dominguez et al. (2009) analyse the process of creating and implementing a code of ethics.

There are various justifications for the use of different measures to score CSR performance. Liu (2018) analysed the number of environmental lawsuits filed against S&P 1500 firms in federal courts in the USA between 2000-2015 and argues that environmental lawsuits are the most direct proxy of corporate environmental misconduct, and that unlike CSR ratings they are not susceptible to corporate manipulation. Similarly, Wei et al. (2017) examined whether greater female representation significantly increases corporate environmental investment due to the greater sensitivity that women can show regarding the environment in the face of economic or regulatory considerations (Jiang & Akbar, 2018). Haque (2017) examined the effects of the board's characteristics on the implementation of initiatives that reduce carbon and GHG emissions for a sample of 256 non-financial UK firms from 2002 to 2014. Their results suggest a positive association between the presence of women in the boardroom and the implementation of carbon reduction initiatives, however they did not find the same results for GHG emissions.

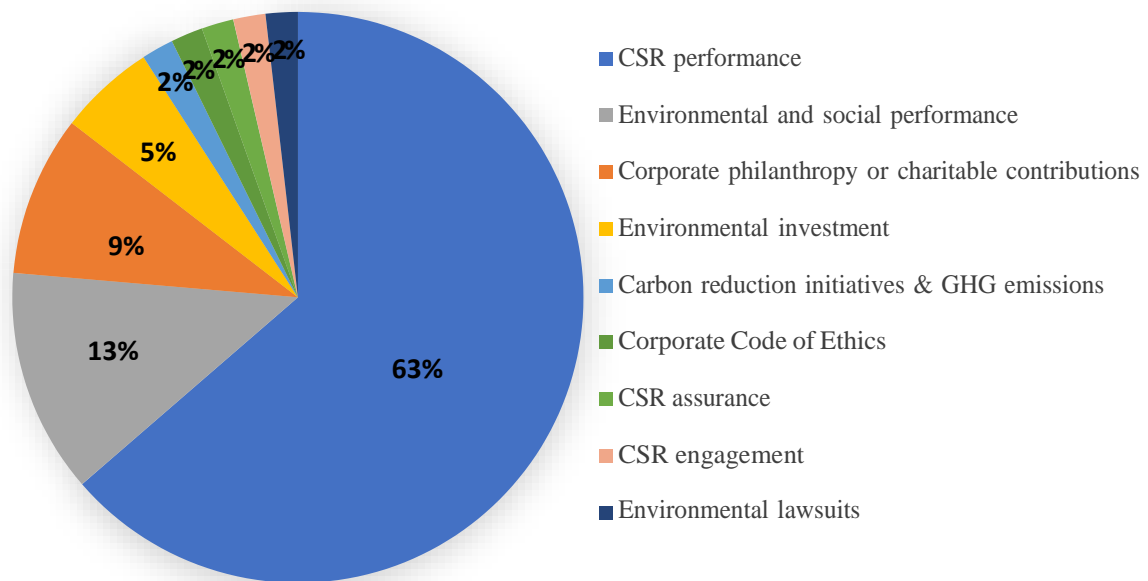


Figure 2. Articles on board gender diversity and CSR per CSR dimension, published from 2000 to 2020, taken from the ISI WOS database

The previous divergences that are also identified in the research on the relationship between the gender diversity of the board and the CSR disclosure practices, in this regard see Figure 3. Among other approaches, authors use dependent variables such as CSR disclosure/reporting as social and environmental reporting, or sustainability disclosures, to

determine the disclosure of a stand-alone report or a report prepared according to an international standard (Amorelli & García-Sánchez, 2020; Helfaya & Moussa, 2017; Mahmood et al., 2018; C. Mallin et al., 2013; Pucheta-Martínez et al., 2019; Ramon-Llorens et al., 2020; Rodríguez-Ariza et al., 2014; Zahid et al., 2020), compared to other studies that use scores such as the ESG variable from Thomson Reuters (Arayssi et al., 2016; Tamimi & Sebastianelli, 2017), or the Carbon Disclosure Project disclosure index (Ben-Amar et al., 2017; Hollindale et al., 2019; Kılıç & Kuzey, 2019; Liao et al., 2015; Prado-Lorenzo & Garcia-Sanchez, 2010; Tingbani et al., 2020).

More recently, researchers have begun to develop their own measures of sustainability reporting quality (Al-Shaer & Zaman, 2016; Amran et al., 2014; García-Sánchez et al., 2019) and corporate opacity (Upadhyay & Zeng, 2014) in order to correct the deficiencies and biases of the previous measures. In general, these studies conclude that the presence of female directors favours corporate transparency in CSR matters. García-Sánchez et al. (2019) analysed the relationship between gender diversity on boards and the quality of sustainability reporting using an international sample of 273 firm-year observations from 2006 to 2014 and concluded that a greater female presence reduces the risk of impression management strategies on sustainability disclosure. Upadhyay & Zeng (2014) analysed a sample of S&P 1500 firms between 2000-2003 and found a positive association between gender diversity and the information transparency of companies. They contrast that the presence of women on boards improves control and communication between stakeholders, implementing more relevant and reliable information policies.

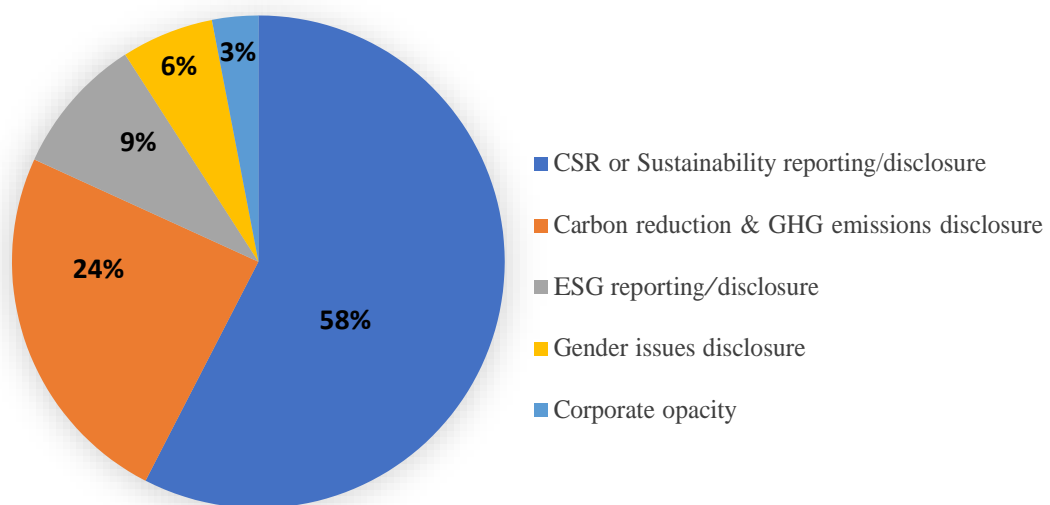


Figure 3. Articles on board gender diversity and CSR disclosure per dimension, published from 2000 to 2020, taken from the ISI WOS database

Despite this evidence, Francoeur et al. (2019) argue that the impact of female directors on corporate social performance varies from one dimension of CSR to another. The presence of women is positively related to the CSR dimensions connected to stakeholders that have less influence in a company, such as the environment and the community. The study of the relationship between gender diversity and the specific disclosure of certain social and/or environmental information, and its impact on the different dimensions of corporate sustainability is thus a relatively unexplored area (Mahmood et al., 2018). This is due to the fact that, according to Lu and Herremans (2019), each dimension involves different concepts and must be studied separately if we want to understand the reality and achieve the best performance for each one.

1.5.2. Board gender diversity and its different theoretical frameworks

Organizations face increasing pressure from interest groups and government initiatives to bring more women onto their boards of directors. A clear example is the gender quota legislation that has been adopted in many countries of the European Union and the trend of gender mainstreaming that has emerged internationally to achieve gender equality (Lee-Gosselin et al., 2013).

The academia is interested in analysing the effect that gender diversity has on the business world in general and trying to explain whether its presence explains why some firms obtain better CSR performance than others, or why they tend to adopt best disclosure practices. Recent research has recognized the influence of women on boards (Rao & Tilt, 2016) showing that women tend to be especially sensitive to social and environmental problems (Boulouta, 2013).

Despite the fact that various studies have considered the board gender diversity relationship, and in particular the role of women in the social or environmental performance of companies (Elmagrhi et al., 2018; Fernandez et al., 2019; Setó-Pamies, 2015), and in CSR disclosure practices (Arayssi et al., 2016; Liao et al., 2015), there is no unified theory behind the commitment to CSR.

Most of the research that studies the relationship between board gender diversity and CSR is empirical and has adopted different theoretical approaches based on the management literature. Our content analysis demonstrates that there are three main theoretical frameworks that guide empirical research into the relationship between corporate governance in general, and board gender diversity in particular, and CSR. The theories most

commonly used included: Agency Theory, Stakeholders Theory and Resource Dependence Theory.

From the perspective of Agency Theory, the board of directors is a relevant mechanism for the supervision and control of managerial actions, and to guarantee the interests of the shareholders (Fama & Jensen, 1983). For this purpose, a board needs to develop an objective judgment on the performance of the company, independent of management. The presence of independent directors monitors the behaviour of senior management because they are not involved in the daily operations of the company, or the need to maintain their professional reputation abroad (Cabeza-García et al., 2018; Jo & Harjoto, 2011; Mallin & Michelon, 2011). Although the presence of external directors and the non-duality of functions are the most common measures of independence, various authors believe that gender diversity contributes to the independence of a board (Fuente et al., 2017) by favouring more effective supervision and the independence of managers, as well as a stricter application of ethical conduct (Galbreath, 2011).

Agency Theory is often combined with the foundations of Stakeholder Theory (Freeman, 1984) in determining the framework for most research on gender diversity and CSR. It extends the agency problem to a multilateral relationship with various stakeholders (Prado-Lorenzo & García-Sánchez, 2010). Independent directors maintain closer contacts and relationships with stakeholders, have a better understanding of the environment and its expectations, and are more likely to meet the demands of different stakeholders. Independence as a consequence of gender diversity improves the management of relationships with different stakeholders through greater concern for their demands (Zhang et al., 2013; Fernandez-Feijoo et al., 2014). It is therefore more likely that a greater presence of women on a board favours strategic decision-making that integrates the interests of stakeholders (Bennouri et al., 2018).

A significant number of investigations refer to resource dependence theory (Pfeffer & Salancik, 1978) to predict the relationship between the presence of women on the board and CSR. This theory holds that more diverse boards contribute to better access to resources, minimizing dependence on environmental resources, providing different points of view, advice, legitimacy, business contacts and information channels (Pfeffer & Salancik, 1978; Terjesen et al., 2009), which leads to an improvement in decision-making dynamics with respect to a company's strategy (Hillman et al., 2002), and favouring the adoption of CSR policies (Bear et al., 2010; Cullinan et al., 2019). It could thus be suggested that within the theoretical framework of dependency theory, studies maintain that gender diversity on a

board provides different perspectives, skills and values (Byron & Post, 2016) that lead to better group decision-making (Lu & Herremans, 2019; Erhardt et al., 2003).

In sum, these paradigms provide the theoretical framework mostly used in empirical research to support how the composition of the board of directors in general, and board gender diversity in particular, can affect CSR (Bear et al., 2010; Setó-Pamies, 2015). Gender diversity in these studies is also based on another set of theories focused on care, which are not explicitly explained and that explain the role of female directors from a variety of perspectives (Haque, 2017). Multiple reasons are suggested for incorporating women onto a board (Gulzar et al., 2019), associated with the fact that women have stronger moral standards and are more socially sensitive, emotional and empathetic than men (Boulouta, 2013; Liao et al., 2015; Cook & Glass, 2017; Rodríguez-Ariza et al., 2017; Jiang & Akbar, 2018; Macaulay et al., 2018).

On these theoretical foundations, in general, empirical evidence suggests a positive relationship between the presence of female directors, CSR performance (Byron & Post, 2016; Kassinis et al., 2016; Nadeem et al., 2017; Cook & Glass, 2017; Francoeur et al., 2019; Macaulay et al., 2018; Zhuang et al., 2018; Gulzar et al., 2019) and greater CSR transparency (Rodríguez-Ariza et al., 2014; Arayssi et al., 2016; García-Sánchez et al., 2019; Amorelli & García-Sánchez, 2020). On the other hand, Landry et al. (2016) use corporate recognition on the "best" lists that include CSR-related action measures to demonstrate that gender can improve a company's commitment to CSR.

Despite the vast majority of research finding a positive association between gender diversity on boards and CSR. Other studies arrive at non-significant relationships between the presence of women and CSR performance (Zhuang et al., 2018; Francoeur et al., 2019; Yang et al., 2019; Kılıç & Kuzey, 2019) and CSR reporting practices (Khan, 2010; Prado-Lorenzo & Garcia-Sanchez, 2010; Amran et al., 2014; Pucheta-Martínez et al., 2018).

Various authors believe that women's presence on boards is most valuable when it is in balanced proportion with the presence of men (Li et al., 2017). For Ben-Amar et al. (2017) and Post et al. (2011) the positive link between board gender diversity and CSR or CSR disclosure is conditional on the presence of a critical mass of female directors.

1.5.3. Critical mass against tokenism

Despite the numerous arguments for a greater number of female directors, and that women have made important advances in representation, the board of directors continues to be an

environment dominated by men, with women constituting a small minority (Birindelli et al., 2019). Under these circumstances, some academic studies have begun to refer to critical mass theory as an explanation for the impact of female representation on boards and CSR issues (Atif et al., 2020; Cabeza-García et al., 2018; Jia & Zhang, 2013; Wei et al., 2017). This theory suggests that the influence of a subgroup depends on its size. When the minority group reaches a critical mass, the nature of the group interactions changes and the degree of influence of the subgroups increases (Torchia et al., 2011). Recent studies suggest that a critical mass of women on a board of directors is reached when such boards have at least three women (Konrad et al., 2008; Torchia et al., 2011). These arguments are mainly based on the fact that minority groups are often considered “tokens” and are generally ignored and may encounter barriers to expressing their opinions. Token theory (Kanter, 1977) exposes the difficulties that women face in organizations and suggests that female behaviour can only manifest in traditionally male-dominated environments when there is greater numerical representation. One or two women on a board face the potential risks of “tokenism”: being stereotyped, ignored, and having to work harder to be heard (Konrad et al., 2008). Critical mass theory postulates that three or more women are necessary to overcome these limitations. In these contexts, gender is no longer a barrier and women will feel more comfortable and free to express their opinions and to raise issues, and are more likely to be heard and supported by the majority, exerting a greater influence on the results (Cook & Glass, 2017; Schwartz-Ziv, 2017).

According to the previous arguments, the positive consequences of the presence of women are obtained when there are at least three, enough for their influence to generate significant changes in a board (Ben-Amar et al., 2017; Fernandez-Feijoo et al., 2014; Post et al., 2011). Academic studies note the importance of the numerical representation of women on boards as regards their influence on the CSR policies of companies. When there are only one or two women on a board, there is no significant impact on corporate environmental investment (McGuinness et al., 2017) or corporate philanthropy (Jia & Zhang, 2013). Greater female representation is associated with a significant improvement in a company's CSR engagement (Cook & Glass, 2017). The greater the diversity of gender, the greater the social performance of the firm (Bear et al., 2010), and as suggested by Kassinis et al. (2016), the higher the percentage, the greater the impact towards better social and environmental performance. A minimum of three women on a board is enough for them to generate significant changes, and for their opinions to be more likely to be heard and supported by the majority, generating an impact on the firm's commitment to greater transparency in the disclosure of information

about CSR (Amorelli & García-Sánchez, 2020). The probability of voluntary disclosure increases when the percentage of women on boards increases. Women improve a company's awareness of environmental problems and promote responses to stakeholder demands for better climate change disclosure practices (Ben-Amar et al., 2017).

In general research findings positively associate greater gender diversity on boards of directors with CSR, but some results do not support this (Post et al., 2011) or suggest that even including just one woman is enough to promote CSR (Cook & Glass, 2017). Gulzar et al. (2019) found a positive relationship between gender diversity and CSR, and these results can be seen even when there is only one female member on the board. Other studies do not support the theory of critical mass and suggest that after reaching it, an increasing presence of female directors does not necessarily have a positive impact on the sustainability performance of CSR (Birindelli et al., 2018).

1.5.4. Moderators of the role of female directors

In parallel with the academic concern for studying the critical mass of women on boards, the mixed findings of previous studies motivate researchers to study the moderating effects that may affect the relationship between the presence of women on boards and CSR performance and disclosure. The inconsistency can be attributed to moderators, such as organizational and institutional context factors, which could diminish or enhance the positive effects of gender diversity on boards (Fernandez et al., 2019). Researchers have thus considered different variables as moderators of this relationship. Table 6 summarizes the empirical work that studies the moderating effects on the relationship between the presence of women on boards and CSR performance and disclosure. This table also provides some additional details, such as the findings related explicitly to the moderating effect of the relationship between female directors and CSR performance and disclosure.

Institutional factors such as regulation and investor protection in the banking sector (García-Sánchez et al., 2018; García-Sánchez et al., 2020), shareholder protection or gender parity (Byron & Post, 2016) can play a significant role in the effect of the diversity of gender and CSR commitment. Similar results were obtained by García-Sánchez et al. (2019) who incorporated the moderating effect of stakeholder orientation, and Byron and Post (2016) who considered various characteristics at the country level. Additionally, Ramon-Llorens et al. (2020) suggest that the role of the dominating owner position of female directors can balance and moderate the effects.

Other contextual variables could also moderate the positive relationship between gender diversity and a company's social and environmental policies. The context in which a company operates in terms of the likelihood of creating pollution (Li et al., 2017) would have a negative effect on this relationship. Furthermore, the proportion of female directors is positively associated with a company's CSR ratings, and the strength of this relationship depends on the company's consumer market orientation level (Hyun et al., 2016). The results of Harjoto et al. (2015) suggest that gender diversity on boards and CSR performance is stronger when companies operate in environments that require strong stakeholder management or are characterized by "negative" business practices (Boulouta, 2013).

Fernandez et al. (2019) found that various firm-level variables moderate the relationship between gender diversity and CSR, concluding that it is reinforced when the context of the company values the "community" orientation of women and can manifest their ability to prioritize problems on the board, and, conversely, the relationship weakens when the context encourages a focus on financial performance.

The composition and structure of the board of directors could also moderate the influence of the presence of women on CSR. If the structure of a board is diverse as regards its attributes - size, independence, external directors and leadership duality - then there is a positive effect on gender diversity and the company's social performance (Hafsi & Turgut, 2013). A greater presence of external directors is associated with more favourable social results (Post et al., 2011) and could positively reinforce the contribution of women in corporate social performance (Macaulay et al., 2018). A variety of ages among female directors, as well as corporate profitability, positively moderate the relationship between a critical mass of women on a board of directors and corporate philanthropy (Jia & Zhang, 2013). Similarly, Amorelli and García-Sánchez (2020) show that the positive impact of a critical mass of at least three women on the quality of CSR disclosure is reinforced by the greater human capital of the board (that is, the greater the educational background, skills and experience of its members).

The ownership of the company (family vs. non-family) could moderate the role played by women directors in promoting CSR practices, being less effective in family firms (Rodríguez-Ariza et al., 2017). The authors conclude that in family businesses, female directors tend to behave in accordance with the family orientation towards CSR, so the commitment does not vary significantly. In contrast, Cordeiro et al. (2020) examine the role of the majority ownership structure and suggest that the effect of board gender diversity on firm's environmental CSR performance is higher in family firms and in dual-class firms.

Table 6 - Moderating effects on Female directors and Corporate social responsibility performance and disclosures relations			
Authors	Dependent variables	Moderation variables	Moderation effect
Cordeiro, J. J., Profumo, G., & Tutore, I. (2020)	Environmental performance	Family firms and dual-class firms	+
García-Sánchez, I. M., Oliveira, M. C., & Martínez-Ferrero, J. (2020)	Gender issues disclosure	Stakeholder-oriented countries	+
Ramon-Llorens, M. C., Garcia-Meca, E., & Pucheta-Martínez, M. C. (2020)	CSR disclosure	Owner position of female directors	-
Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019)	CSR performance	Voluntary initiative membership	+
		Deviation from prior financial performance	+
		Internationalization	+
		Product diversification	-
García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2018)	CSR performance	Institutional factors (banking regulation and investor protection)	+
Macaulay, C. D., Richard, O. C., Peng, M. W., & Hasenhuttl, M. (2018)	CSR performance	Outside directors	+
Rodríguez-Ariza, L., Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017)	CSR performance	Family firms	-
Li, J., Zhao, F., Chen, S., Jiang, W., Liu, T., & Shi, S. (2017)	Environmental policy	Likelihood to cause environmental pollution	-
Byron, K., & Post, C. (2016)	CSR performance	Country-level institutions (Shareholder protection strength and gender parity)	+
Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2016)	CSR performance	Resources available (ROA)	+
Jia, M., & Zhang, Z. (2013)	Corporate philanthropic disaster response	Age diversity among women on BODs	+
		Corporate profitability (earnings per share)	+
Hafsi, T., & Turgut, G. (2013)	CSR performance	Demographic diversity in boards (directors' attributes)	+
García-Sánchez, I. M., Suárez-Fernández, O., & Martínez-Ferrero, J. (2019)	CSR reporting quality	Stakeholder-oriented countries	+
Amorelli, M. F., & García-Sánchez, I. M. (2020)	CSR disclosure	Board Human Capital (board's background, skills, and experience)	+
Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2014)	CSR disclosure	Gender equality	+

1.6. CONCLUSIONS

CSR and non-financial information disclosure are essential elements in the modern business world. Various studies suggest that gender diversity contributes to improving corporate governance mechanisms and appears to be an important factor in improving and reporting on the social and environmental performance of companies. It could be assumed that the presence of women means that boards of directors are more likely to make strategic decisions aimed at improving information transparency regarding CSR and meeting the demands of the main stakeholders.

This paper has reviewed the existing literature on gender diversity and CSR, seeking to provide an overview of the state of the art to facilitate future lines of research. By conducting bibliometric and content analysis of research on women in boardrooms, CSR performance and disclosure published in academic journals, it contributes to a greater understanding of the role of gender diversity in boards of directors, and its relationship with the CSR.

Our content analysis suggested that there are three main theoretical frameworks guiding empirical research into the relationship between corporate governance and CSR, Agency Theory, Stakeholders Theory, and Resource Dependence Theory, however, these frameworks are beginning to fall into disuse in favour of theories more focused on determining the ideal composition of a board of directors, that favours decision-making in line with the new values of society. Although researchers have begun to focus on the foundations of critical mass theory, the results are not always conclusive.

Second, although CSR is generally considered a global construct, it must be taken into account that it is a multidimensional concept, and that joint analysis could prevent true corporate performance and the role that gender diversity can play in the different dimensions of the CSR from being recognized.

We found an emerging line of research focused on the study of the moderating effects of the relationship between gender diversity on boards and CSR, making it necessary to delve into the organizational and institutional factors that reinforce female aptitudes and capacities.

This study contributes to the gender literature by expanding the discussion on the role of boards and the appointment of more women directors to improve corporate social performance and commitment to CSR in general. It is important for both organizations and regulators to know the results obtained in the university-based research as an argumentative basis for their decisions. Similarly, research generates important implications for those who

decide on the composition of boards of directors, highlighting its importance for the selection process.

From a practical point of view, our results carry important practical implications for managers, investors, legislators and regulators. Although most of the previous studies have confirmed the commitment of women directors to CSR and corporate transparency, not all support the benefits of gender socialization. In this sense, although the female directors may show greater concern for the interests of others and greater sensitivity for the environment, the short-term adverse economic effects and the complexity of sustainability strategies can cause their social traits to be a minority are not decisive in promoting them.

So, first of all, for regulators and policymakers, the results reveal the need to reinforce corporate governance principles that seek to increase the presence of female directors in order to achieve a balanced composition of gender on boards of directors. It is important to promote the inclusion of women on boards, recognizing that their contributions are different from those of men and that they contribute to enriching the decision-making process. Beyond the mandatory quotas in countries such as Norway or Spain, it is essential for this study to highlight the contribution of women, not only in corporate commitment to socially responsible practices, but also as support for those who seek to promote public policies based on CSR.

Second, companies are subject to enormous pressure to increase female representation on main decision position, however, it seems advisable to take into account certain professional traits of female directors and their sensitivity towards sustainability in order to increase the value of the company and achieve harmony with the stakeholders through the implementation of sustainable policies. In this sense, the boards would have a greater predisposition to lead a positive change in the social and environmental impact of the business world.

Finally, in addition to what has already been discussed, future studies should focus on examining the impact that board gender diversity has on a specific element of CSR versus CSR activities as a multi-dimensional aggregate. Thus, for example, research on social issues would focus on employee relations, product quality, among others. Regarding the environment, eco-design, eco-innovation, etc. It also relevant to analyse the role that female directors play in other areas include managing the risks and limits of social activities, prioritizing or balancing the demands of stakeholders, and addressing the complexities of CSR for multinational corporations. Future lines of research, which hopefully can improve

and broaden academic knowledge on CSR, but also help address the practical challenges faced by executives and corporations. Moreover, the limitations of this paper regarding the objectives and criteria selected for conducting this bibliometric and bibliographic study allow for more ambitious reviews focused on establishing links between authors, topics and journals.

1.7. ANEXO ACTUALIZACIÓN

1.7.1. Introducción

En el presente anexo se realiza una actualización del estado del arte de las investigaciones académicas en materia de diversidad de género en los consejos de administración y su relación con las practicas sostenibles y políticas de transparencia corporativa. Se aplico un método análogo al realizado en el artículo académico publicado, realizándose una revisión bibliométrica y bibliográfica de artículos sobre mujeres en el consejo de administración, RSC y divulgación de información relacionada con la sostenibilidad publicados en revistas sobre “Business”, “Management”, “Ethics”; and “Environmental Sciences” de acuerdo con el Journal Citation Reports de la base de datos ISI Web of Knowledge desde el 2020 (año hasta el cual abarco la antedicha investigación) y abril de 2023.

Si bien en el periodo anteriormente analizado (comprendido entre 2000 y 2020) se había observado un crecimiento espectacular de esta línea de investigación a partir de 2016, esta tendencia se ha mantenido constante en los últimos tres años, observándose nuevamente que la publicación de artículos académicos en la materia ha incrementado notablemente. Se incorporaron al estudio 52 artículos académicos, concluyendo en un total de 141 artículos académicos publicados en el periodo comprendido entre 2000 y abril de 2023.

De la actualización se observa que el interés de los académicos en esta línea de investigación mantuvo la tendencia creciente observada anteriormente en los últimos tres años. Las publicaciones académicas han crecido un 37% desde 2020 a abril 2023. En concreto, de un total de 141 artículos académicos examinados entre 2000 y 2023, 52 se han publicado entre 2020 y abril de 2023.

Se actualiza también la revisión de contenido, identificándose en los 52 artículos incorporados los objetivos propios de cada publicación y los hallazgos abordados. Asimismo, se incluyen los análisis anteriormente realizados, actualizándose los estudios sobre la evolución y trayectoria de las publicaciones sobre diversidad de género en el consejo de

administración, desempeño y divulgación de la RSC y la clasificación de los artículos publicados por año, por revista y por país del primer autor. Se observa que la tendencia creciente se mantiene y continúa siendo liderada por investigadores españoles y estadounidenses, aunque también es de destacar que los investigadores chinos e italianos han crecido notoriamente.

1.7.2. Metodología

Se analizó la literatura existente sobre la diversidad de género en los consejos de administración y su relación con el desempeño en RSC y la divulgación de información relacionada con la sostenibilidad, en el periodo comprendido entre 2020 y abril de 2023 con el objetivo de actualizar la visión general del estado del arte realizada en el anteriormente expuesto artículo de investigación.

Para la consecución de este objetivo, se ha realizado un análisis bibliométrico y bibliográfico análogo al realizado anteriormente, incorporando las investigaciones sobre diversidad de género en los consejos, RSC y divulgación publicadas en revistas académicas listadas en la base de datos ISI Web of Science (ISI WOS), bajo las categorías del Journal Citation Reports “Business”, “Management”, “Ethics”; and “Environmental Sciences”.

En el periodo de actualización comprendido entre el 2020 hasta abril de 2023 se han incorporado 52 artículos académicos, arribando a un total de 141 artículos de investigación analizados en el periodo 2000-2023, observándose un crecimiento del 37% desde 2020.

La relación se mantiene y se observa nuevamente que más del 75% de las investigaciones sugieren una relación positiva entre la presencia de mujeres en el consejo y la RSC o la divulgación de información relacionada con la sostenibilidad. Se observan también estudios que sugieren relaciones no-significativas o negativas en la antedicha relación por lo que en general, los resultados continúan siendo no concluyentes.

La tabla 7 resume la actualización sobre las investigaciones sobre mujeres consejeras y RSC y divulgación, publicadas entre 2020 y abril de 2023 de la base de datos ISI WOS. La tabla detalla también aspectos adicionales como los objetivos de cada investigación y los resultados abordados sobre el efecto en la antedicha relación.

Tabla 7 - Lista de artículos académicos incorporados en la actualización			
Nº	Autores	Objetivos	Relación
1	Fernández-Torres, Y., Gutiérrez-Fernández, M., & Gallego-Sosa, C. (2021)	Analyse the relationship between gender diversity on the board of directors and companies' environmental practice (International)	negative
2	Ali Gull, A., Hussain, N., Akbar Khan, S., Nadeem, M., & Mansour Zalata, A. (2022)	Explore whether board gender diversity is associated with CSR decoupling (USA)	negative
3	Al-Najjar, B., & Salama, A. (2022)	Explore the relationship between board gender diversity and environmental performance (USA)	positive
4	Amorelli, M. F., & García-Sánchez, I. M. (2021)	Literature review	-
5	Amorelli, M. F., & García-Sánchez, I. M. (2023)	Study the association of board gender diversity with sustainable business commitment (International)	positive
6	Arayakarnkul, P., Chatjuthamard, P., & Treepongkaruna, S. (2022).	Study the association of board gender diversity with firms' social commitment and sustainability (USA)	positive
7	Ardito, L., Dangelico, R. M., & Messeni Petruzzelli, A. (2021)	Examine the effects of the presence of women on boards and several dimensions of CSR performance (USA and Europe)	positive/ negative/non-significant
8	Bhuiyan, M. B. U., Huang, H. J., & de Villiers, C. (2021)	Investigates the corporate governance determinants of environmental investment (Europe)	positive
9	Boukattaya, S., & Omri, A. (2021)	Study the relationship between board gender diversity and corporate social responsibility and irresponsibility separately (France)	positive
10	Bruna, M. G., Đăng, R., Ammari, A., & Houanti, L. H. (2021)	Addresses the relationship between the representation of women on corporate boards and CSP (USA)	positive/ negative
11	Buallay, A., Hamdan, R., Barone, E., & Hamdan, A. (2022)	Examines the relationship between board gender diversity and sustainable reporting (International)	positive/ negative
12	Buertey, S. (2021)	Investigates the relationship between board gender diversity and the assurance of CSR reports (Africa)	positive
13	Cabral, C., & Sasidharan, A. (2021)	Examines the impact of board characteristics and ownership structure on CSP (India, China, South Africa)	positive/ negative
14	Cambrea, D. R., Paolone, F., & Cucari, N. (2023)	Study whether the presence of a critical mass of women in boardrooms correlates with firm ESG performance (Italy)	positive
15	Cicchello, A. F., Fellegara, A. M., Kazemikhasragh, A., & Monferrà, S. (2021)	Investigate the influence of board gender diversity on sustainability reporting and on the use of external assurance (Asia and Africa)	positive

Tabla 7 (continuación)			
16	Cosma, S., Schwizer, P., Nobile, L., & Leopizzi, R. (2021)	Explore the relationships between boards attributes and their attitudes towards environmental protection	positive
17	De Abreu, M. C. S., Soares, R. A., Daniel-Vasconcelos, V., & Crisóstomo, V. L. (2022)	Study the effect of board diversity on environmental policy (Brazil, Mexico, and Chile)	non-significant
18	Disli, M., Yilmaz, M. K., & Mohamed, F. F. M. (2022)	Investigate the effects of board attributes (board independence, gender diversity, board size and board activity) on the sustainability performance (International)	positive
19	Erin, O., Adegboye, A., & Bamigboye, O. A. (2021)	Examine the association between corporate governance (board size, board independence, board gender diversity and board expertise) and sustainability reporting quality (Nigeria)	positive
20	Fan, P., Qian, X., & Wang, J. (2023)	Explores the effects of gender diversity on overall carbon emissions	negative/non-significant
21	Gallego-Sosa, C., Fernández-Torres, Y., & Gutiérrez-Fernández, M. (2020)	Study the influence of board gender diversity on environmental performance (USA and Europe)	non-significant
22	Gallego-Sosa, C., Gutiérrez-Fernández, M., Fernández-Torres, Y., & Nevado-Gil, M. T. (2021)	Explores whether gender diversity on the board of directors can be used to differentiate between companies with different degrees of CSR in terms of commitment to the 2030 SDGs (Europe)	positive
23	Galletta, S., Mazzù, S., Naciti, V., & Vermiglio, C. (2022)	Analyse the impact of female directors and managers on sustainability performance in the banking industry (International)	positive
24	Gangi, F., Daniele, L. M., D'Angelo, E., Varrone, N., & Coscia, M. (2022)	Investigate the relationship between board gender diversity and corporate environmental responsibility within the banking industry (International)	positive
25	Gavana, G., Gottardo, P., & Moisello, A. M. (2023)	Analyze the effect of structural and demographic board diversity on family firms' CSP (France, Germany, Italy, Spain and Portugal)	positive/non-significant
26	Giannarakis, G., Mallidis, I., Sariannidis, N., & Konteos, G. (2022)	Investigate the impact of Corporate Governance attributes (gender diversity, among others) on the environmental and social aspects of CSR (Europe, excluding Eurozone)	positive
27	Gonenc, H., & Krasnikova, A. V. (2022)	Investigate the effect of board gender diversity on the decision to disclose carbon emissions voluntarily (International)	positive
28	Guping, C., Safdar Sial, M., Wan, P., Badulescu, A., Badulescu, D., & Vianna Brugni, T. (2020)	Study if board gender diversity and reputational incentives of non-executive directors affect CSR reporting (China)	positive

Tabla 7 (continuación)			
29	Gutiérrez-Fernández, M., Gallego-Sosa, C., & Fernández-Torres, Y. (2023)	Study board gender diversity and commitment to SDGs (Europe)	positive
30	Islam, R., French, E., & Ali, M. (2022)	Investigate how board gender diversity and age diversity influence the CSR performance (Australia)	positive
31	Jin, R., Jiang, X., & Hu, H. W. (2021)	Study the impacts of female independent directors on firms' (internal and external) CSR engagement (China)	positive/non-significant
32	Khan, H. U. R., Khidmat, W. B., Awan, S., Al Hares, O., & Saleem, K. (2022)	Examines the effect of independent directors (gender diversity, among others) on carbon information disclosure (China)	positive
33	Liu, Z., Cai, L., & Zhang, Y. (2022)	Investigate the extent to which the degree of gender diversity and ownership structure can help improve corporate environmental performance (China)	positive
34	Marano, V., Sauerwald, S., & Van Essen, M. (2022)	Examine the relationship between women directors and CSP (International)	positive
35	Marchini, P. L., Tibiletti, V., Mazza, T., & Gabrielli, G. (2022)	Investigates the relationship between the implementation of mandatory gender quotas on boards and companies' environmental indicators (Italy)	positive/non-significant
36	Martínez, M. D. C. V., Martín-Cervantes, P. A., & del Mar Miralles-Quirós, M. (2022)	Compares the influence of gender diversity on corporate boards on CSR performance in developed and emerging European markets	positive
37	McGuinness, P. B., Vieito, J. P., & Wang, M. (2020)	Study the management quality and CSP of firms supervised according to three distinctly different governance regimes (UK, China and Sweden/Norway)	positive
38	Menicucci, E., & Paolucci, G. (2022)	Investigates the relation between board diversity and ESG dimensions (Italy)	positive
39	Molinero-Díez, P., Blanco-Mazagatos, V., Garcia-Rodriguez, I., & Romero-Merino, M. E. (2022)	Analyses the influence of board's gender diversity and educational background on economic performance, CSR and, ultimately, firm value (Spain)	positive
40	Muhammad, H., & Migliori, S. (2022)	Examines the effect of board gender diversity and sustainability committees on environmental performance (Italy)	positive
41	Naveed, K., Voinea, C. L., Ali, Z., Rauf, F., & Fratostiteanu, C. (2021)	Examines the links between board gender diversity and CSP (China)	positive
42	Nerantzidis, M., Tzeremes, P., Koutoupis, A., & Pourgias, A. (2022)	Explores the association between board gender diversity and CSP (Europe)	positive
43	Nguyen, T. T. P., & Thai, H. M. (2022)	Examines the effects of board gender diversity on female representation at lower organization levels and CSP	positive

Tabla 7 (continuación)			
44	Orazalin, N., & Mahmood, M. (2021)	Examine the effects of board characteristics (gender diversity, among others) and country governance quality on the level of environmental performance (Europe)	positive
45	Sekarlangit, L. D., & Wardhani, R. (2021)	Study the influence of the characteristics and activities of the board of directors and the existence of CSR committees on sustainability disclosures (Asia)	non-significant
46	Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021)	Study whether a board structure (gender diversity, among others) is associated with firm financial and CSR performance (International)	positive
47	Valls Martínez, M. D. C., Martin Cervantes, P. A., & Cruz Rambaud, S. (2020)	Examine the extent to which the relationship between female directors and CSP remains positive according to the level of gender diversity (USA and Europe)	positive
48	Wang, C., Deng, X., Álvarez-Otero, S., Sial, M. S., Comite, U., Cherian, J., & Oláh, J. (2021)	Investigate the impact of women and independent directors on CSR reporting and financial performance (China)	positive
49	Wang, Y., Luo, X., Wang, T., & Hu, D. (2021)	Examines whether (inside/outside) female directors contribute to CSR performance (China)	positive/ negative
50	Wang, Y., Ma, J., & Wang, T. (2021)	Study the differential impact of two types of female directors (politically connected/politically disconnected) on CSR (China)	positive
51	Yarram, S. R., & Adapa, S. (2021)	Examine the association between gender diversity and CSR dimensions (Australia)	positive/non-significant
52	Zaid, M. A., Wang, M., Adib, M., Sahyouni, A., & Abuhijleh, S. T. (2020)	Investigates the effects of board diversity (nationality and gender diversity) on the extent of corporate sustainability performance (Palestine)	positive

1.7.3. Enfoque bibliométrico

Para realizar la actualización del estudio de la evolución y el análisis de las trayectorias, se considera el total de los 141 artículos publicados y se clasifican, al igual que en la investigación anteriormente realizada, por año, revista y país del primer autor.

1.7.3.1. Publicaciones por año

La siguiente Figura presenta la cantidad de artículos académicos publicados sobre diversidad de género en el consejo y RSC o divulgación de sus prácticas por año, extendiendo el periodo de análisis hasta abril de 2023.

Se presentan los 141 artículos que cumplen con los parámetros de búsqueda anteriormente mencionados. Como se muestra en la Figura 4, el 84% de los artículos se publicaron entre 2016 y 2023, manteniéndose la tendencia creciente sugerida.

Adicionalmente, sugiere una preferencia de los académicos por investigaciones empíricas relacionadas con el impacto de la diversidad del consejo en el desempeño de la RSC. Concretamente, el 70% de los artículos analiza el impacto de la diversidad de género en el desempeño en materia de RSC frente a un 30% que lo hace sobre la divulgación de información. Por lo cual, se mantiene constante el interés de los investigadores desde el año 2016.

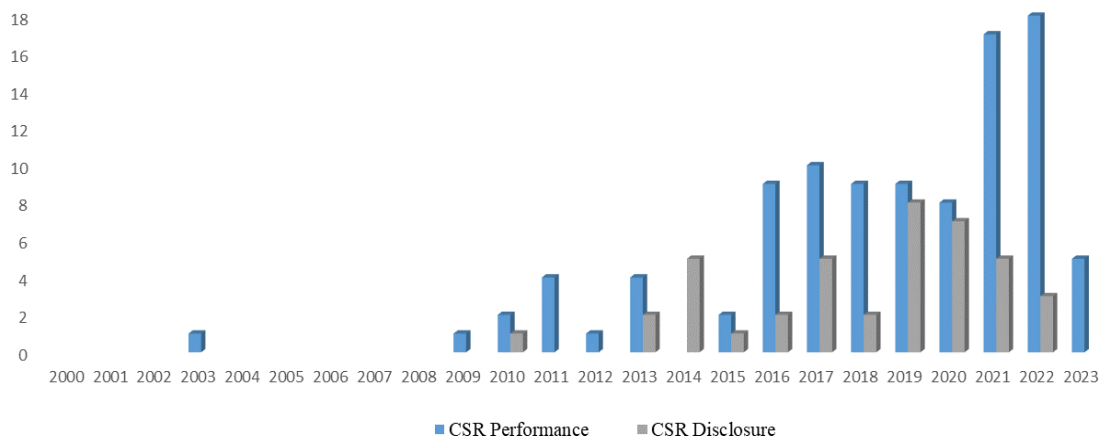


Figura 4. Cantidad de artículos sobre diversidad de género en el consejo y desempeño en RSC o divulgación de RSC publicados de 2000 a 2023, tomados de la base de datos ISI WOS

1.7.3.2. Publicaciones por revista académica

La actualización incluye también considerar las revistas académicas que han publicado artículos que abordan la diversidad de género en el consejo y el desempeño y divulgación de la RSC. La Figura 5 presenta el 68% de las principales revistas indexadas en Negocios, Gestión, Ética y Estudios Ambientales que han publicado tres o más artículos, presentando un especial interés en estos temas de investigación.

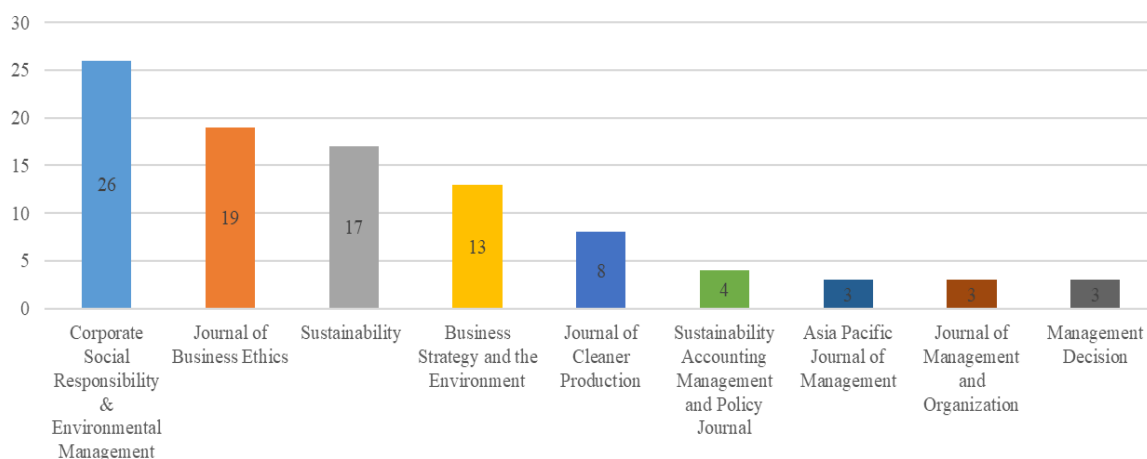


Figura 5. Presenta las revistas con la mayor cantidad de publicaciones sobre diversidad de género y RSE o divulgación de RSE publicadas de 2000 a 2023 tomadas de la base de datos ISI WOS.

Si bien cambian las posiciones rankeadas con relación a la investigación realizada anteriormente, son las mismas las revistas las que cuentan con más publicaciones sobre diversidad de género y RSC o divulgación de RSC. Las primeras cinco son: Corporate Social Responsibility & Environmental Management, Journal of Business Ethics, Sustainability, Business Strategy the Environment y Journal of Cleaner Production.

1.7.3.3. Publicaciones por país

Para actualizar las trayectorias de publicación en diversidad de género y desempeño y divulgación de RSC por país, se enumeraron los artículos según el país del primer autor. La investigación sobre la temática en cuestión ha despertado el interés de investigadores de 33 países. La Tabla 8 actualiza las publicaciones por país del primer autor, se observa que los países líderes continúan siendo España, EE. UU. y Reino Unido, aunque también es de destacar que los investigadores chinos e italianos han crecido notoriamente.

La Figura 6 muestra las publicaciones por país del primer autor

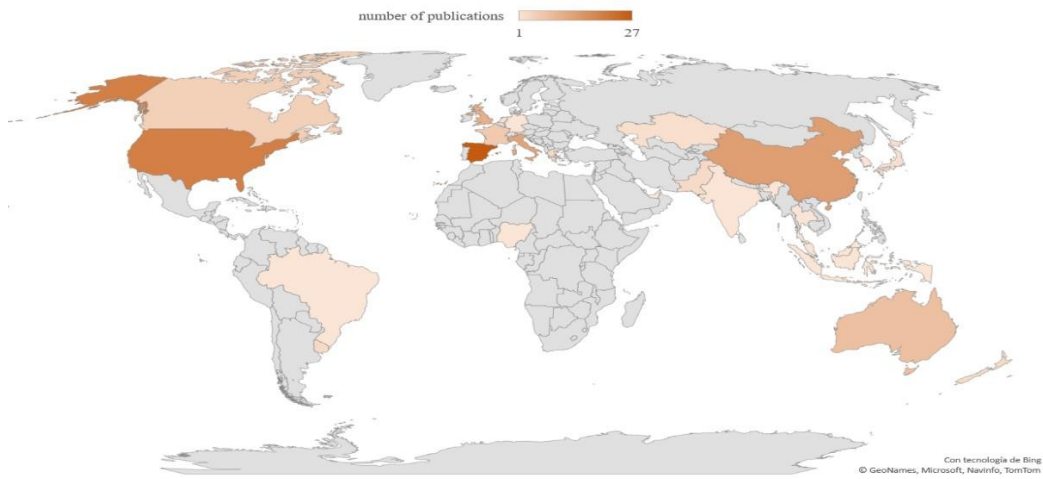


Tabla 8	
Publicaciones por país	Nº of artículos
Spain	27
USA	20
China	14
Italy	13
UK	11
Australia	8
France	6
Canada	5
Greece	3
New Zealand	3
Pakistan	3
Uruguay	3
Hong Kong	2
Japan	2
Kazakhstan	2
Qatar	2
AE	1
Brazil	1
Cyprus	1
Dubai	1
Germany	1
India	1
Indonesia	1
Korea	1
Lebanon	1
Lebanon	1
Malasya	1
Netherlands	1
Nigeria	1
South Korea	1
Thailand	1
The Netherlands	1
Turkey	1

1.7.3.4. Publicaciones por autor

Basándonos en los datos de la base de datos ISI WOS, la actualización suma 138 nuevos autores a la lista previa de 214 autores que han publicado artículos sobre diversidad de género en el consejo y RSC o divulgación de RSC en el periodo comprendido entre 2000 y abril de 2023. En la Tabla 9 se enumeran los autores que han publicado dos o más artículos en dicho periodo. Los autores que más han contribuido continúan siendo son Isabel-Maria Garcia-Sanchez de la Universidad de Salamanca, Martínez -Ferrero, Jennifer y Pucheta-Martínez, María Consuelo.

Table 9		
Publicaciones por autor	Organización	Nº Art.
García-Sánchez, Isabel-María	University of Salamanca	12
Martínez-Ferrero, Jennifer	University of Salamanca	5
Pucheta-Martínez, María Consuelo	University Jaume I	5
Fernández-Torres, Y.	University of Extremadura	4
Gallego-Sosa, C.	University of Extremadura	4
Gutiérrez-Fernández	University of Extremadura	4
Amorelli, María-Florencia	Universidad ORT Uruguay	3
Harjoto, Maretno	Pepperdine University	3
Kuzey, Cemil	Murray State University	3
Post, Corinne	Lehigh University	3
Rodríguez-Ariza, Lazaro	University of Granada	3
Bel-Oms, Inmaculada	University Jaume I	2
Bernardi, Richard A.	Roger Williams University	2
Birindelli, Giuliana	University of Chieti-Pescara	2
Cabeza-García, Laura	University of León	2
Cuadrado-Ballesteros, Beatriz	University of Salamanca	2
Fernández-Gago, Roberto	University of León	2
Frías Aceituno, José V.	University of Granada	2
Gallego-Alvarez, Isabel	University of Salamanca	2
García-Meca, Emma	University of Cartagena	2
Giannarakis, Grigoris	University of Western Macedonia	2
Iannuzzi, Antonia Patrizia	University of Bari "A. Moro"	2
Jizi, Mohammad	Lebanese American University	2
Karaman, A. S	American University of the Middle East	2
Kilic, M.	Samsun University	2
Konteos, George	University of Western Macedonia	2
Liao, Lin	Southwestern University of Finance and Economics	2
Mallin, Christine	University of Birmingham	2
Martin Cervantes, P. A.	Universidad de Almería	2
Mazza, Tatiana	University of Parma	2
McGuinness, Paul B.	The Chinese University of Hong Kong	2
Michelon, Giovanna	University of Padov	2
Nadeem, Muhammad	University of Otago School of Business	2

Table 9 (continued)		
Nekhili, Mehdi	University of Maine	2
Nieto, Mariano	University of León	2
Olcina-Sempere, Gustau	University Jaume I	2
Omri, A	Université de Tunis	2
Orazalin, N.	KIMEP University	2
Rahman, Noushi	Pace University	2
Sariannidis, Nikolaos	University of Western Macedonia	2
Savioli, Marco	University of Salento	2
Tibiletti, Veronica	University of Parma	2
Uyar, A.	Excelia Business School	2
Vieito, João Paulo	Instituto Politécnico de Viana do Castelo	2
Wang, M.	King's College London	2
Wang, T.	Harbin Institute of Technology	2
Wang, Y.	Lanzhou University	2

1.7.4. Enfoque bibliográfico

Tal como se ha expuesto anteriormente, no existe un enfoque único de la CSR (Gulzar et al., 2019) quizás como reflejo de las diferentes iniciativas que las organizaciones han puesto en marcha para satisfacer las expectativas de los diferentes grupos de interés (Zhuang et al., 2018). La multidimensionalidad del concepto ha llevado a los académicos a utilizar diferentes constructos para medirla y denominarla.

Los artículos publicados entre 2020 y abril de 2023 sugieren una tendencia al considerar la multidimensionalidad del concepto y utilizan variables dependientes similares a la revisión realizada anteriormente, tal y como puede observarse en la Figura 7.

Se destaca que el desempeño corporativo socialmente responsable y el medioambiental siguen siendo los enfoques mayoritariamente utilizado en las investigaciones académicas para medir la relación entre la presencia de mujeres consejeras y la RSC.

La Figura 7 presenta el porcentaje de artículos sobre diversidad de género en el consejo y RSC por dimensión, publicados de 2000 a 2023 tomados de la base de datos ISI WOS.

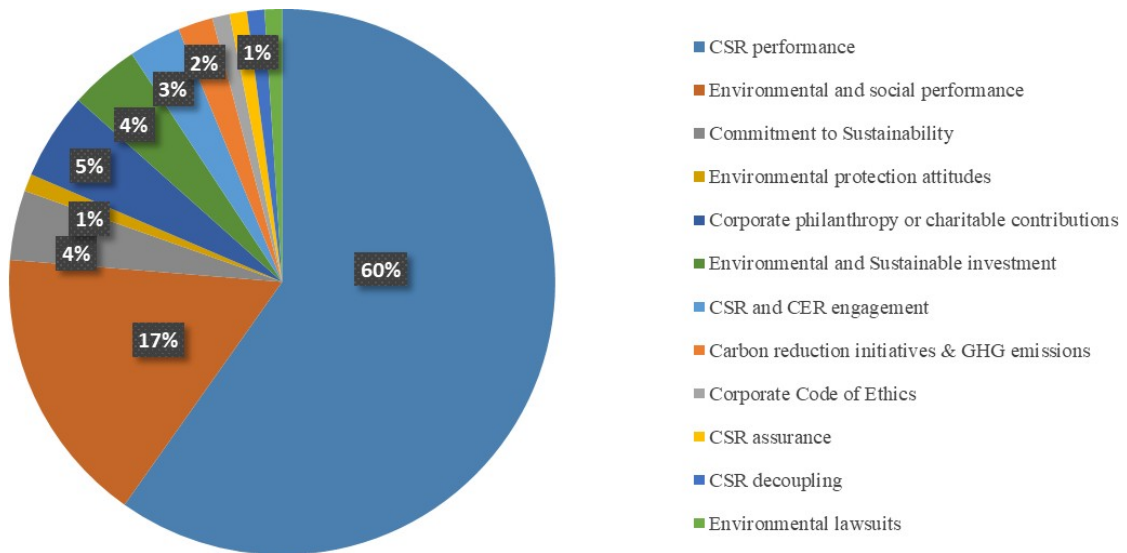


Figura 7. Presenta el porcentaje de artículos publicados sobre diversidad de género en el consejo y RSC por dimensión de RSC, publicados de 2000 a 2023 tomados de la base de datos ISI WOS.

Resultados similares se observan al considerar las investigaciones sobre la relación entre la diversidad de género del consejo y las practicas de transparencia informativa, véase al respecto la Figura 8, presentada a continuación, que muestra el porcentaje de artículos sobre diversidad de género en el consejo y divulgación de RSC por dimensión, publicados de 2000 a 2023 tomados de la base de datos ISI WOS.

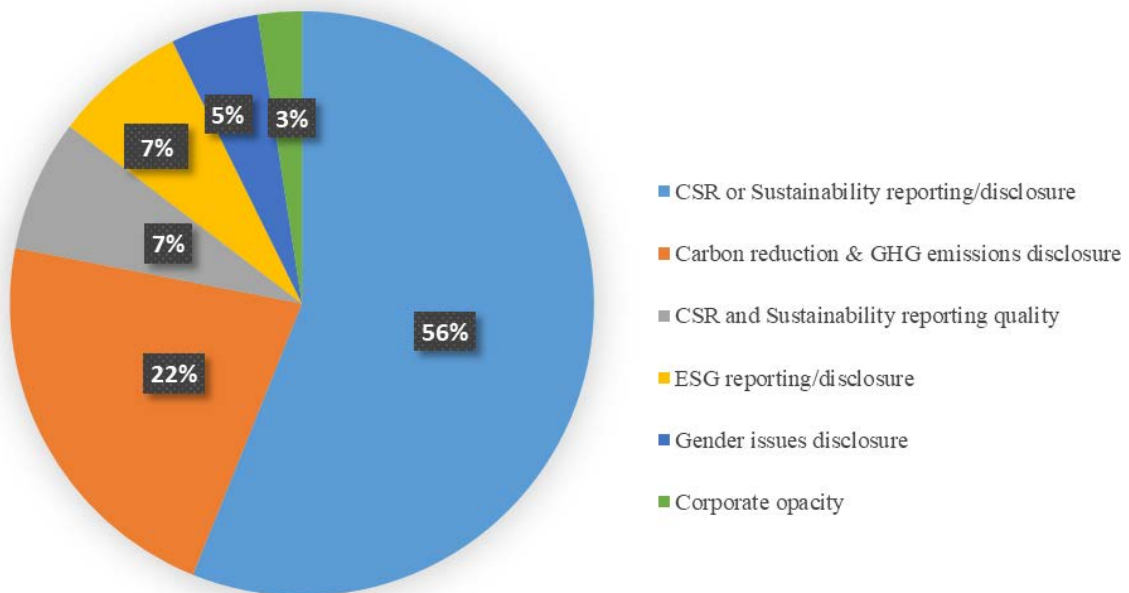


Figura 8. Presenta el porcentaje de artículos publicados sobre diversidad de género en el consejo y divulgación de RSC por dimensión, publicados de 2000 a 2023 tomados de la base de datos ISI WOS.

1.7.5. Actualización del efecto moderador

Si consideramos los 52 artículos publicados entre 2020 y abril de 2023 que cumplen con los parámetros de búsqueda anteriormente mencionados, se incorporan 9 investigaciones que presentan diferentes variables como moderadoras de la relación entre la presencia de mujeres en los consejos y la RSC y su divulgación. La Tabla 10 resume los trabajos empíricos que estudian los efectos moderadores en la antedicha relación, a su vez provee algunos detalles adicionales como los resultados abordados.

Tabla 10 - Efecto moderador sobre las relaciones entre las consejeras y la RSC y la divulgación de la RSC			
Autores	Variables Dependientes	Variables Moderadoras	Efecto Moderador
Guping, C., Safdar Sial, M., Wan, P., Badulescu, A., Badulescu, D., & Vianna Brugni, T. (2020)	CSR disclosure	Firm size	+
Buertey, S. (2021)	CSR disclosure	Ownership concentration	-
Naveed, K., Voinea, C. L., Ali, Z., Rauf, F., & Fratostiteanu, C. (2021)	CSR performance	Industry ESG risk exposure	+
Wang, Y., Ma, J., & Wang, T. (2021)	CSR performance	State ownership	+
Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021)	CSR performance	CSR committee and CEO duality	0
Jin, R., Jiang, X., & Hu, H. W. (2021)	CSR performance	Politically connected and Overseas returnee independent directors	+/-
Gonenc, H., & Krasnikova, A. V. (2022)	GHG emissions disclosure	Gender (soft or hard) quotas	0
Gangi, F., Daniele, L. M., D'Angelo, E., Varrone, N., & Coscia, M. (2022)	CER engagement	Gender inequality in national culture	-
Gavana, G., Gottardo, P., & Moisello, A. M. (2023).	CSR performance	Institutional and business environment	-

1.7.6. Conclusiones

En este apartado se realiza una actualización de las investigaciones académicas sobre diversidad de género en los consejos de administración y su relación con las practicas sostenibles y políticas de transparencia corporativa, buscando proporcionar una visión general del estado del arte para facilitar futuras líneas de investigación. Así, se aplica un método análogo a la investigación presentada en el capítulo, realizándose un análisis bibliométrico y de contenido de las investigaciones sobre mujeres consejeras y RSC y

divulgación de información relacionada con la sostenibilidad publicados en revistas sobre “Business”, “Management”, “Ethics”; and “Environmental Sciences” de acuerdo con el Journal Citation Reports de la base de datos ISI WOS desde el 2020 (año hasta el cual abarco la antedicha investigación) y abril de 2023. El objetivo es contribuir a una mayor comprensión del rol de la diversidad de género y su relación con la RSC.

Si bien en el periodo anteriormente analizado (comprendido entre 2000 y 2020) se había observado un crecimiento espectacular de esta línea de investigación a partir de 2016, esta tendencia se ha mantenido en los últimos tres años, observándose un crecimiento aún mayor, sugiriendo que la tendencia creciente se mantiene vigente y continúa siendo liderada por investigadores españoles y estadounidenses, aunque también es de destacar que los investigadores chinos e italianos han crecido notoriamente.

Se observa que aún existe un predominio de considerar la RSC como un constructo global, a pesar de ser reconocido como un concepto multidimensional.

Al igual que en la investigación anteriormente realizada, encontramos algunas investigaciones empíricas centradas en el estudio de los efectos moderadores de la relación entre la diversidad de género y la RSC, que incorporan nuevas variables moderadoras a la investigación empírica, siendo necesario profundizar en los factores organizativos e institucionales que refuercen las aptitudes y capacidades femeninas.

CHAPTER II

CHAPTER II

BOARD GENDER DIVERSITY AND CORPORATE SUSTAINABILITY DISCLOSURE

Summary

This chapter aims to examine two closely related issues: first, the effect of the presence of female directors on boards on corporate social responsibility disclosure, focusing on the necessary critical mass of this minority group, and, second, the moderation of the human capital of board members - their background, skills, and experience - that could favor the intrinsic female directors' characteristics through the cognitive effect of equal board members. For an international sample of 9,744 firm-year observations from 2007 to 2016, different panel data regressions are proposed. The findings of this study reveal a positive impact of gender board diversity on voluntary socially responsible disclosure by examining the presence of at least three women on the board—the critical mass. Moreover, the paper reports a greater effect when the board's background, skills, and experience are greater. As a supplemental analysis, the evidence shows that the female role does not remain when women achieve the position of chairperson; that is, female directors adopt a male stereotype regarding voluntary information disclosure when they are also the chairperson of the firm, independently of the human capital of the board members.

Keywords: background, board of directors, corporate governance, corporate social responsibility disclosure, critical mass, experience, female directors, skills

Reference: Amorelli, M. F., & García-Sánchez, I. M. (2020). Critical mass of female directors, human capital, and stakeholder engagement by corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 27(1), 204-221. <https://doi.org/10.1002/csr.1793>

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Wiley Top Cited Article 2020-2021

2.1. RESUMEN CAPÍTULO II EN ESPAÑOL

Este capítulo tiene como objetivo examinar dos cuestiones estrechamente relacionadas. Primero, la relación entre la presencia de mujeres en el consejo de administración y la revelación de información sobre RSC, centrándose en la masa crítica necesaria de este grupo minoritario. Segundo, el rol moderador del capital humano de los miembros del consejo - antecedentes, habilidades y experiencia de los consejeros - que podría favorecer las características intrínsecas de las mujeres por el efecto cognitivo de igualdad de sus miembros.

En primer lugar, se busca analizar las condiciones necesarias para que los beneficios tradicionalmente asignados a la diversidad de género, de acuerdo con la Teoría de dependencia de los recursos y las Teorías de la identidad social, puedan conducir a mejores prácticas informativas de RSC. Por lo tanto, es interesante identificar en qué condiciones las mujeres consejeras imponen sus estereotipos e identidades femeninas en la política de divulgación de RSC.

En referencia a la Teoría de dependencia de los recursos, las mujeres consejeras aportan valores y experiencias profesionales diferentes a los hombres y son más propensas a representar el estereotipo femenino (i.e. comportamiento empático y más sensible socialmente) lo que permite mejorar el desempeño social de las empresas (Boulouta, 2013). De acuerdo con la Teoría de la identidad social (Tajfel & Turner, 1979) los individuos se categorizan como proceso de orden y simplificación de la realidad social, utilizando atributos demográficos, como el género, la raza o la edad, para clasificarse tanto a ellos mismos como a otros, entre varias categorías sociales (e.g. consejeras y consejeros) y poseen una identidad social basada en su pertenencia a dichos grupos o categorías. Al definirse a sí mismos en términos de las membresías de grupo el comportamiento de los individuos se ve afectado por la pertenencia a las categorías sociales con las que se identifican (Ashforth & Mael, 1989). Por lo tanto, la identidad de género se constituye indudablemente como una de las principales formas de división social que explica las implicancias diferenciales que existen en el seno de los órganos empresariales en los que se toman decisiones, tales como el consejo de administración. Esto lleva a que las mujeres en los consejos tiendan a actuar en concordancia con el estereotipo femenino (Boulouta, 2013) aportando diferentes puntos de vista y heterogeneidad al proceso de toma de decisiones y pueden ejercer influencia sobre las decisiones relativas a ciertas prácticas de organización como el desempeño en RSC y sus políticas de divulgación (Nielsen & Huse, 2010a). Una mayor presencia de mujeres en el consejo de administración parece influir positivamente en el alcance de la divulgación social,

confirmando la percepción de que las mujeres son más sensibles a las preocupaciones sociales (Giannarakis et al., 2014), con ello mejoran la relación con los stakeholders y promueven el comportamiento ético de las empresas, favoreciendo y promoviendo la transparencia informativa.

En base a lo anteriormente expuesto, la evidencia previa condice que a medida que aumenta la diversidad de género en el consejo, más amplio es el compromiso de una empresa con las políticas y prácticas relevantes para la RSC (Bear et al., 2010; Cook & Glass, 2017), favoreciendo y promoviendo la transparencia informativa.

Es importante considerar que la integración de las mujeres en los consejos constituye una pequeña minoría, por lo que los consejos de administración continúan siendo entornos dominados por hombres. En este contexto, los individuos tienden a exhibir un sesgo favorable hacia otros que perciben como miembros de su grupo, afectando la toma de decisiones individual, por lo que generalmente habrá una tendencia a escuchar más las opiniones de los miembros de la mayoría (e.g., hombres) y rechazar las ideas que provienen de los representantes de las minorías (e.g., mujeres) (Mathisen, Ogaard, & Marnburg, 2013). Bajo estas circunstancias los beneficios propuestos de la diversidad de género en la divulgación voluntaria de RSC tienen menos posibilidades de materializarse (Hillman et al., 2008). Desde la perspectiva de la Teoría de la Masa Crítica, para comprender el impacto de la diversidad de género en los consejos en la divulgación voluntaria de RSC es importante considerar no solo su presencia sino también su número (Fernandez-Feijoo et al., 2014; Torchia et al., 2011). La teoría de la masa crítica postula que son necesarias tres o más mujeres para superar las antedichas limitaciones, así las mujeres tendrán más probabilidad de que sus opiniones sean escuchadas y apoyadas por la mayoría, ejerciendo mayor influencia en la toma de decisiones sobre las políticas y prácticas corporativas de RSC (Cook & Glass, 2017).

Los argumentos anteriores nos permiten sustentar la siguiente hipótesis: “las mujeres ejercen un efecto positivo en la divulgación de RSC cuando alcanzan una masa crítica en el consejo”.

Adicionalmente, se introduce al análisis el clima psicológico del consejo, conocido como *boardplace*. Es necesario que exista un clima que favorezca la inserción de las mujeres y no limite su contribución potencial a la toma de decisiones del consejo. Se entiende que el capital humano de los miembros asociado a sus antecedentes, habilidades y experiencia podría reflejar un entorno contextual en el consejo donde las mujeres tienen la percepción de ser miembros iguales del consejo (Bear et al., 2010) y debido a estas características intangibles,

mejorar la discusión de grupo y la consideración de diferentes opiniones en el proceso de toma de decisiones (Van Knippenberg et al., 2004).

Este trabajo vincula el "clima psicológico" del consejo con el capital humano de sus miembros. Dada la influencia del *boardplace* en el compromiso de las consejeras sobre la divulgación de la RSC, se investiga en mayor profundidad cómo el contexto del consejo influye en las mujeres y en su compromiso de divulgación de la RSC.

En este sentido Bear et al. (2010) afirman que el capital humano del consejo está asociado con la experiencia, el conocimiento y las capacidades de sus miembros; estos son recursos que favorecen la comprensión y la solución efectiva de los problemas por parte del consejo, así como el compromiso con la RSC, que puede extenderse a la divulgación. Así, como determinantes del *boardplace*, nos centramos en los antecedentes educativos, las habilidades y la experiencia de los miembros del consejo. Esperamos que la estrategia de divulgación de RSC se pueda beneficiar de los antecedentes, habilidades y experiencia de los miembros del consejo si las mujeres son percibidas como miembros iguales y pueden reforzar el compromiso de RSC de la empresa.

Los argumentos anteriores nos permiten sustentar la siguiente hipótesis: "los antecedentes educativos, las habilidades y la experiencia de los miembros del consejo refuerzan positivamente el compromiso de divulgación de RSC cuando las consejeras representan una **masa crítica en el consejo**".

Para probar las hipótesis de investigación, se considera una muestra de firmas internacionales listadas para el período 2007 a 2016 y se proponen diferentes regresiones de datos de panel que permiten controlar la heterogeneidad inobservable y la endogeneidad. Los hallazgos de este estudio revelan el impacto positivo de la diversidad de género en el consejo en la revelación voluntaria de información socialmente responsable cuando las mujeres están representadas en el consejo y alcanzan una masa crítica de al menos tres mujeres. El resultado principal revela el papel moderador de los antecedentes, las habilidades y la experiencia de los miembros del consejo. A mayor capital humano, mayor es el efecto positivo de las mujeres consejeras en la promoción de las políticas de divulgación de RSC.

Estos resultados se complementan con un análisis de la relación entre la diversidad de género en el consejo de administración, la divulgación de la RSC y el rol moderador del capital humano del consejo cuando una consejera alcanza la posición de presidente del consejo. La evidencia del análisis complementario muestra que el rol femenino no permanece cuando las mujeres logran una posición de liderazgo; es decir, las mujeres adoptan un estereotipo

masculino en la divulgación voluntaria de información cuando también son presidentes del consejo, independientemente del capital humano de los miembros del consejo. Se evidencia que las mujeres que siguen carreras gerenciales generalmente rechazan los estereotipos femeninos y adoptan características masculinas que son más valoradas en posiciones de liderazgo. El cargo de presidente cambia el estereotipo femenino y su enfoque en las divulgaciones de RSC, independientemente del capital humano de los miembros del consejo.

2.2. INTRODUCTION

The rise of corporate social responsibility (CSR) as a new model of business behaviour is closely linked to the disclosure of social and environmental information. This allows the **different interest groups to know companies' commitment to sustainability in detail**. However, not all companies are equally concerned about the interests and demands of stakeholders. There are important differences in the quantity and quality of the reported CSR information (Herremans et al., 2016; Boiral and Henri, 2017; Moratis and Brandt, 2017).

Under this information heterogeneity, corporate governance mechanisms must be designed with the aim of guaranteeing the information demands of the stakeholders. This would imply a reduction in the opportunistic behaviour of those to whom the responsibility is delegated, exercising control over the actions of the managers and monitoring and controlling their behaviour and decisions. As the basis of corporate governance (García-Sánchez et al., 2015), among the main tasks of the board of directors is the supervision of management actions (Fama and Jensen, 1983), playing a relevant role in the CSR disclosure policy.

Previous studies have shown whether and how the board composition and structure significantly influence the disclosure of information (García-Sánchez and Martínez-Ferrero, 2018a and 2018b). In relation to the board composition, several studies have considered diversity and in particular the role of women in the promotion of CSR practices and disclosure. In general, the empirical evidence suggests a positive relationship between the presence of women on the board, greater CSR performance (Setó-Pamies, 2015; Cuadrado-Ballesteros et al., 2017) and greater transparency of these practices (Ben-Amar et al., 2017; Liao et al., 2015; Arayssi et al., 2016; Cabeza-García et al., 2017; Khan et al., 2019; García-Sánchez et al., 2019c).

Women, according to the female stereotype, have stronger moral standards and are socially more sensitive, emotional and empathic than men (Boulouta, 2013). These characteristics lead women in decision-making positions (e.g., female directors) to take into account the

interests of multiple stakeholders. Men, on the other hand, tend to focus on economic cost/benefit analysis without considering other decision criteria (Hillman, 2014). The above could explain at least part of the differences between companies in relation to CSR performance and disclosure, focusing on the gender diversity on corporate boards.

However, critical voices have emerged in recent years, suggesting that the influence of women on the promotion of CSR disclosure practices could be due to reputational motivations. In this respect, Hyun et al. (2016) highlighted reputational concerns and asserted that women focus on CSR due to it being seen as an opportunity to improve their position of power within the organization. In addition, they can influence how actively and thoroughly they will play their role in the board in relation to the promotion of CSR. This argument can be extrapolated not only to the promotion of CSR practices but also to their disclosure.

In the same way, several studies have found a non-significant (Khan, 2010; Prado-Lorenzo and García-Sánchez, 2010; Giannarakis et al., 2014) or even negative relationship (Lorenzo et al., 2009) between the presence of women on boards and the extent of CSR disclosure. Consequently, the empirical evidence remains inconclusive in relation to the presence of female directors and its impact on the promotion and dissemination of CSR information.

In this sense, this paper aims to analyse in more depth the necessary conditions for the benefits traditionally assigned to gender diversity, according to the resource dependence and social identity theories, to lead to better CSR informative practices. This is because diversity is a double-edged sword. It is necessary for women to feel that they are part of the board to promote their creativity. In general, as Nielsen and Huse (2010a) posited, female directors need to be perceived as valuable board members. Thus, it is interesting and important to identify the conditions under which women on boards impose their female stereotypes and identities on the CSR disclosure policy.

In this regard, the token theory argues that women are a minority group and often encounter barriers to expressing their opinions and being heard. In minority board scenarios, female directors could face significant limitations in influencing the board decision making regarding CSR disclosure (Cook and Glass, 2017). According to the critical mass theory, the presence of at least three women on the board is necessary for them to exert their influence on decisions (Torchia et al., 2011).

In addition, it is necessary for the psychological climate of the board, known as the “*boardplace*”, to favour the insertion of female directors and not to limit their potential contribution to board decision making. According to Walt and Ingley’s (2003) premise, the

effective decision making of female directors requires a balance between their presence and the human capital of the board members. **The study defends the idea that directors' human capital, associated with their background, skills and experience, could reflect the contextual environment of boards in which female directors have the perception of being equal board members (Bear et al., 2010) due to these intangible characteristics enhancing group discussions and improving the consideration of different opinions in the decision-making process (Van Knippenberg et al., 2004).**

To test the research propositions, the paper uses a sample of international listed firms consisting of 9,744 firm-year observations for the period 2007 to 2016. The evidence confirms the greater socially responsible disclosure of information when women are represented on boards and reach a critical mass of at least three female directors. The main result reveals the moderating role of the background, skills and experience of board directors. When the human capital of directors is greater, there is a greater positive effect of female directors on the promotion of CSR disclosure policies. However, complementary evidence has confirmed that the similarities between men and women in the chairperson position are greater than the differences. Women who follow top management careers generally reject female stereotypes and hence adopt male characteristics that are more valued in leadership positions. The position of chairperson changes the female stereotype and its focus on CSR disclosures regardless of the human capital of the board.

This research is organized as follows. Section two describes the literature review that underpins the research hypotheses. The third section shows the data collection, variable measurement and model specification. Section four describes the descriptive and empirical results and discusses them. Finally, the conclusions, implications and limitations are presented in section five.

2.3. LITERATURE REVIEW AND CENTRAL RESEARCH QUESTIONS

Several previous studies have indicated that the disclosure of information on CSR allows companies to minimize the agency costs associated with asymmetric information problems (Martínez-Ferrero et al., 2016) and enables them to benefit from lower costs of capital (Dhaliwal et al., 2014; Martínez-Ferrero et al., 2016) **due to the greater precision of analysts' forecasts (Dhaliwal et al., 2012; Garrido-Miralles et al., 2016).** In addition, greater CSR transparency allows the reinforcement of moral legitimacy (Zhang et al., 2013) before a wide range of interest groups and society; it also enables the improvement of the corporate

reputation (Bear et al., 2010; Arayssi et al., 2016) and the reinforcement of the stakeholders' trust (Odrizola and Baraibar-Diez, 2017).

Consequently, given the substantial heterogeneity in CSR commitment, the recent literature has focused on examining why and how some companies are more socially responsible and show a stronger voluntary disclosure strategy than others. The literature has agreed in suggesting that both the board structure and the board composition could partially explain these differences. The findings of Babío-Arcay and Muiño-Vázquez (2005) revealed that the adoption of a series of good governance practices has a significant influence on the communication of voluntary information.

Thus, certain characteristics of the board could determine the policy of promotion or disclosure of information on CSR (Haniffa and Cooke, 2005; Khan, 2010). Several studies have identified factors such as board independence (Barako and Brown, 2008; Liao et al., 2015), board size (Haniffa and Cooke, 2005; Frías-Aceituno et al., 2013) and the presence of a CSR committee (Liao et al., 2015; Fuente et al., 2017), among others. The results obtained by Bear et al. (2010), Boulouta (2013), Setó-Pamies (2015), Helfaya and Moussa (2017) and Tejedo-Romero et al. (2017) suggest that boards with greater gender diversity among their members show a greater propensity to disseminate information that is more relevant and reliable and allows their stakeholders to know their commitment to sustainability (Giannarakis et al., 2014). Therefore, the structure of the board of directors, particularly in terms of gender diversity, seems to be a key factor in reinforcing and promoting transparency in CSR.

2.3.1. Female directors and CSR disclosure

The literature to date has attempted to examine the contribution of women on boards under the premises of the resource dependency and social identity theories. The resource dependency theory (Pfeffer and Salancik, 1978) states that the board must provide the firm with critical resources. From this perspective, heterogeneous boards in terms of composition perform their functions and roles better because their members have different points of view, skills and professional experience. Heterogeneity can be addressed by diversity, understood as the difference or distinction between the characteristics of its members. Board diversity contributes a greater amplitude of knowledge, opinions and perspectives and exerts a positive influence on the transparency of corporate information; it is a determinant factor in boards' decision to enhance and improve the disclosure, transparency and accountability processes (Frías-Aceituno et al., 2013). In this regard, diversity in terms of gender brings different

perspectives, skills and resources to boardrooms (e.g., personal attributes, experiences and values) that improve their performance. Female directors bring values and professional experiences that are different from men's and are more likely to represent the female stereotype (i.e., empathic behaviour and more social sensitivity), improving firms' social performance (Boulouta, 2013). Additionally, the number of women on boards could act as a signal to external stakeholders; it may indicate the firms' commitment to women as a minority group and to socially responsible behaviour (Bear et al., 2010).

According to the social identity theory, individuals use demographic attributes – for example gender, race or age – to classify themselves, as well as others, among various social categories (e.g., feminine and masculine) and possess a social identity based on belonging to those groups or categories (Tajfel and Turner, 1986). By defining themselves in terms of group memberships, the behaviour of individuals is affected by belonging to the social categories with which they identify (Ashforth and Mael, 1989). This leads to women on boards acting in accordance with their female stereotype, according to which they are more socially sensitive, emotional and empathic than men (Boulouta, 2013), contributing different points of view and heterogeneity to the decision-making process.

Women tend to be more sensitive than their male counterparts and can influence decisions about certain organizational practices, such as CSR performance and reporting policies (Nielsen and Huse, 2010a). A greater presence of women on boards seems to influence the reach of social disclosure positively, supporting the premise that women are more conscious of social concerns (Giannarakis et al., 2014).

From the above two theoretical positions, in general the empirical evidence suggests a positive relationship between gender diversity on boards and: (i) greater CSR commitment (Bernardi and Threadgill, 2010; Fernández-Gago et al., 2016; Kassinis et al., 2016; Kirsch, 2016; Rodríguez-Ariza et al., 2017); and (ii) greater information transparency (Barako and Brown, 2008; Post et al., 2011; Rodríguez-Ariza et al., 2014; Fernandez-Feijoo et al., 2014). Female directors take strategic decisions from a more socially responsible perspective; accordingly, they improve the relationship with stakeholders and promote the firm's ethical behaviour.

In addition, the different perspectives of men and women are of great value to ensure a balanced approach between the economic, the social and the environmental (Setó-Pamies, 2015). This effect is supported by Liao et al. (2015) – who examined the disclosure of carbon emissions – and Fernandez-Feijoo et al. (2014) and Arayssi et al. (2016) – who focused on

sustainability reporting. Based on the above, the prior evidence agrees that, as the gender diversity on a board increases, so does the firm's commitment to the policies and practices relevant to CSR (Bear et al., 2010; Cook and Glass, 2017), favouring and promoting their informative transparency.

2.3.2. From tokens to critical mass

Nonetheless, the strategic importance of women on boards of directors has been widely debated by academics. Although women have made important advances in representation, the integration of women on boards represents a small minority and boards continue to be dominated by men. In this setting, individuals could exhibit a favourable bias towards others whom they perceive as strong members of their group, affecting individual decision making. Thus, there will generally be a tendency to listen more to the opinions of the majority members (e.g., men) and to reject the ideas that come from the representatives of the minorities (e.g., women) (Mathisen et al., 2013). Therefore, the proposed benefits of diversity in CSR voluntary reporting are less likely to materialize (Hillman et al., 2008).

In this regard, several studies have given relevance to the numerical representation of women on boards. Cook and Glass (2017) analysed the representation thresholds that are necessary for women to influence corporate CSR policies. Their findings positively associated female representation with greater commitment to CSR. They showed that the presence of one or two women, in comparison with all-male boards, is enough to exert an impact on that commitment. However, other authors affirmed that, as the presence of female directors on boards increases (in number or as a percentage of the total), the impact on companies' CSR ratings grows (Bear et al., 2010; Kassinis et al., 2016). Recent studies have supported the assertion that, to enable female representation to have a significant influence on board decisions, a critical mass of at least three women must be reached (Post et al., 2011; Fernandez-Feijoo et al., 2014; Ben-Amar et al., 2017). That is, the positive effects of the presence of women are obtained if a minimum number of three are present, enough for their influence to generate significant changes on boards (Nekhil et al., 2018).

These arguments are mainly based on the fact that minority groups are often considered to be tokens and could encounter barriers to expressing their opinions and being heard. The token theory (Kanter, 1977) exposes the difficulties that women face in organizations (e.g., exclusionary practices and behaviours) as members of a group that is significantly under-represented. In this respect, the study by Nielsen and Huse (2010b) examined how female directors contribute to the decision-making process; the authors pointed out that they are

perceived as “unequal” board members, which minimizes their participation in decision making. These limitations reduce women’s ability to contribute effectively to organizations by having less influence than their male counterparts and less access to organizational resources. Therefore, female directors could have a limited capacity to influence decision making about CSR corporate policies and practices (Cook and Glass, 2017) and, consequently, CSR disclosure. This perspective suggests that these obstacles can be reduced by hiring more women (Zimmer, 1988).

Meanwhile, the Critical Mass Theory posits that three or more women are necessary to overcome the limitations of being considered as tokens by the majority. From this perspective, when women’s representation on boards reaches a critical mass, gender ceases to be a barrier to acceptance and communication. There is a greater likelihood that the opinions and contributions of female directors will be heard and supported by the majority (Konrad et al., 2008), thereby exerting a stronger influence on the results (Cook and Glass, 2017).

In this respect, Torchia et al. (2011) investigated whether a greater number of women on boards results in the accumulation of the critical mass that substantially contributes to the innovation of the company. The authors observed that, once the number of women moves from being a symbol or token to being a consistent minority of “at least three women”, they can constitute the desired critical mass, so their opinions can contribute to the level of organizational innovation. According to Konrad et al. (2008, p. 12), some of the benefits of increasing the number of women on boards include: “providing different perspectives on the issues, expanding the content of the discussions, raising issues that pertain to multiple stakeholders, asking difficult questions about tough issues, and using interpersonal skills to positively influence board processes”. The aforementioned study suggested that boards containing three or more women tend to raise issues that are considered to be “soft” by men, such as those related to the community, diversity or the firm’s reputation. In this sense, Fernández-Feijoo et al. (2014) showed that boards with a greater female representation of at least three women favour and enhance CSR disclosure.

Consequently, to advance the understanding of the impact of women on boards on CSR voluntary disclosure, it is important to consider their presence and their number, that is, this minority group’s size (Torchia et al., 2011; Fernandez-Feijoo et al., 2014). The above arguments underpin the following hypothesis. A positive effect on CSR disclosure of women on boards is expected, examining the critical mass necessary to influence decision making:

H1: Female directors favour socially responsible disclosure when they represent a critical mass on the board.

2.3.3. Human capital of boards as a moderator: background, skills and experience

To date, previous studies have analysed the role of board gender diversity in enhancing CSR performance and disclosure. However, they have not studied the influence of the difficulty involved in controlling, monitoring and managing diverse boards. In this regard, Milliken and Martins (1996) argued that board diversity could be considered from a double perspective: on the one hand, it increases creativity, diversity of opinions and experiences; on the other hand, it increases the possibility that the minority will disagree with the rest of the board members by not identifying with them. That is, the greater the diversity in a boardroom, the less integrated the group will be. In this context, it is possible to talk about diverse boards but not effective and productive boards unless an adequate work environment is created for understanding the value of diversity. This environment is termed the *boardplace*.

The previous arguments found their starting point in the cognitive revolution, considering that individuals respond to stimuli from the environment. However, the environment and its influence on the individual depend on the psychological component that each one of them grants. In this vein, James and Jones (1974) defended the so-called “psychological climate”. This refers to the way in which individuals influence and are influenced by their work, colleagues, superiors, remuneration, career opportunities and so on. The main influencing factors are associated with the cooperation among members, the friendliness and the work climate in the group.

Thus, for Johns (2001), the influence of the environment in which decision making takes place is such that it often favours, or on the contrary limits, the behaviour, attitudes and decisions of individuals – in this study, of female directors. That is why – given the influence of the *boardplace* on the commitment of female directors to CSR disclosure – this paper investigates in greater depth how the context of the board influences women on boards and their CSR disclosure commitment.

This research links the “psychological climate” of the board with some human capital of its members. Regarding the human capital of the board members creating the *boardplace*, several variables have been identified as important. This research focuses on educational background, skills and experience as determinants of the *boardplace*. As Bear et al. (2010) stated, the board’s human capital is associated with the experience, knowledge and

capabilities of its members; these are resources that favour the understanding and effective solution of problems by the board as well as fostering commitment to CSR, which can be extended to disclosure. Walt and Ingley (2003) also defended the idea that the impact of woman on board decision making requires a balance of the human capital of its members **that favours the understanding of the firm's environment.**

This human capital plays a powerful role in the *boardplace* of female directors and thus could moderate the impact of a certain size of the minority group (female directors) on the dissemination of CSR information. It is necessary to highlight that, following Bradshaw and Wicks (2000), only when the rest of the board members listen to them are women effective board members. In this respect, this study posits that a positive attitude of the board members is determined by greater human capital of directors – background, skills and experience – as the contextual environment of boards.

At this point, whether and how the human capital of boards of directors affects women's ability to be equal board members and CSR disclosure are the underlying issues that this paper aims to address. To evaluate and favour the strategies of the dissemination of CSR information and the inclusion of women as determining members of the board, every company needs its directors to have sufficient knowledge, experience and skills in this regard (Hillman and Dalziel, 2003).

On the one hand, female directors as a minority group usually work in boards in which, as Nielsen and Huse (2010b, p. 7) stated, a “variation in group composition leads to an increase in the skills, abilities, knowledge and information of the team as a whole”. These attributes could enhance the group discussion (Van Knippenberg et al., 2004) and then affect the decision-making process regarding CSR disclosure strategies. As Hillman et al. (2000) posited, female directors can have professional backgrounds from outside business that offer different perspectives to the board, which could benefit the quality of CSR disclosure.

Moreover, the study considers that, when boards present higher levels of human capital in terms of less visible differences, such as background, skills and experience (Thatcher and Jehn, 1998; Williams and O'Reilly, 1998), female directors could adopt a diverse compositional approach. These board attributes have a significant effect on female directors' perception of equal board members (e.g., Tsui et al., 1992, 2002). They are aspects of the *boardplace*, to which all the members bring different skills, diversity and experience, gathering people with different backgrounds and therefore different opinions and enriching the decision-making process (Arfken et al., 2004). Having broad and heterogeneous perspectives

in the decision-making process is fundamental for complex decisions, such as those related to CSR (Rao and Tilt, 2016). Moreover, the paper defends the assertion that, in this *boardplace* of boards with higher human capital, there is a lack of gender stereotype biases and female directors are not captive in relation to their appearance and behaviour during board meetings; this context enriches the decision-making process of the board as a result of the perception of female directors as equal board members.

Additionally, although the evidence is limited given the difficulty involved in measuring these variables, Rao and Tilt (2016) expected that directors with greater experience and expertise have the potential to influence positively the disclosure of CSR information at the board level. In this respect, Krüger (2009) reported that longer experience, measured using the tenure of directors, improves skills and expertise, affecting the ability of firms to manage their social and environmental risks effectively.¹ Greater experience of board members – even on other corporate boards – allows them to offer different alternatives and points of view, providing the rest of the members with information about how to deal with other companies with similar problems or decisions.

Regarding education and professional background, although their effect on board decisions and on CSR disclosure seems to be much more complex than it appears, some previous studies have offered certain arguments in that respect. Dhalin et al. (2005) clearly posited that the education of top managers expands the information used in decision making, reflecting their cognitive ability and skills. Bear et al. (2010) suggested that more diverse boards in terms of educational and professional backgrounds could favour decision making, since more perspectives and issues are considered, thus making them more effective. Chang et al. (2001) also proposed that these backgrounds are determinants of better engagement in CSR issues – and hence disclosure. Meanwhile, Kassinis and Vafeas (2002) asserted that the educational/functional background plays an important role in the decisions on CSR. Thus, directors like academics, politicians or members of the clergy often align with the interests of society.

Overall, according to the previous perspectives, reaching a critical number of female directors is desirable, because it increases the diversity of viewpoints within a group, favouring the dissemination of CSR information. Furthermore, it is expected that the CSR disclosure strategy could benefit from the background, skills and experience of board

¹ Nonetheless, Krüger (2009) evidenced a negative impact of directors' experience on CSR outcomes. They usually focus on long-term investments and avoid any risk that could damage their professional career and reputation.

members if female directors are perceived as equal board members and can reinforce the firm's CSR commitment. The above arguments about the effect on CSR disclosure of women on boards in which they are perceived as a group of equal members allow the following hypothesis to be put forward:

H2: The background, skills and experience of board directors reinforce the positive orientation of female directors towards socially responsible disclosure when they represent a critical mass on the board.

2.4. DATA, MEASURES AND MODEL SPECIFICATION

2.4.1. Data collection

Data were collected from Thomson Reuters Eikon² for a period of 10 years (2007-2016) for all non-financial firms belonging to America; Europe, the Middle East, and Africa (EMEA); and Asia, comprising 3,594 companies from 31 stock indices. After excluding observations with missing information, a final sample of 9,744 firm-year observations was available. The study's sample is composed of firms from 26 different countries (Australia, Belgium, Bermuda, Canada, China, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, Macao, Mexico, the Netherlands, New Zealand, Papua New Guinea, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom and the United States).

2.4.2. Measures

2.4.2.1. Dependent variable: CSR disclosure

CSR disclosures are measured by undertaking a content analysis of sustainability information, according to the compliance of the content of these reports with the Global Reporting Initiative (GRI) recommendations (Clarkson et al., 2008; García-Sánchez and Martínez-Ferrero, 2017, 2018a, 2018b). The comparison between CSR reporting information and GRI guidelines allows the determination of whether this information is global, comparable and harmonized.

² Thomson Reuters Eikon is a database that integrates financial and non-financial information (CSR, ethics, corporate governance, etc.) of over 6,000 international companies, allowing the analysis of the investments made by these firms, their adaptation to their strategy and the risk of the portfolio.

Table 1. CSR information reports		
<i>CSR_report</i>		
0 points	Companies that do not disclose CSR information.	
20 points	Companies that disclose CSR information not adapted to the GRI guidelines	
40 points	<p>Companies that disclose CSR information adapted to the GRI guidelines and states that it is “in accordance” with either the core option. The Core option contains the essential elements of a sustainability report. The Core option provides the background against which an organization communicates the impacts of its economic, environmental and social and governance performance.</p> <p>* GRI G3.1: Companies that disclose CSR information adapted to the C/C+ level of the GRI guidelines, so these reports are very basic.</p> <p>* GRI G3.1: Companies that disclose CSR information adapted to the B/B+ level of the GRI guidelines, so the reports have medium-high quality</p>	<p>Companies that disclose CSR information adapted to the GRI G4 guidelines. The G4 Sustainability Report Guidelines offer two options to an organization in order to prepare its sustainability report ‘in accordance’ with the guidelines: the <i>Core</i> option and the <i>Comprehensive</i> option. Each option can be applied by all organizations, regardless of their size, sector or location.</p> <p>The focus of both options is on the process of identifying material aspects. Material aspects are those that reflect the organization’s significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders.</p>
60 points	<p>Companies that disclose CSR information adapted to the GRI guidelines and states that it is “in accordance” with the comprehensive option. The Comprehensive option builds on the core option by requiring additional standard disclosures of the organization’s strategy and analysis, governance, and ethics and integrity. In addition, the organization is required to communicate its performance more extensively by reporting all indicators related to identified material aspects.</p> <p>* GRI G3.1: Companies that disclose CSR information adapted to the A/A+ level of the GRI guidelines, so their reports are advanced, and they have high quality.</p>	

Source: The authors following García-Sánchez and Martínez-Ferrero (2017, 2018a).
Abbreviations: CSR, corporate social responsibility; GRI, Global Reporting Initiative.

Our dependent variable, “CSR_report”, takes values between 0 and 60, representing the level of standardization of CSR information disclosed measured against the recommendations of the G4.1 GRI standards, which are valid until June 2018. To create this variable, a value is assigned to the variable “CSR_report”: 0 for companies that do not disclose CSR information; 20 for companies that disclose CSR information that does not comply with the GRI guidelines. For companies that follow GRI recommendations, we add the number of

generic (maximum 58) and specific (maximum 92) GRI indicators disclose but, in order to take into account comparability, we relativize these values on a scale of 20 points according to the “in accordance” options established in the G4. In this sense, we assign 20-40 points for companies that disclose CSR information following the GRI guidelines and state (or not) that it is “in accordance” with the core option – for each identified material aspect, the organization should provide the generic disclosures on management approach (DMA) and at least one indicator; and 40-60 for companies that disclose CSR information following the GRI guidelines and state (or not) that it is “in accordance” with the comprehensive option – for each identified material aspect, the organization should disclose the generic DMA and all the indicators related to the material aspect.³ Table 1 shows the score of the dependent variable attending to the GRI option reported.

2.4.2.2. Explanatory variables: female directors and human capital of boards

To examine the number of women, as Torchia et al. (2012) proposed, a dummy variable is created, which is called “Critical_mass” and coded as one if boards have at least three women and zero otherwise. As these authors argued, this dummy variable allows the use of a single regression equation to represent multiple groups (female minorities).

In line with previous studies (Jehn and Bezrukova, 2004; Torchia et al., 2011), with respect to the specific board background, skills and experience, this study uses the following measures to create its human capital board proxy: “B_Background” is a categorical variable that takes the value one if the functional background of the board directors is administrative; the value two if it is marketing and customer service; the value three if it is finance; and the value four if it is operations; “B_SpecificSkills” is the percentage of board members who have either an industry-specific background or a strong financial background; and “B_Experience” is a numerical variable that represents the average number of years for which each board member has been on the board.

These variables are grouped by a factorial analysis; the results are shown in Table 2. The Kaiser–Meyer–Olkin (KMO) measure of sample suitability is 0.554, which is higher than 0.5,

³ According to García-Sánchez et al. (2014), until 2013 the information obtained was measured against the recommendations of the G3.1 GRI standards by determining the level of application of the GRI guidelines: C, B or A, ranked from low to high levels of usefulness and comparability. Aiming to achieve a comparison with the G-4 levels, level C/C+ represents a very basic report with minimal indicators – these reports are very basic, and the study assigns the value 20-40; level B/B+ corresponds to a medium-high-quality report – the reports have medium-high quality and the researchers assign the value 20-40; and level A/A+ reflects a high-quality report and the authors assign the value 40-60 – reports are advanced and of high quality.

the minimum variable of suitability. This means that the results of the factorial analysis provide an adequate basis for the empirical examination. The results show one factor, “**HC_Board**”, that defines the human capital of the board across firms. All of the variables have a positive charge on the factor.

Table 2. Factorial analysis of human capital of board	
	<i>HC_Board</i>
B_Background	0.572
B_SpecificSkills	0.489
B_Experience	0.493
Kaiser–Meyer–Olkin (KMO) Measure of sample suitability	0.554
Bartlett test of sphericity (chi-square)	394.490
p-value	0.000

2.4.2.3. Control variables

We also included a number of variables influencing the quality of CSR reports. These control variables are included in accordance with previous studies (Dhaliwal et al., 2012; Torchia et al., 2012; Harjoto and Jo, 2014; Fondevila et al., 2019; Vaz Ogando et al., 2019; Siueia and Wang, 2019; Martínez-Ferrero et al., 2019). They include firm, board and institutional aspects. Among the firm-level aspects, the following are included: “**Size**”, measured as the natural logarithm of total assets; “**ROA**”, measured as the return-on-assets ratio; “**MtB**”, as the ratio market to book value; “**Leverage**”, measured as the ratio long-term debt to total assets; “**KZ**”, measured as the capital constraints or access to finance using the KZ index (Kaplan and Zingales, 1997) for every firm-year. More concretely, the KZ index is a linear pondered combination of cash flow to total capital, cash holding to total capital, dividends to total capital, debt to total capital, and market to book ratio (García-Sánchez et al., 2018). “**IA**”, representing the information share and its higher absolute value identifies higher asymmetric information. It is calculated by the ratio forecasted earnings per share divided by the actual earnings per share; “**COC**”, representing the ex ante cost of capital based on the model proposed by Easton (2004); and “**Analysts**”, as a measure of the natural logarithm of the number of analysts following the firm through a year (García-Sánchez et al., 2019a and 2019b). Among the board-level variables are the following: the **size of the board** “**BSize**”, measured as the total number of directors on the board; “**BAttendance**”, measured as the total number of meetings held in the year and acting as a proxy for the level of activity; “**CEO_noduality**”, a dummy variable that takes the value one if the CEO of a firm is not also the chairperson and zero otherwise; board independence, “**BInd**”, as the percentage of

independent directors on board; “**CEOBoardMember**”, a dummy variable that takes the value one if the CEO is also a board member and zero otherwise; and the existence of a CSR/sustainability committee on the board, “**CSRCom**”, as a dummy variable that takes the value one if there is a committee or a director to deal with sustainability issues and zero otherwise.

Given the use of an international sample of analysis, a number of institutional-level control variables are also included. The paper defines two numerical variables – “**STAKELAW**” and “**CSRLAW**” – following the previous studies by Dhaliwal et al. (2014) and García-Sánchez et al. (2016). “**STAKELAW**” and “**CSRLAW**” are two proxies developed by Dhaliwal et al. (2012, 2014) to represent stakeholder orientation. The first variable assesses the legal environment of a country with regard to the protection of labour rights and benefits (Dhaliwal et al., 2014). “**STAKELAW**” is the average score of four indices obtained from La Porta et al. (2004) and Botero et al. (2014). These indices are associated with employment laws, social security laws, collective relations laws and human rights laws. According to Dhaliwal et al. (2014), “**CSRLAW**”, as a stakeholder orientation factor, is an ordinal variable coded one if the country of origin has disclosure requirements for sustainability issues that are mandatory only for industrial or for pension funds; two if the mandatory disclosure requirements are for both activity sectors; and zero otherwise.

Finally, to control for variation across time, country and industry, “**Year**” and “**Industry**” dummies are included.

2.4.3. Models and technique of analysis

The econometric models proposed are examined using dependence techniques for panel data. The use of a panel data set allows the study to overcome the low explanatory capacity of cross-sectional and time series analysis; it considers several periods and firms and thus provides greater consistency and explanatory power. Moreover, panel data allow the study to control for unobservable heterogeneity, such as the particular behaviour and characteristics of each company that are invariant over time; it is controlled by modelling it as an individual effect, η_i , which is then eliminated by taking the first differences of the variables. Moreover, panel data lead to more informative data, greater variability, less collinearity among variables, more degrees of freedom and greater efficiency than cross-sectional or time period methods.

This research applies different regression models to the panel data. The analytic technique employs the dynamic panel estimator proposed by Arellano and Bond (1991), based on the generalized method of moments (GMM). This dynamic panel estimator corrects the endogeneity problem and controls for unobservable heterogeneity. More concretely, the study uses the two-step estimator of Arellano and Bond (1991).

The paper statistically tests several closely related relationships: (i) the effect that different sizes of the minority group (critical mass) could have on CSR disclosure for achieving equal board members; and (ii) the moderating effect of the background, skills and experience of board members on the previous relationship. The hypotheses are tested using multiple lineal regressions as follows. Firstly, the paper proposes a model in which the critical mass indicator, “**Critical_mass**”, and the control variables are regressed on CSR disclosure, “**CSR_report**”, as follows:

$$\begin{aligned} \text{CSR_report}_{it} = & \delta_1 \text{Critical_mass}_{it} + \delta_2 \text{Size}_{it} + \delta_3 \text{ROA}_{it} + \delta_4 \text{Mtb}_{it} + \delta_5 \text{Leverage}_{it} + \delta_6 \text{KZ}_{it} + \\ & \delta_7 \text{IA}_{it} + \delta_8 \text{COC}_{it} + \delta_9 \text{Analysts}_{it} + \delta_{10} \text{BSize}_{it} + \delta_{11} \text{BAttendance}_{it} + \delta_{12} \text{CEO_nonduality}_{it} \\ & + \delta_{13} \text{BInd}_{it} + \delta_{14} \text{CEOBoardMember}_{it} + \delta_{15} \text{CSRCom}_{it} + \delta_{16} \text{CSRLAW}_{it} + \delta_{17} \text{STAKELAW}_{it} + \\ & \sum_{j=18}^{40} \delta_j \text{Industry}_{it} + \sum_{k=41}^{50} \delta_k \text{Year}_t + \mu_{it} + \eta_i \end{aligned}$$

Secondly, to examine the moderating role of the human capital of board members (based on their background, skills and experience), the paper proposes a second model in which it regresses on “**CSR_report**” the indicator “**Critical_mass**”, the human capital of the board indicator, “**HC_Board**”, the interaction “**Critical_mass*HC_Board**” and the control variables:

$$\begin{aligned} \text{CSR_report}_{it} = & \delta_1 \text{Critical_mass}_{it} + \delta_2 \text{HC_Board}_{it} + \delta_3 \text{Critical_mass} * \text{HC_Board}_{it} + \delta_4 \text{Size}_{it} + \\ & \delta_5 \text{ROA}_{it} + \delta_6 \text{Mtb}_{it} + \delta_7 \text{Leverage}_{it} + \delta_8 \text{KZ}_{it} + \delta_9 \text{IA}_{it} + \delta_{10} \text{COC}_{it} + \delta_{11} \text{Analysts}_{it} + \\ & \delta_{12} \text{BSize}_{it} + \delta_{13} \text{BAttendance}_{it} + \delta_{14} \text{CEO_nonduality}_{it} + \delta_{15} \text{BInd}_{it} \\ & + \delta_{16} \text{CEOBoardMember}_{it} + \delta_{17} \text{CSRCom}_{it} + \delta_{18} \text{CSRLAW}_{it} + \delta_{19} \text{STAKELAW}_{it} + \\ & \sum_{j=20}^{42} \delta_j \text{Industry}_{it} + \sum_{k=43}^{52} \delta_k \text{Year}_t + \mu_{it} + \eta_i \end{aligned}$$

All the models incorporate a firm-specific effect, η_i , which controls the unobservable heterogeneity that affects firms’ decision-making processes, while μ_{it} represents the disturbance term. The firm is represented by **i**, and **t** refers to the time period. δ are the parameters to be estimated.

2.5. RESULTS

2.5.1. Descriptive results

Table 3 reports some descriptive statistics and correlations for all the analysed variables. Regarding the main variables of this paper, in the range between 0 and 60, the mean value of CSR disclosure is low, being 14.779; however, it increases to 15.809 in firms with at least one female director on the board. The table offers the first evidence about the impact of the presence of women on boards and the CSR disclosure strategy. Meanwhile, 4,323 firm-year observations belong to firms in which the board has at least three female directors as the critical mass of the minority group. In terms of control variables, for example, the board size is around 11 directors and, on average, 62.308% of them are non-executive.

Panel B reports the bivariate correlations between variables; high values are not identified and thus multicollinearity problems are not found.

Table 3. Descriptive statistics and correlation matrixes						
Panel A. Mean and standard deviation of variables used in regressions						
	<i>Full Sample</i>		<i>Board without women</i>		<i>At least one woman on board</i>	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
CSR_report	14.779	16.988	11.473	14.400	15.809	17.593
Size	2.086	6.201	2.042	6.134	2.100	0.622
ROA	1.122	35.778	0.188	8.961	1.406	40.549
MtB	54.061	202.078	28.712	161.746	63.967	215.003
Leverage	8.039	824.855	17.759	363.901	5.088	920.201
KZ	0.027	0.646	0.075	1.093	0.011	0.388
IA	0.395	5.834	0.662	8.952	0.295	4.096
COC	0.221	3.128	0.117	1.888	0.296	3.642
Analysts	15.897	9.382	14.185	8.179	16.322	9.611
BSize	10.668	3.267	9.465	3.490	11.034	3.105
BAttendance	0.322	0.467	0.362	0.481	0.309	0.462
BInd	62.308	28.223	45.626	30.970	67.376	25.239
CSRLAW	0.699	0.848	0.636	0.828	0.803	0.868
STAKELAW	12.909	4.552	12.482	4.125	13.613	5.100
	Freq	%	Freq	%	Freq	%
Critical_mass	4,323	38.02	-	-	4,323	100
CEO_nonduality	3,311	33.98	642	28.28	2,669	35.71
CEOBoardMember	8,45	89.24	1,891	85.84	6,559	90.27
CSRCom	6,237	64.01	1,202	52.95	5,035	67.37

Table 3. Descriptive statistics and correlation matrixes (continued)**Panel B. Bivariate correlations between variables used in regressions**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. CSR_report	1.000																	
2. Critical_mass	0.071	1.000																
3. HC_Board	0.032	0.663	1.000															
4. Size	-0.053	-0.014	-0.039	1.000														
5. ROA	-0.034	0.027	0.044	-0.028	1.000													
6. MtB	0.000	0.006	0.017	-0.026	-0.004	1.000												
7. Leverage	0.032	0.077	0.030	0.045	-0.019	0.016	1.000											
8. KZ	-0.004	-0.019	-0.019	-0.007	-0.002	0.000	-0.016	1.000										
9. IA	0.025	-0.031	-0.019	-0.006	-0.013	0.012	0.023	-0.003	1.000									
10. COC	0.072	-0.009	-0.031	-0.039	0.009	0.003	0.014	-0.005	-0.003	1.000								
11. Analysts	0.065	0.040	-0.030	-0.034	0.025	-0.029	0.024	-0.005	-0.003	0.910	1.000							
12. BSize	0.055	0.197	-0.070	-0.008	0.085	-0.044	0.134	0.003	0.021	0.020	0.033	1.000						
13. BAttendance	0.051	0.107	0.215	-0.170	0.112	-0.009	-0.027	0.008	-0.007	-0.066	-0.046	0.286	1.000					
14. CEO_nonduality	0.109	-0.032	-0.049	0.054	-0.050	-0.012	-0.063	-0.001	0.045	-0.037	-0.043	-0.240	-0.256	1.000				
15. Bind	-0.079	0.069	0.072	0.108	0.029	-0.006	0.064	0.005	0.017	-0.010	-0.002	0.167	0.090	-0.297	1.000			
16. CEOBoardMember	0.025	0.303	0.059	0.225	-0.017	-0.047	0.069	-0.004	-0.043	0.026	0.041	0.072	-0.182	-0.016	0.197	1.000		
17. CSRCom	-0.142	0.011	0.005	0.255	-0.015	-0.012	0.025	-0.004	0.011	-0.121	-0.111	-0.060	-0.052	0.007	0.175	0.237	1.000	
18. CSRLAW	0.046	0.154	0.137	-0.032	0.066	-0.007	-0.018	0.013	-0.048	0.008	-0.002	0.153	0.200	-0.037	-0.026	-0.016	0.044	1.000
19. STAKELAW	0.185	0.008	0.004	-0.148	-0.043	0.052	-0.108	-0.001	-0.003	0.049	0.040	-0.167	-0.025	0.320	-0.257	-0.090	-0.144	-0.010

Sample: 9,744 observations in 2007–2016.

2.5.2. Critical mass of women on boards and CSR disclosure: the moderating role of the human capital of board members

The results of the GMM regression models used to test the relationships proposed are obtained using the Stata software. The paper reports the coefficient and the standard error associated with the explanatory variable. It also reports the Arellano–Bond test for AR (2) in first differences and the Hansen test of over-identification restrictions.

The main findings, reported in Table 4, are the following. In Model 1, the presence of at least three women on the board is positive and significant in explaining CSR disclosure ($\delta_1=3.065$, $p<0.01$). This result suggests that there is a positive relationship between a certain size of the minority group of women on boards (at least three) and the quality of CSR disclosure. In this respect, the study supports the critical mass perspective; when there are at least three women on the board, the barriers to minority groups exerting an influence are avoided and the ideas and opinions of women towards CSR disclosure are listened to by the rest of the board members.

Additionally, the paper examines the moderation of the background, skills and experience of board members. In model 2, the presence of a critical mass of three or more female directors on the board is again positively significantly associated with the quality of CSR reporting ($\delta_1=3.130$, $p<0.01$). This again supports the suggestion that, for female representation to have a significant influence on the CSR disclosure policy, a firm must reach a critical mass of at least three women. Aiming to examine the moderating role of the human capital of board members, associated with their functional background, skills and experience, it is necessary to operate with coefficients. In this respect, the interaction term made by the critical mass of female directors and the human capital of the board, “**Critical_mass*HC_Board**”, is positively significant ($\delta_3=2.510$, $p<0.01$). The paper supports the idea that the greater quality of CSR information as a result of greater representation of female directors on boards – of at least three women – is enhanced when the functional background, specific skills and experience of the board members are higher ($\delta_1=3.130 + \delta_3=2.510 = 5.640$) than when the human capital of the board is lower ($\delta_1=3.130$). That is, the positive impact on the quality of CSR disclosure when female directors achieve a critical mass of at least three members is reinforced and complemented by higher human capital of the board, thus supporting its moderating role.

The results are the opposite in Model 0, those estimated in order to test the role of women in firms in which they are a minority (female directors are less than 3). The variable “Women<3” and “Women<3*HC_Board” are non-significant from the statistical point of view ($\delta_1=0.035$, $p>0.10$; $\delta_1=-1.914$, $p>0.10$, respectively). These null effects confirm the results of Model 1 and Model 2 in relation to the need to have a critical mass of female directors. Moreover, these results indicate that when there is a minority of women on boards, their opinion is not considered by the rest of the directors, even when they have greater skills, experiences and professional training or background.

Table 4. Regression analysis linking the critical mass of female directors and human capital of boards on quality of CSR disclosure

	Model 1		Model 2	
	Coef.	Std. Err.	Coef.	Std. Err.
<i>Main Variables</i>				
Critical_mass	3.065***	0.188	3.130***	0.440
HC_Board			0.734***	0.151
Critical_mass*HC_Board			2.510***	0.374
<i>Control Variables</i>				
Size	0.000***	0.000	0.000***	0.000
ROA	11.581***	0.632	11.475***	1.368
MtB	-0.001	0.000	0.001	0.001
Leverage	-0.009***	0.000	-0.009***	0.000
KZ	-5.753***	0.277	-4.918***	0.632
IA	0.000**	0.000	0.000***	0.000
COC	0.008***	0.001	0.005***	0.000
Analysts	0.044***	0.016	0.059**	0.030
BSize	1.073***	0.035	0.991***	0.090
BAttendance	5.903***	0.228	4.924***	0.527
CEO_nonduality	-1.596***	0.090	-1.958***	0.182
Bind	0.004	0.006	0.026**	0.011
CEOBoardMember	-0.113	0.321	-1.660***	0.464
CSRCom	0.982**	0.411	1.791***	0.482
CSRLAW	-1.565***	0.544	-1.925***	0.571
STAKELAW	0.298**	0.117	0.425***	0.063
<i>Controlled by year and industry</i>				
<i>AR(2) Arellano-Bond test</i>	Pr > z = 0.921		Pr > z = 0.157	
<i>Hansen test</i>	Prob > chi2 = 1.000		Prob > chi2 = 0.870	
Sample: 9,744 observations in 2007–2016.				
*, ** and *** represent statistical significance at 90%, 95% and 99%, respectively				

2.5.3. Supplemental analysis: female chairperson

Gender mainstreaming has been adopted internationally as a strategy to achieve gender equality. Mainstreaming includes the integration of a gender perspective into the design, implementation and evaluation of policies, regulations and programmes with the aim of promoting equality between women and men and counteracting discrimination. The ultimate goal is to achieve gender equality and maintain it over time (Lee-Gosselin et al., 2013).

The academic literature in relation to gender mainstreaming within organizations shows that in practice it achieves mainly symbolic results (Benschop et al., 2012). Over the last years, international and national organizations have been committed to women's rights and gender equality, and many organizations have developed programmes and measures for the inclusion of gender mainstreaming. However, in practice, women are still a minority at the higher levels of decision making, because there are still factors that limit the progress of women in organizations (Benschop et al., 2012; Lee-Gosselin et al., 2013). Breaking the *glass ceiling* is still a considerable challenge. In this sense, the results of Arfken et al. (2004) on the progress in the composition of boards showed a minimal improvement in the representation of women and even less regarding reaching the main role of chairperson. This confirms the presence of *glass ceilings* as a reason for the limited participation of women in boardrooms. This fact has also been observed in top management positions, in which the female representation is still relatively low and cases of women who manage to break the *glass ceiling* to become CEOs are shown as exceptions to the rule (Athanasopoulou et al., 2018).

Although the leadership style of chairperson and CEO are quite different (Nekhili, et al., 2017), these authors observed that female chairs is more valuable for family firms, companies in which women are more effective due to they use a transformational leadership style. Results that are not extrapolate to non-family firms. So, we expect that when women reach a top position, CEO or chairperson, in contrast to addressing stereotype barriers, could reject female stereotypes because they probably show needs, values and leadership styles that are similar to those of men that are more valued in leadership positions (Athanasopoulou et al., 2018). Thus, the results obtained by Athanasopoulou et al. (2018), based on personal conversations with 151 CEOs (139 men and 12 women), suggested that women in their role as leaders engage in behaviours that are linked to the male stereotype (e.g., strategic thinking and a sense of comfort in situations of uncertainty and risk). Besides, the results of Nielsen and Huse (2010a) suggested that the impact of women on boards depends on the nature of the task performed; the study concluded that there are no general differences in behaviour between women and men in leadership positions. These results are consistent with studies that have argued that the similarities between men and women in leadership styles are greater than the differences (Nielsen and Huse, 2010a). The previous findings, therefore, can be extrapolated to women in their role as chairmen of boards of directors.

In this regard, it should be noted that board chairmen have a dual role. On the one hand, they occupy a leading position on the board. On the other hand, they hold a position similar to the rest of the members, as they have no special legal authority. However, in the

chairperson's position, they are considered as leaders and are responsible for ensuring effective board performance, playing a key role by taking responsibility for organizing and supervising the decision-making processes (Bezemer et al., 2018). In addition to the responsibility of ensuring that the correct decision elements are considered, and the necessary information is available to make informed decisions, their role is reinforced by their key position as a link between the board of directors and the CEO (Bezemer et al., 2018). Consequently, does the position of chairperson change the female stereotype and its focus on CSR disclosures? Does the human capital of board members moderate this relationship? Examining the relationship between female directors and CSR disclosure and the moderating role of the human capital of the board requires the analysis of women's behaviour when they reach leadership positions (e.g., chairperson). With this aim, the paper proposes as a supplemental analysis the following research model. It regresses CSR disclosure on the same indicators as Model 2 B, but it also includes a dummy variable, "Chairperson", representing the chairperson of the firm and the interactions with each explanatory variable. This variable takes the value one if the chairperson is a woman and 0 otherwise.

$$\begin{aligned}
\text{CSR_report}_{it} = & \delta_1 \text{Critical_mass}_{it} + \delta_2 \text{HC_Board}_{it} + \delta_3 \text{Critical_mass} * \text{HC_Board}_{it} + \\
& \delta_4 \text{Chairperson}_{it} + \delta_5 \text{HC_Board} * \text{Chairperson}_{it} + \delta_6 \text{Critical_mass} * \text{Chairperson}_{it} + \\
& \delta_7 \text{Critical_mass} * \text{HC_Board} * \text{Chairperson}_{it} + \delta_8 \text{Size}_{it} + \delta_9 \text{ROA}_{it} + \delta_{10} \text{Mtb}_{it} + \\
& \delta_{11} \text{Leverage}_{it} + \delta_{12} \text{KZ}_{it} + \delta_{13} \text{IA}_{it} + \delta_{14} \text{COC}_{it} + \delta_{15} \text{Analysts}_{it} + \delta_{16} \text{BSize}_{it} + \\
& \delta_{17} \text{BAttendance}_{it} + \delta_{18} \text{CEO_nonduality}_{it} + \delta_{19} \text{BInd}_{it} \\
& + \delta_{20} \text{CEOBoardMember}_{it} + \delta_{21} \text{CSRCom}_{it} + \delta_{22} \text{CSRLAW}_{it} + \delta_{23} \text{STAKELAW}_{it} + \\
& + \sum_{j=24}^{46} \delta_j \text{Industry}_{it} + \sum_{k=47}^{56} \delta_k \text{Year}_t + \mu_{it} + \eta_i \quad (\text{Model 3})
\end{aligned}$$

Table 5 reports the results for Model 3. The result of the indicator variable associated with the critical mass of female directors is not significant; however, the interaction with the human capital of board members remains similar to that in Table 4. That is, the interaction term made by the critical mass of female directors and the human capital of the board, "Critical_mass*HC_Board", is positively significant ($\delta_3=10.325$, $p<0.01$). The study confirms once again the positive impact on the quality of CSR reporting when female directors achieve a critical mass of at least three members and there is greater human capital of board members.

In this model, however, the most interesting results are those associated with "Critical_mass*Chairperson" and "Critical_mass*HC_Board*Chairperson". First, a critical mass of at least three women on the board is negative and significant in explaining

CSR disclosure when one of these women is also the chairperson of the firm ($\delta_6 = -3.918$, $p < 0.01$). That is, women who are also the chair of the board show values and leadership styles that are similar to those of men, relegating the commitment to CSR transparency. Second, regarding the moderation played by the human capital of the board members, “**Critical_mass*HC_Board*Chairperson**” is also negatively significant ($\delta_7 = -7.391$, $p < 0.01$). Operating with coefficients, the paper supports the assertion that a lower quality of CSR information occurs when at least one of the female directors of the critical mass of at least three women is also the chairperson; this is not limited by a greater functional background, specific skills and experience of board members ($\delta_7 = -7.391 + \delta_6 = -3.918 = -11.309$). That is, the negative impact on the quality of CSR disclosure when female directors achieve a critical mass of at least three members and occupy leadership positions (e.g., chairperson) is even greater with greater human capital of the board. This human capital fails to minimize the male stereotype adopted by female directors in leadership positions.

In addition, when we only consider the chairperson role, we observe a positive impact of “**Chairperson**” on “**CSR_report**” ($\delta_4 = 6.644$, $p < 0.01$). But this favourable effect is lost when we considered the presence of female directors on boards, as we have indicated in the previous epigraph. Jointly considered, these results could be suggested that women on leadership position could maintain their female stereotype when they are the only woman in the board, perhaps to differentiate themselves from the rest of the male directors. However, when there are other women in the board, they modify their leadership style to achieve greater acceptance by male directors.

Table 5. Supplemental analyses. How do behave female directors when are chairman?		
Panel A		
	Model 3	
	Coef.	Std. Err.
<i>Main Variables</i>		
Critical_mass	-0.392	0.314
HC_Board	-2.533***	0.210
Critical_mass*HC_Board	10.325***	0.536
Chairman	6.644***	0.330
HC_Board*Chairman	-0.901**	0.416
Critical_mass*Chairman	-3.918***	0.842
Critical_mass*HC_Board*Chairman	-7.391***	2.693
<i>Control Variables</i>		
Size	0.000***	0.000
ROA	8.537*	4.841
MtB	0.020***	0.003
Leverage	-0.009***	0.000
KZ	-28.531***	10.027
IA	0.000***	0.000
COC		(omitted)
Analysts	0.466***	0.034
BSize	0.201***	0.048
BAttendance	6.163***	0.697
CEO_nonduality	-1.966***	0.325
Bind	-0.007	0.012
CEOBoardMember	-10.103***	1.251
CSRCom	-0.406	0.382
CSRLAW	-0.721	0.971
STAKELAW	-0.693***	0.213
<i>Controlled by year and industry</i>		
<i>AR(2) Arellano-Bond test</i>		Pr > z = 0.517
<i>Hansen test</i>		Prob > chi2 = 0.998
Sample: Sample: 9,744 observations in 2007–2016.		
*, ** and *** represent statistical significance at 90%, 95% and 99%, respectively		

2.5.4. Discussion of the results

From the above, several interesting findings can be reported. First, the study confirms that, as the number of female directors increases, these minority voices become more assertive; then, their female stereotype in enhancing firm transparency around CSR information is powered. Moreover, it documents the influence of the *boardplace* on the female perception of equal board members and then on the CSR reporting policy.

This study's evidence supports previous studies. First, it provides support for the assertion that the greater the female representation on the boards, the greater the impact on the firm's commitment to greater transparency of CSR information (Barako and Brown, 2008; Bear et al., 2010; Post et al., 2011; Fernández-Feijoo et al., 2014; Arayssi et al., 2016; Cook and Glass, 2017).

Second, these results are in accordance with the resource dependency and social identity theories. The positive impact of board gender diversity on CSR disclosure confirms that female directors bring values and professional experience that are different from those of male directors, fulfilling the female stereotype in the decision-making process around CSR disclosure (Boulouta, 2013). These findings provide support for the past evidence that women are more sensitive to social and environmental concerns (e.g., Cook and Glass, 2017; Fernández-Feijoo et al., 2014).

Third, the study confirms that a critical mass of at least three female directors is necessary to influence corporate CSR policies (in line with Nielsen and Huse, 2010a; Torchia et al., 2011; Ben-Amar et al., 2017). The paper reports that a minimum number of three women is enough for their influence to generate significant changes on boards and thus there will be a greater likelihood that their opinions about CSR disclosure will be heard and supported by the majority. That is, the study clearly agrees with the previous evidence of Nielsen and Huse (2010) and Torchia et al. (2011). The findings support the critical mass theory, which postulates that a critical mass of women is necessary to solve the limitations of being **considered as tokens or “symbols”** – a minority group – by the majority; greater female representation of at least three women achieves a perception of equal board members. As Fernández-Feijoo et al. (2014) suggested, the above evidence means that women can raise issues related to social and environmental disclosure, which are considered by men to be **“softer”**.

Fourth, regarding the moderating role of the human capital of board members, the study provides support for the assertion by James and Jones (1994) and Johns (2001). It confirms the influence of the environment – the psychological climate – on the decision-making process. As they posited, this paper reports that the psychological climate could enhance the behaviour, attitudes and decisions of female directors. The empirical results suggest that a more diverse board in terms of background, skills and experience – that is, the human capital of board members – favours a more effective decision-making process and the perception of female directors as equal board members. In boards with higher human capital, the gender stereotype biases are minimized, and female directors can positively promote CSR reporting strategies. With this perception of equal members, female directors gain the ability to be heard in their CSR claims, thus enhancing the quality of CSR disclosure. This evidence is in line with the previous studies by Bear et al. (2010) and Chang et al. (2011) about the benefit of the human capital on the board. Moreover, the findings show that the background, experience and skills of board members are resources of greater human capital, which is

positively associated with stronger commitment to CSR issues and concerns (as documented by Walt and Ingley, 2003; Bear et al. 2010; and Rao and Tilt, 2016).

Fifth, regarding the supplemental analysis of women as chairmen, the paper clearly provides evidence that female directors adopt a male stereotype in voluntary information disclosure when they also hold the position of chairperson, independently of the human capital of the board members. In this respect, it provides support for the studies by Nielsen and Huse (2010b) and Athanasopolou et al. (2018), evidencing that, when women reach the chair position, they reject female stereotypes in the promotion of CSR strategies; there are no differences in the CSR commitment of women and men in leadership positions.

2.6. CONCLUSIONS

The main research questions proposed in this study are: (1) is there a critical mass to reach (“three female directors”) to have an impact on CSR disclosure policy? (2) Does the human capital of board members moderate the relationship between the critical mass of female directors and CSR reporting? This paper tests the effects that an increase in the size of the minority group (of at least three women on the board) may have on CSR disclosure and the moderating role of the background, skills and experience of board members. Analyses are conducted using multiple lineal regressions for an international sample consisting of 9,744 firm-year observations from 2007 to 2016.

Our findings support the assertion that an increase in the number of female directors from tokens to a critical mass exerts an effective influence on the quality of disclosure of CSR information. In addition, this effect is greater when the board members possess a better background, skills and experience. The human capital of board members moderates – reinforces – the impact of female directors on socially responsible disclosure. As a supplemental analysis, the evidence shows that the female role does not remain when women achieve a chairperson position; that is, female directors adopt the male stereotype in voluntary information disclosure when they are also the chairperson, independently of the human capital of the board. This paper thus supports the idea that the similarities in the leadership styles of men and women are greater than their differences.

This research presents a number of contributions to the literature. First, the relationship between female directors and CSR disclosure is not yet established and the evidence is not conclusive. The study thus advances the understanding of the role played by women on boards in the disclosure of CSR voluntary information. The main results answer the question

of how female directors contribute to CSR disclosure. They also contribute by reinforcing the understanding of the previous studies on the validity of the token/critical mass theory in the field of corporate governance, incorporating the importance of their number into the debate about the presence of women on boards of directors. Regarding the limited previous studies about the critical mass effect on CSR reporting, the research also sheds light on the relationship between the two. It reports that the quality of CSR disclosure is reinforced when at least three women are present on the board, constituting the critical mass desired to raise CSR reporting issues. Thus, it provides support for the theoretical perspective on the critical mass by investigating how a certain number of female directors on boards favours the dissemination of CSR information; in this sense, women begin to be heard by other non-minority board members and can promote their ideas and behaviours in decision making, particularly to a greater extent when the board members have high human capital. This greater effect is achieved by considering the human capital of board members as a determinant of the *boardplace* and the environmental conditions in the decision-making process of the board.

In this respect, and as the second point, despite the availability of these indicators about female behaviour regarding CSR information, the role of human capital in boards remains unexplored. One of the main contributions of this research is the analysis of the moderating role played by the background, skills and experience of directors as the human capital of the board. The paper assesses the importance of specific variables of board directors associated with their human capital for modelling the relationship between female directors as a critical mass and CSR disclosure. It fills this gap by providing the theoretical underpinnings of the underlying relationships and presenting fact-based evidence about the moderating role of the **board's background, skills and experience**.

Moreover, the study contributes to academia by examining the male stereotype that women adopt when they are in leadership positions. Thus, it examines not only the moderation of the human capital of board members on the gender diversity–CSR disclosure relation but also the female role in the chairperson position. It thus advances the knowledge of the different settings in which women on boards show their female role in CSR voluntary disclosure. Finally, from a methodological point of view, the paper reinforces the previous literature by using a panel data set of 9,744 firm-year observations and by proposing dependency econometric models tested using the GMM estimator.

This paper also identifies a number of implications for managers, directors, owners and regulatory bodies by clearly reinforcing the debate around the critical mass of female

directors on boards. This study's findings provide useful evidence for the debate about the importance of the number of women on boards, as a minority group, by clearly examining the critical mass of female directors. The findings contribute to the investigation of the importance of the number of women on boards as a minority group. For managers, owners and investors, it is important to know the size of the minority group of women that is necessary to reinforce and enhance their CSR disclosure policy; this policy in turn could benefit the firm through superior performance, a lower cost of capital and a better image and reputation – among other outcomes. Moreover, they must be aware of the necessary human capital of board members that reinforces the perception of female directors being equal board members. By examining the *boardplace*, the study provides directors, managers and organizations with knowledge and recommendations for an effective gender diversity impact on CSR reporting. It provides evidence about how the background, skills and experience of board members favour the decision-making process promoted by female directors around CSR disclosure. This human capital creates a favourable *boardplace* for female directors. Thus, the results also have some implications for boards of directors to create an appropriate workgroup environment – the *boardplace*. The findings suggest that background, skills and experience benefit a workplace that supports female decisions and emphasizes the dissemination of CSR information. The authors suggest that firms can reinforce their CSR disclosure strategy by promoting a *boardplace* in which directors have greater human capital. Finally, the paper also evidences relevant results for regulatory bodies about the presence of female directors on boards. At present, there is a global tendency to change the composition of boards of directors. The development of good corporate governance practices and legal or regulatory changes are intended to increase transparency with respect to the representation of women on boards and in senior management positions. Although some European countries have established actions to promote the inclusion of women on boards (e.g., France, Italy, Norway and Spain), the percentage of women on boards remains low.

Although the current study adopts rigorous methods to investigate the research questions proposed, its results should be interpreted carefully, because it is subject to certain limitations. Firstly, it complements the prior literature with evidence drawn from an international sample beyond the previous single-country analyses (e.g., Torchia et al., 2016). However, the sample shows a notable bias towards US and UK firms. Moreover, it consists only of public firms; reliable data on non-listed firms are difficult to obtain. To generalize the findings beyond the listed sample, the paper recommends that researchers explore the evidence in non-listed small and medium-sized businesses. This research also examines the

impact of the number of women on boards, from tokens to critical mass, on the quality of CSR reporting and the moderation of the background, skills and experience of board members; however, other attributes of board members could be examined as moderators – for example age, career concerns, managerial ability or nationality. While the study identified several attributes of board members contributing to the effect on CSR reporting of female directors, there are undoubtedly others that future research should examine.

2.7. ANEXO ACTUALIZACIÓN

La composición del consejo de administración ha recibido en los últimos años cada vez más atención por parte de los académicos como un determinante importante del desempeño social y medioambiental de las compañías. En la actualidad, son aún mayores las presiones de los diferentes grupos de interés lo que ha puesto en relevancia la transparencia informativa como una respuesta. La diversidad de género continúa siendo uno de los factores de la composición de los consejos que ha recibido recientemente más atención ya que se relacionan fuertemente con los problemas de sostenibilidad.

En este apartado se busca actualizar la literatura académica sobre la relación de la presencia de mujeres en los consejos de administración y la divulgación de información social y medioambiental.

El interés de los investigadores en analizar el efecto de la diversidad de género en el consejo de administración, la RSC y la transparencia informativa ha tenido un crecimiento espectacular en los últimos años (Amorelli & García-Sánchez, 2021).

En lo que se refiere a la literatura recientemente publicada, muchas teorías tienden a explicar la motivación detrás de la divulgación de las actividades de RSC por parte de las empresas. Las premisas de la Teoría de la Agencia (Fama & Jensen, 1983) y la Teoría de los Stakeholders (Freeman, 1984) continúan siendo las mayoritariamente utilizadas por los académicos para sustentar cómo las características de gobierno corporativo y la presión de las partes interesadas influyen en la elección que hacen las empresas de emitir voluntariamente informes de sostenibilidad (Cicchiello et al., 2021; Wang et al., 2021). A su vez, estas teorías se combinan con la Teoría de dependencia de los Recursos (Pfeffer & Salancik, 1978) evidenciando que la presencia de mujeres consejeras indican una gobernanza sólida y una mejor comunicación entre las partes interesadas (Gonenc & Krasnikova, 2022).

De la actualización se informan hallazgos interesantes. En primer lugar, la gran mayoría de las investigaciones empíricas que se han publicado recientemente sugieren una relación

positiva entre la diversidad de género en el consejo y una mayor transparencia informativa de la RSC (Khan et al., 2022; Cicchiello et al., 2021; Buerthey, 2021), agregando valor a la literatura existente sobre gobierno corporativo, señalando la importancia de las mujeres consejeras en las decisiones estratégicas de las organizaciones. Aunque en menor medida, encontramos investigaciones empíricas recientes que abordan resultados negativos o no-significativos (Sekarlangit & Wardhani, 2021; Buallay et al., 2022). Por lo que la evidencia empírica permanece no concluyente, haciendo necesario ahondar en los motivos que explican estas diferencias.

Por último, se observa que el interés de los investigadores se está enfocando en estudiar el papel de las mujeres en el consejo en los subcomponentes de la RSC (Haque & Jones, 2020), centrándose también en el impacto que ejercen en la divulgación de cuestiones medioambientales (Gonenc & Krasnikova, 2022; Khan et al., 2022) o en la evitación de prácticas de greenwashing (Ali Gull et al., 2022)

CHAPTER III

CHAPTER III

BOARD GENDER DIVERSITY AND SUSTAINABILITY IN TIMES OF PANDEMIC

Summary

From a business perspective, the health and socio-economic effects of the Covid-19 have affected a firm's stakeholders to a different extent, making it necessary for them to develop sustainable initiatives that allow them to meet their needs.

Decisions must be made and implemented in a recessionary environment in which companies debate whether it is economically reasonable to promote them and whether they can afford not to do so. In this work, based on the theory of social identity, we argue that these business commitments will have been promoted in companies with boards of directors that have a greater female presence. The results obtained for a sample of 4821 multinationals confirm that the repercussion of incidental affect on the social identity of the in-group of female directors has partially slowed the setback that business sustainability has suffered due to the pandemic, which is especially important with respect to good governance policies and practices and guaranteeing the social and environmental commitment of previous years. This evidence has important theoretical and practical implications, contributing the current debate on strategic decisions regarding sustainability and the benefits associated with board gender diversity.

Keywords: board of directors, COVID-19, female directors, social identity, sustainability, women

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3.1. RESUMEN CAPÍTULO III EN ESPAÑOL

Las innumerables consecuencias sanitarias, económicas y sociales provocadas por la Covid-19 y las medidas de contención necesarias para frenar su transmisibilidad afectan a organizaciones, familias e individuos (Overberg et al., 2021), los cuales, desde un enfoque empresarial, se configuran como los grupos de interés afectados por esta pandemia, cuyas necesidades deben ser tenidas en cuenta por las compañías dentro de sus estrategias de sostenibilidad.

Estos desafíos ocurren en un entorno de desaceleración económica, en el que las compañías tienen que enfrentarse a enormes amenazas, surgiendo con fuerza un debate que había perdido intensidad, “shareholderism” versus “stakeholderism” (Bebchuk and Tallarita, 2020; Mayer, 2020), tratando de reflexionar sobre si las empresas deben maximizar el valor de los accionistas o el bienestar de los stakeholders. En este sentido, aunque no existe unanimidad debido a los costes de agencia (Demers et al., 2020; Bae et al., 2021), en general, la literatura previa sugiere que el stakeholderism aumenta el valor de la empresa para los shareholders (i.e., Deng et al., 2013; Borghesi et al., 2014; Flammer, 2015, 2021; Ferrell et al., 2016; Lins et al., 2017; Kim et al., 2019; Cao et al., 2019; Albuquerque et al., 2020; Dai et al., 2021; Gao et al., 2021), especialmente en periodos de crisis (i.e., Bénabou and Tirole, 2010; Cheng et al., 2014; Di Giuli and Kostovetsky, 2014; Masulis and Reza, 2015).

Los resultados de los trabajos que han analizado las reacciones empresariales en los momentos más duros de la pandemia sugieren la existencia de decisiones muy dispares entre sí respecto a la preferencia que han otorgado a los intereses de los shareholders y stakeholders (García-Sánchez and García-Sánchez, 2020; Talbot y Ordoñez-Ponce, 2020; Mahmud et al., 2021; Gürlek y Kılıç, 2021), siendo necesario ampliar el conocimiento respecto a lo que han hecho las empresas para responder a esta crisis mundial (Carroll, 2021) y los motivos que han impulsado a algunas empresas a ser más éticas y socialmente responsables (He and Harris, 2020).

En esta línea, sin considerar contextos de recesión, un relevante número de académicos han centrado sus investigaciones en conocer el papel que las mujeres juegan en puestos de alto nivel en materia de sostenibilidad (i.e., Amorelli y García-Sánchez, 2020; Bannò et al., 2021; Campopiano et al., 2022; Zhao et al., 2022), en especial, respecto a las funciones que desempeñan dentro del consejo de administración, debido a que: (i) en el seno del consejo de administración se toman las decisiones estratégicas de las empresas, incluidas las relacionadas con la sostenibilidad; (ii) es el órgano responsable de la supervisión de las

actuaciones de los directivos; y (iii) en los últimos años se ha presenciado un incremento de la presencia de consejeras como consecuencia de las exigencias vigentes en numerosos países respecto a la paridad de género que debe caracterizar a este órgano.

Además, el interés por estudiar el rol que las mujeres consejeras han tenido respecto a las decisiones empresariales que se han tomado durante la Covid-19, está justificado por la tradicional diferencia entre los roles que hombres y mujeres adoptan en la esfera pública y privada, la cual se ha exacerbado durante la pandemia. Por poner un ejemplo, las mujeres han sido las que han estado al frente de la batalla contra la Covid-19, ya que, según la OCED (2020), representan casi el 70 % de la fuerza laboral en el sector de la atención de la salud a nivel mundial. Además, durante el confinamiento, las mujeres han asumido mayores obligaciones domésticas que los hombres (i.e., Hipp and Bünning, 2021), incrementando la diferencia de hasta diez veces lo previamente identificado por la OCDE (2019) en el Índice de Instituciones Sociales y Género del Centro de Desarrollo (2019). Así, entendemos que una potencial explicación de las divergencias en el comportamiento empresarial observado durante la pandemia puede explicarse por la prevalencia de criterios económicos e individualistas vs. interés colectivo o bien común, que caracteriza a los géneros, tal y como se ha expuesto de manifiesto en las decisiones profesionales y familiares señaladas. Por otra parte, diversos estudios han puesto de manifiesto que, aunque la representación de las mujeres en política es limitada, su liderazgo ha permitido respuestas más eficaces, especialmente enfocada en una mejor reconstrucción de los países (UN Women, 2021).

En este sentido, el objetivo de este trabajo se enfoca en ampliar el conocimiento del efecto que las capacidades, competencias y otros rasgos cognitivos relacionados con el género de los miembros del consejo (Akhmetshin et al. 2018; Ferramosca y Verona, 2020) puede suponer respecto a las decisiones que las compañías han tomado en materia de sostenibilidad en 2020, un año de desaceleración económica, vulnerabilidad sanitaria y aumento de la desigualdad social. Basándonos en la teoría de la identidad social, argumentamos que aquellos consejos con un mayor número de asientos ocupados por mujeres habrán sido más favorables a mantener las iniciativas de sostenibilidad para hacer frente a las nuevas demandas derivadas de la pandemia Covid-19.

Al respecto, sabemos que la identidad social de las mujeres consejeras es un aspecto importante de su autoconcepto, lo que las lleva a hacer esfuerzos para conseguir que el sentido de esa identidad grupal se mantenga, presentando una alta motivación hacia la sostenibilidad y acción social. Sin embargo, la evidencia empírica previa no resulta concluyente. En el presente trabajo extendemos las contribuciones que nos preceden,

analizando el impacto que el afecto incidental que la Covid-19 supone. Para ello, se observará si los efectos de la identidad social asociados a la diversidad de género son potenciados dependiendo de las características del entorno estratégico en el que se encuadra la empresa. Defendiendo que, en el caso de la pandemia, el afecto incidental sería consecuencia de que las mujeres siguen siendo un colectivo minoritario que reacciona ante las amenazas sanitarias, económicas y sociales de acuerdo con los valores determinados por su pertenencia al endogrupo más vulnerable.

Para una muestra no balanceada de 4.821 firmas internacionales en el periodo 2015-2020, los resultados obtenidos son indicativos de la incidencia del afecto incidental sobre la identidad social del endogrupo de consejeras, respecto a las decisiones que se han tomado en materia de sostenibilidad. Al respecto, los compromisos empresariales con sus grupos de interés se han visto afectados negativamente por la pandemia. Este retroceso ha sido inferior en empresas con consejos más diversos, en especial, respecto a las políticas de buen gobierno, garantizando el compromiso social y medioambiental de ejercicios previos. Evidencia que confirma las diferencias de roles por género que se han puesto de manifiesto en varios trabajos enfocados a analizar el papel que las féminas trabajadoras han asumido en los periodos de confinamiento respecto a diferentes obligaciones familiares, en especial, lo relativo al cuidado de hijos y mayores (Andrew et al., 2020; Carlson et al., 2020; UN Women, 2020a y 2020b; Carli, 2020).

Nuestro trabajo contribuye al debate académico respecto al papel que las mujeres desempeñan dentro de un órgano que asume importantes responsabilidades empresariales en relación con la sostenibilidad. En este sentido, diversas investigaciones que han sintetizado el conocimiento actual indican que el contexto en el que opera la empresa modera la relación de diversidad del consejo y la sostenibilidad, considerando principalmente el efecto institucional a nivel país (i.e., Endrikat et al., 2020; Majumder et al., 2017; García-Sánchez et al., 2021). Así, nuestro trabajo complementa el conocimiento existente incorporando el efecto moderador que un entorno de recesión económica y crisis sanitaria ha supuesto en las decisiones tomadas por estas profesionales y si difieren de las de sus homólogos masculinos, confirmando los argumentos de la teoría social y la existencia de un afecto incidental respecto al endogrupo femenino. Adicionalmente, contribuimos al avance teórico identificando las principales lagunas de investigación y sugerir futuras vías de investigación. Estos aspectos son esenciales para avanzar en el conocimiento de cómo la presencia de mujeres en puestos de liderazgo afecta a la estrategia empresarial en general y la sostenibilidad, en particular.

Metodológicamente, para aislar mejor el papel de la identidad social de género y el afecto incidental asociado a la pandemia respecto a la sostenibilidad, incluimos varias variables a nivel de empresa e institución. Además, debido al uso de un panel de datos, se ha controlado la posible causalidad relativa a la posibilidad de que las empresas más sostenibles aumenten el número de consejeras y la heterogeneidad inobservable que lleva a comportamientos temporales homogéneos en cada empresa y otros factores no observados que puede provocar que muchas compañías respondan de manera similar en el tiempo.

3.2. INTRODUCTION

The innumerable health, economic, and social consequences caused by Covid-19 and the necessary containment restrictions to curb its transmission affect organizations, families, and individuals (Overberg et al., 2021), which are configured such as the interest groups affected by this pandemic, whose needs must be considered by companies within their sustainability strategies (Bansal et al., 2021; and Tettamanzi et al., 2022). Moreover, Crane and Matten (2021) affirm the challenges in the concepts and practices of sustainability require the identification and prioritization of different stakeholders' demands to manage risks, as well as a reevaluation of value creation theories due to these challenges occurring in an environment of economic slowdown, in which companies have to face enormous threats.

From this, a debate that had lost intensity is strongly emerging, namely, "stakeholderism" versus "shareholderism" (Bebchuk and Tallarita, 2020; Mayer, 2020), attempting to reflect on whether companies should maximize stakeholder welfare or shareholder value. In this sense, although there is no unanimity due to agency costs (Demers et al., 2020; Bae et al., 2021), in general, previous literature suggests that stakeholderism increases the value of a company for shareholders (i.e., Deng et al., 2013; Borghesi et al., 2014; Flammer, 2015, 2021; Ferrell et al., 2016; Lins et al., 2017; Kim et al., 2019; Cao et al., 2019; Albuquerque et al., 2020; Dai et al., 2021; Gao et al., 2021), especially in times of financial crisis (i.e., Bénabou and Tirole, 2010; Di Giuli and Kostovetsky, 2014; Cheng et al., 2014; Masulis and Reza, 2015). In this line, recent studies show the stock-return and the market value of companies decrease sharply with Covid-19 consequences, but this effect is less pronounced in firms with greater commitments to sustainability (i.e., Ding et al., 2021; Garel and Petit-Romec, 2021; Bose et al., 2022).

Although investing in sustainability brings benefits even during periods of economic adversity, the results of the papers that have observed business reactions in the toughest

moments of the pandemic suggest the existence of very different decisions regarding the preference they have given to the interests of shareholders and stakeholders (García-Sánchez and García-Sánchez, 2020; Talbot and Ordoñez-Ponce, 2020; Gürlek and Kılıç, 2021). More specifically, these authors have shown companies that reoriented and increased their sustainable actions to meet the new needs caused by the pandemic but also firms that have caused greater inequalities with the cancellation of supplier contracts, layoffs, poor home-working conditions, less transparency with its shareholders and other groups, relaxing its good governance practices, among others. Therefore, it is possible to affirm that there are concerns about companies that have reduced their commitment to sustainability during the pandemic and it is necessary to expand the knowledge regarding what companies have done to respond to this global crisis (Carroll, 2021) and the reasons that have driven some companies to promote more responsible actions in the face of the previous decisions that have been mentioned (He and Harris, 2020; Phang et al., 2023).

To increase the knowledge about the drivers of this strategy without considering recessionary contexts, a significant number of academics have focused their research on understanding the role that women in leadership positions play in terms of sustainability (i.e., Amorelli and García-Sánchez, 2020; Bannò et al., 2021; Campopiano et al., 2022; Zhao et al., 2022), especially with respect to the functions they perform within the board of directors because: (i) strategic decisions are taken within this body, including those related to sustainability; (ii) this is the body responsible for supervising the actions of top management; and (iii) in the last decade, there has been a larger presence of female directors as a result of the current requirements in many countries regarding gender parity that should characterize this body.

In addition, the interest in analysing the role that women directors have had regarding the business decisions that have been made during Covid-19 is justified by the traditional difference between the roles that men and women adopt in their public and private spheres, which has been exacerbated during the pandemic. To give a few examples, women have been at the forefront of the battle against Covid-19 because according to the OECD (2020), they represent almost 70% of the workforce in the health care sector. In addition, during confinement, several studies evidenced that women have assumed greater domestic obligations than men (i.e., Hipp and Bünning, 2021; Czymara et al., 2021), increasing the difference from up to ten times that which has been previously identified by the OECD (2019) in the Development Center's Social Institutions and Gender Index 2019. Thus, we understand that a potential explanation for the divergences in business behaviour observed

during the pandemic can be explained by the categorical thinking and stereotypes of directors associated with the prevalence of economic and individualistic criteria vs. collective interest or common good that characterizes the genders, as has been shown in the professional and family decisions indicated. On the other hand, Martínez-Cordoba et al. (2021) have shown that although the representation of women in politics is limited, their leadership has allowed for effective responses, especially focused on a better reconstruction of the countries (UN Women, 2021).

More precisely, the objective of this study is focused on expanding the knowledge of the effect that capacities, competencies, and other cognitive traits related to the gender of the directors (Akhmetshin et al., 2018; Ferramosca and Verona, 2020; Mohan et al., 2022) can have with respect to the decisions that companies have made regarding sustainability in 2020, a year of economic slowdown, health vulnerability, and increased social inequality. Based on the theory of social identity, we argue that those boards with a greater number of seats occupied by women will have been more favourable to maintaining sustainability initiatives to face the new demands resulting from the Covid-19 pandemic.

We know that the social identity of female directors is an important aspect of their self-concept and leads them to make efforts to ensure that the sense of that group identity is maintained, presenting a high motivation towards sustainability and social action. However, previous empirical evidence is not conclusive. In the present work, we extend the contributions that precede us, analysing the impact of the incidental affect that Covid-19 bestows. To do this, it will be observed whether the effects of social identity associated with gender diversity are enhanced depending on the characteristics of the strategic environment in which a company operates. In the case of the pandemic, the incidental affect would be a consequence of the fact that women continue to be a minority group that reacts to health, economic, and social threats in accordance with the values determined by their belonging to the most vulnerable in-group and their worries about other individuals in similar situations, associated with their cognitive traits and beliefs.

In this vein, sustainability will be linked to the ESG (Environmental, Social and Governance) criteria used as a reference for socially responsible investment. These criteria determine the level of responsibility that companies have with respect to the environment; people, social justice, and the society; and good governance. All these factors are of special relevance in times of a pandemic due to the consequences derived from Covid-19 that have been mentioned previously and will be detailed in later sections.

For an unbalanced sample of 4,821 multinationals in the period 2015–2020, the results obtained are indicative of the impact of incidental affect on the social identity of the in-group of female directors regarding sustainability decisions. In this regard, business commitments to its stakeholders have been negatively affected by the pandemic. This decline has been lower in companies with more diverse boards, especially regarding good governance policies, guaranteeing the social and environmental commitment of previous years. The evidence confirms the differences in roles by gender that have been revealed in several works focused on analysing the role that working women have assumed in periods of confinement with respect to different family obligations, especially regarding the care of children and the elderly (Andrew et al., 2020; Carlson et al., 2020; UN Women, 2020a, 2020b; Carli, 2020).

This paper contributes to the academic debate regarding the role that women play within a body that assumes important business responsibilities in relation to sustainability in uncertain times and chaos. Various researchers that have synthesized current knowledge indicate that the environment in which a company operates affects the relationship between sustainability and board diversity, mainly considering the institutional effect at the firm level (i.e., Majumder et al., 2017; Endrikat et al., 2020). Thus, our work complements existing knowledge by incorporating the moderating effect that an environment of economic recession and health crisis has had on the decisions made by female professionals. In addition, this research allows us to understand whether are different from those of male directors, confirming the arguments of social identity theory and the existence of an incidental affect with respect to the female in-group. Additionally, we contribute to the current knowledge by determining the gaps and future research pathways for advancing the knowledge of the role that the presence of females in top positions could implies for business strategy, in general, and sustainability, in particular.

In terms of methodology, to better isolate the role of social gender identity and incidental affect associated with the pandemic with respect to sustainability, we included several variables at the company and institution level. In addition, due to the use of a data panel, the possible causality related to the possibility that the most sustainable companies increase the number of female directors and the unobservable heterogeneity that leads to homogeneous temporary behaviours in each company and other unobserved factors have been controlled, which may cause many companies to respond similarly over time.

The paper is structured in five sections plus a section for the final conclusions. In section 1, a review of the state of the art is carried out in relation to the impact of the pandemic on business decisions regarding sustainability. The following epigraph proposes the theoretical

framework and research hypotheses regarding the role that women directors may have played in this regard. In the third section, the empirical design of the research is described. The following epigraph presents and discusses the results, with special attention to the robustness of the empirical evidence obtained. The fifth section is dedicated to carrying out new analyses that allow complementing the knowledge regarding the impact of incidental affect associated with the pandemic versus another period of economic crisis.

3.3. SUSTAINABILITY IN TIMES OF A PANDEMIC

In recent decades, the world's leading companies have been immersed in contributing to sustainable development by establishing strategies that balance the social, environmental, and economic impacts of their activities. These strategies require responsible policies and actions, and the disclosure of more detailed reports on them and the involvement of stakeholders (Johnsen et al., 2017; Tettamanzi et al., 2022).

This approach assumes that business concerns go beyond the interests of shareholders, in favour of other stakeholders, and that the company's contributions to society are broader than what is established in regulations. In this more altruistic version of the business world, sustainability strategies aimed at sustainable development and social good are configured, being a source of competitive advantages (Christensen et al., 2014). From this perspective, companies are forced to attend to the needs of a variety of stakeholders who have been impacted by the effects of Covid-19, including, in addition to individuals and society, the environment (Lawton et al., 2020; Carroll, 2021).

In general, academic research suggests that companies are rewarded by these policies, with this being more noticeable during periods of different types of crisis as they enjoy privileges due to increased support from their stakeholders (Lins et al., 2017; Boubaker et al., 2020; Bae et al., 2021; Garel and Petit-Romec, 2021; Qiu et al., 2021). However, recent studies suggest that to achieve this, business commitments must be genuinely consistent with the demands of interest groups (Bae et al., 2021), while decoupling strategies (lips out) are insufficient in **the era we live in to guarantee the firm's survival** (He and Harris, 2020).

It must be borne in mind that the pandemic has provoked a humanitarian and economic panic, causing economies to struggle to alleviate it and many companies to collapse due to its negative consequences (Zhang et al., 2020; Sharif et al., 2020; Anggadwita et al., 2022; Tettamanzi et al., 2022; Ajeigbe and Ganda, 2023; Phang et al., 2023). Also, we currently live in a state of continuous alert due to the appearance of variants that cause different waves of

contagion that make it difficult to achieve a status of continued normality (Pitofsky, 2020). More concretely, the pandemic has also led to the paralysis of production, the breakdown of the supply chain, liquidity problems, among others that have entailed the firms' decisions with strong implications for all the company's stakeholders.

García-Sánchez et al. (2021) show that on the one hand, in certain companies, these decisions have been made mainly aimed at guaranteeing liquidity and avoiding losses that have led to cancellations in the distribution of dividends, disinvestment and layoffs. These decisions have been communicated in a single crisis declaration letter that directors used to outsource the responsibilities in the event. These actions affect the good corporate governance of the company. In addition, these decisions disproportionately affect a vulnerable group, which is made up of important segments of the population – older people, women, people with disabilities, and refugees and migrants. From the environmental point of view, the confinement due to the pandemic led to a considerable reduction in daily CO2 emissions, although the economic implications of the Covid-19 affect the commitment in the fight against climate change.

On the other hand, several firms have adopted an opposite strategy with a higher commitment with new ecological investment to guarantee employment, equality, and economic recovery, using an interactive communication strategy with these stakeholders. Therefore, these firms use sustainability as a tool to manage risks (Crane and Matten, 2021; Ajeigbe and Ganda, 2023), oriented towards the following risks and responsibilities: (i) social level: employees (health and labor conditions), supply chain responsibilities/vulnerability and societal inequalities; (ii) governance: shareholder interests, transparency, and good governance principles; and (iii) environment: commitments, above all, in the fight against climate change. All of them, according to Carroll (2021), lead to wondering what companies should do to help alleviate the adverse effects of the pandemic in these uncertain times for them. We try to respond in this work to the leadership style that fosters these decisions.

3.4. FEMALE DIRECTORS, SOCIAL IDENTITY, AND INCIDENTAL AFFECT: RESEARCH HYPOTHESIS

3.4.1. The state of the art

The board of directors assumes several responsibilities about the firms' sustainability strategy, determining the balanced consideration and integration of the expectations of all stakeholders. Their level of interest and commitment determines the degree of success in the

formulation and execution of the different social and environmental policies (García-Sánchez et al., 2020a). Numerous authors take the view that a greater heterogeneity linked to the gender of the directors entails positive and negative aspects in the decision-making process. However, the greater number of female directors tends to tip the balance in favour of practices more aligned with the demands of stakeholders, as evidenced by different literature review articles (i.e., Rao and Tilt, 2016; Velte, 2017; Nguyen et al., 2020; Amorelli and García-Sánchez, 2021; Naciti et al., 2021; Bannò et al., 2021; García-Sánchez, 2021) and in meta-analysis (i.e., Byron and Post, 2016; Endrikat et al., 2020).

However, considering the most recent studies on diversity, sustainability, and corporate responsibility, the results are inconclusive. Thus, several studies have found a positive relationship (i.e., Shoham et al., 2017; Elmagrhi et al., 2019; Yaseen et al., 2019; Provasi and Harasheh, 2020; Beji et al., 2021; Rehman et al., 2020; Govindan et al., 2021; Uyar et al., 2021; Al-Najjar and Salama, 2022; De Masi et al., 2022; Galletta et al., 2022; Issa et al., 2022; Moreno-Ureba et al., 2022; Wang et al., 2022; García-Sánchez et al., 2023), while others have observed non-significant (Ajaz et al., 2020; Zaid et al., 2020; Ardito et al., 2020) and even negative (Sanan, 2016; Loukil et al., 2019; García-Sánchez et al., 2020b; Fakir and Jusoh, 2020; Bristy et al., 2020; Orazalin and Baydauletov, 2020) relationships, presenting divergences in favour of economic dimensions over social and environmental ones (Nadeem et al., 2020; Nguyen et al., 2021). In addition, there may be a temporary effect that indicates changes in the role that female directors play, in the sense that a change has been observed in the interest they show regarding the adoption of ethical policies and management of the firm's activities (i.e., Nadeem et al., 2017; Monteiro et al., 2021), something that did not occur in previous times (i.e., Rodríguez-Domínguez et al., 2009; García-Sánchez et al. 2015).

The divergence of the results obtained may justify the fact that the sustainability linked to a greater gender diversity of the board does not always provoke an increase in the firm's value (i.e., Bristy et al., 2020; Ajaz et al., 2020), as contradictory effects, both positive (i.e., Bektur and Arzova, 2020; Qureshi et al., 2020; Atif et al., 2021) and negative (i.e., Buil-Fabrega et al., 2017; Pan et al. al., 2020), can be observed.

Authors such as Campopiano et al. (2022) consider that these divergences are due to different reasons, highlighting the biases that the authors can introduce in their research, especially in the establishment of their theoretical frameworks and the configuration of the variables that they use in their empirical models. They conclude the stereotypes based on conventional gender roles and the consideration of the percentage of female directors are inadequate to contrast the hypotheses related to the role that women have in decision-making. It is

necessary to incorporate structural dimensions such as the presence of a critical mass of female directors, experience and professional career, hierarchical position, and permanence in the organization. In addition, it is possible the consideration of the impact of the context and the conditions of the board that may or may not favor the implications associated with gender diversity. This is because they consider that individual characteristics can be substitutes for the biases and personal values associated with the group.

In this line, several authors show that this effect is conditioned by the role of key influencers or tokens that women may be playing within the board (Elstad and Ladegard, 2012; Amorelli and García-Sánchez, 2020), by socio-demographic and educational factors (i.e., Alazzani et al., 2017; García Martín and Herrero, 2020) and, in particular, by institutional factors at the company (ownership), sector (type of activity), and country level (i.e., Campopiano et al., 2019; García-Sánchez et al., 2020a; Govindan et al., 2021). Moreover, several works show that their leadership could be conditioned by the responsibilities, networks, and experiences that women allow during their professional trajectory (Tomkins and Simpson, 2015).

There are extremely important studies to understand how and when women directors contribute to improving corporate commitment to sustainability. However, most of these approaches suppose a juxtaposition based on the existence of two conflicting and incongruous roles that women either adopt a masculine role to access positions of power and exercise as leaders or else assume a traditional female role linked to gender stereotypes (Becker et al., 2002), which is negatively affected by cognitive biases related to a greater interest in inclusion and solidarity and low motivation to access leadership positions and achieve a dominant presence (Hernández Bark et al., 2016), perhaps due to the female difficulties in fitting into the dynamics of traditional corporate structures (Mavin and Grandy, 2016).

So, gender stereotypes currently in force as previously indicated (OECD, 2019, 2020) entail essential beliefs and values in today's world (concerned about the social and business impacts of organizations), which turn women into role models for their transformational leadership (Nekhili et al., 2016) determined by the cognitive dimensions of their gender (Mohan et al., 2022). Specifically, their presence brings unique capabilities and resources to companies (Nielsen & Huse, 2010), as it is accompanied by a more participatory, empathic, and creative decision-making style (Christensen et al., 2014; Javidan et al., 2016), and greater solidarity and sensitivity to social problems (Williams, 2003). Their presence promotes a cultural change in corporations (Klettner et al., 2016), modifying the dynamics of decision-making

bodies (Zhang et al., 2015). These effects linked to the traditional gender stereotype can be enhanced by certain structural conditions, such as greater knowledge, expertise, and skills (Byron and Post, 2016; Marano et al., 2022), by making them more aware of the business reality (Boulouta, 2013), as well as by a greater influence associated with a greater presence (Cook and Glass, 2017) and status (Nekhili et al., 2016), by increasing the probability of being heard. All this, the contribution is dependent on a set of contexts and interactions that hinder or favor their contributions (Byron & Post, 2016).

According to the previous arguments, in this paper, to contribute to current knowledge, we consider diversity as a feature of heterogeneity using the theory of social identity to categorize the decisions made within the board based on gender issues, emphasizing the positive aspects that diversity implies in terms of sustainability in the pandemic period this be response to incidental affect. In this sense, this work focuses on testing the effect that the proportion of women, as a group with a common social identity, has on the implementation of business policies aimed at integrating the challenges of society in uncertain and economically adverse periods. In addition, the previously mentioned factors (i.e., expertise, background, skills, etc.) have avoided because it would suppose the consideration of a different research question by involving the inclusion of the analysis of attributes other than gender.

3.4.2. The in-group of women on the board and their social identity

According to social psychology, the social identity of an individual is built from the sum of two identities – one individual, which includes the aspects that make us peculiar and unique as people, and the other social, which brings together the characteristics that we share with our peers within different groups. The identity of belonging to groups facilitates and determines our interpersonal and intergroup relationships, as well as relationships with the physical environment, and arises because of the interaction between psychological processes – cognitive, evaluative, and emotional – and social reality (Tajfel and Turner, 1979).

Thus, according to Tajfel (1981), social identity forms part of the self-concept of each individual associated with the knowledge of belonging to one or several social groups, determined by the emotional and evaluative meaning of these memberships. In other words, it supposes an integration of the natural reality – biological and psychological – and the concept of society in which the individual lives: history, language, power structures, customs, rules and social norms, etc.

The individual is categorized as a process of order and simplification of social reality. The decision involves the creation of two separate categories: the in-group (female directors) and the out-group (male directors) and the construction of social identity based on the group to which they belong, which accentuates the differences between and the similarities within categories. In this regard, the individual maximizes their self-esteem with the specific groups to which they belong, helping them to be positively valued and benefit from the comparison. Therefore, this categorical thinking is constitutive of the way in which people understand their environment, simplifying the perception of social reality and decision-making process.

Gender is seen as an extensive social category because each individual necessarily belongs to one of the existing groups, i.e., men or women (Athenstaedt et al., 2008) – a categorization that supposes the construction of different stereotypes (subcategorizations) about the masculine and the feminine (Dovidio et al., 2003), providing expectations about social interactions that, in the case of not being fulfilled, penalize the deviation of the expected behaviour. Specifically, the previous literature highlights the significant connections that exist between gender and cognitive profiles in business contexts. Men and women, in general, are governed by different social norms, consider a variety of perspectives, and tend to adopt different attitudes associated with the cognitive background of diversity created by entrenched social conventions. Therefore, gender identity is undoubtedly one of the main forms of social division that explains the diverse implications that exist within business bodies in which decisions are made, such as the board of directors.

Thus, the literature is full of examples of group preferences of male-dominated boards in favour of hiring their peers (i.e., Gregorič et al., 2017; Allemand et al., 2022) and the need for regulation that acts against women's access to levels of corporate power, etc. (i.e., Gabaldon et al., 2016; Doldor et al., 2016; Galia et al., 2017; Joecks et al., 2019). According to the theory of social identity, these behaviours are linked to the masculine cognitive profiles of the out-group because men should show attitudes and behaviours more oriented towards power and success, in accordance with different social norms, and a cognitive background rooted in a long tradition in the exercise of this role.

The previous evidence of the impact of a greater presence of women greater on the commitment to the demands of the different stakeholders justified the “empathetic and caring” female stereotype, in that women generally have more altruistic traits. This leads them to sympathize more with disadvantaged groups and pay more attention to those collectives that need help (Amorelli and García-Sánchez, 2020). Thus, the theory of social identity allows us to understand the changes that the female directors introduce as an idiosyncratic in-group,

promoting values such as care, inclusion, well-being, justice, satisfaction, ethics, and responsibility as female cognitive dimensions linked to high morale, warmth, and solidarity (Monzani et al., 2015). These cognitive elements influence both the way in which the directors perceive themselves as a group and the way in which they wish to treat their colleagues and the different stakeholders. In other words, women directors promote a friendly framework for stakeholders due to their cognitive profile, regardless of whether they are part of the in-group linked to the female gender. In short, the differences in the commitment of each group in relation to sustainability would be rooted in conventional gender roles.

3.4.3. The incidental affect of Covid-19

The declaration of the Covid-19 pandemic has led to home confinement policies and a whole series of measures to protect the population from contagion, and in situations of isolation, the world population has faced two critical situations: the fear of contagion, and with-it death, and the crisis caused by confinement. In the case of business leaders, it has meant an increase in their stress level due to increased concerns about the well-being of employees, uncertainty regarding the company's performance, and their fear of losing their jobs. In general, all of this is accompanied by reductions in their income as an economic measure imposed by numerous companies (García-Sánchez and García-Sánchez, 2020).

To shed light on current knowledge, we will consider how affective processes can be affected by intergroup relations, focusing on incidental affect, that is, on those emotions not directly aroused in the relationship with other groups, in the case of Covid-19. This approach involves the analysis of the effect that the state of mind supposes over the judgments or decisions that the female directors (in-group) make in an inconsistent way, taking place in a complicated and unforeseen situation, a context in which the state of mind becomes more influential in evaluations and answers.

In doing this, the affect infusion model of Forgas (1995) tries to explain how mood affects the process information, under the assumption that its effect tends to be exacerbated in complex situations that require substantial cognitive processing, influencing information processing and response resulting from four heterogenous processing strategies.

The strategies identify several degrees of severity to which the effects of Covid-19 exert their influence and range from resorting to responding to previous experiences (direct access processing), search strategies (motivated processing), processing emotional reactions

(heuristic processing), and involvement of mood in the entire cognitive process (substantive or systematic processing). All of them suppose a greater presence of expectations and personal identity in the decision-making process (Wilder and Simon, 2001), this effect being greater with negative (positive) emotions because they activate deep (superficial) processes. In addition, self-concepts tend to be congruent with the state of mind, as they are able to produce an activation of personal identity, especially in majority groups (Clark and Isen, 1982).

According to Turner et al. (1987), the affective states derived from negative events can reinforce the values of security and power and the in-group social identity, especially in minority groups. This intra-group solidarity strengthens the values of concern for the well-being of the members of the group itself and becomes more salient when there is a perception of conflict and social threat (Stephan et al., 2002). This causes the cognitive traits of the in-group to be reinforced to guarantee their survival and determine the ability with which the female directors process situations and make decisions, using more categories to discriminate between stimuli and see more connections between them. It led them to adopt empathetic leadership with which they promote solidarity strategies related to their conventional traits of femininity. On the contrary, the out-group will enhance their masculine cognitive traits, focusing on decision-making based on economic criteria.

Thus, the pandemic supposes a context of crisis that is, by definition, uncertain, in which one might think that the opinions that emerge from their group of belonging will be more important than ever for the female directors. In addition, due to the negative cognitive burden that the pandemic poses as a threat to the state of well-being and the perception of limitations in the execution of activities or actions necessary to get out of it, it exacerbates the social polarization and the emotional judgments of the in-group as a protection mechanism. That is, the context presents a series of conditions that favour collective action of the in-group (Tilly, 1978), such as the existence of common interests and the belief that it is necessary to organize to defend them, and the mobilization of material, social, and communicative resources is necessary to achieve the end pursued by the action. Additionally, social vulnerability, understood as the risk of suffering harm in the event of an eventual contingency and the inability to avoid the harmful result, reduce it, and/or face it, will entail a greater commitment on the part of the directors as a weaker group or collective, more vulnerable to job loss.

Therefore, we believe that the incidental affect derived from the pandemic enhances the pattern of behaviour that women in-group adopt in decision-making associated with their

social identity, promoting additional specific actions to meet the new demands of the different stakeholders, arguments that lead us to establish the first working hypothesis:

Hypothesis 1 (H1). The gender diversity of the board is positively associated with the sustainable business commitment, this relationship being enhanced by the incidental affection associated with the health, economic, and social vulnerability that the Covid-19 pandemic entails.

Additionally, we argue that these decisions could have been made within companies that have been hit differently by the Covid-19. The pandemic has caused temporary disturbances in the production and commercialization of goods and services that have translated into tensions in the sales figures, causing serious liquidity problems, drops in profitability, and increased risk. In this context of business recession, it is conceivable that the commitment to sustainability may have been negatively affected. The presence of women could have limited this effect because their social identity is assimilated to a moral imperative to carry out activities aimed at protecting well-being (Apesteguia et al., 2012). It is because these objectives are integrated into their decision-making, being characterized by a greater demonstration of their innate values of ethics, altruism, empathy, and community orientation (Eagly et al., 2012; Boulouta, 2013; Anggadwita et al., 2022). These are all expected traits in the exercise of their leadership, determined by the customs and by the deep-rooted social conventions that are still in force. Thus, the studies that have analysed the male and female roles in the teleworking period during the pandemic have shown that women make use of work flexibility to pay more attention to childcare and housework, adopting a pattern of behaviour clearly associated with their social identity (Alon et al., 2020; Lyttelton et al., 2020; Collins et al., 2021). These arguments lead us to establish the following working hypothesis:

Hypothesis 2 (H2). In companies that have suffered a drop in their economic activity, the gender diversity of the board is positively associated with the sustainable business commitment, this relationship being enhanced by the incidental affection associated with the health, economic, and social vulnerability that the Covid-19 pandemic entails.

3.5. METHOD

To contrast the central research hypotheses of this study and determine the impact of the identity of female directors on sustainability, the empirical models synthesized in Equations 1 [Eq. 1] and 2 [Eq. 2] were designed. Both correspond to endogenous models delayed by one period with the aim of controlling the impact that the variable explained one period ago

(t-1) has on the variable explained at time t. This approach is consistent with the fact that the sustainability projects in force at time t are associated with those promoted in the previous period, considering that sustainability is a continuous process (García-Sánchez et al., 2022).

For the estimation of the models, we will use linear regressions with fixed effects for panel data, using a sample of 25,506 observations during 2015–2020. The panel is composed of 4,821 multinationals (unbalanced panel) whose information was extracted from the Thomson Reuters EIKON database.

To correct potential endogeneity problems, the control variables are delayed by one period, using centering variables in the interactions to control the multicollinearity that their use introduces.

$$\begin{aligned} \mathbf{ESG_Perf}_{i,t} = & \varphi_0 + \varphi_1 \mathbf{B_Diversity}_{i,t} + \varphi_2 \mathbf{Covid}_{i,t} + \varphi_3 \mathbf{B_Diversity} * \mathbf{Covid}_{i,t} + \\ & \varphi_4 \mathbf{ESG_Perf}_{i,t-1} + \varphi_5 \mathbf{B_Size}_{i,t} + \varphi_6 \mathbf{B_Activity}_{i,t} + \varphi_7 \mathbf{B_Indep}_{i,t} + \varphi_8 \mathbf{CEOduality}_{i,t} + \\ & \varphi_9 \mathbf{CSRCommittee}_{i,t} + \varphi_{10} \mathbf{B_Tenure}_{i,t} + \varphi_{11} \mathbf{F_Age}_{i,t} + \varphi_{12} \mathbf{F_Size}_{i,t} + \\ & \varphi_{13} \mathbf{F_ROA}_{i,t} + \varphi_{14} \mathbf{F_Leverage}_{i,t} + \varphi_{15} \mathbf{F_WorkCap}_{i,t} + \varphi_{16} \mathbf{F_R\&D}_{i,t} + \varphi_{17} \mathbf{F_Adverstising}_{i,t} + \\ & \varphi_{18} \mathbf{F_Capex}_{i,t} + \varphi_{19} \mathbf{F_Dividend}_{i,t} + \varphi_{20} \mathbf{I_Factor1}_{i,t} + \varphi_{21} \mathbf{I_Factor2}_{i,t} + \varphi_{22} \mathbf{Country}_i + \\ & \varphi_{23} \mathbf{Industry}_i + \varphi_{24} \mathbf{Year}_t + \varepsilon_{it} + \eta_i \quad [\text{Eq. 1}] \end{aligned}$$

$$\begin{aligned} \mathbf{ESG_Perf}_{i,t} = & \varphi_0 + \varphi_1 \mathbf{B_Diversity}_{i,t} + \varphi_2 \mathbf{Covid}_{i,t} + \varphi_3 \mathbf{B_Diversity} * \mathbf{Covid}_{i,t} + \\ & \varphi_4 \mathbf{DSales_Decline}_{i,t} + \varphi_5 \mathbf{B_Diversity} * \mathbf{DSales_Decline}_{i,t} + \varphi_6 \mathbf{DSales_Decline} * \mathbf{Covid}_{i,t} + \\ & \varphi_7 \mathbf{B_Diversity} * \mathbf{DSales_Decline} * \mathbf{Covid}_{i,t} + \varphi_8 \mathbf{ESG_Perf}_{i,t-1} + \varphi_9 \mathbf{B_Size}_{i,t} + \\ & \varphi_{10} \mathbf{B_Activity}_{i,t} + \varphi_{11} \mathbf{B_Indep}_{i,t} + \varphi_{12} \mathbf{CEOduality}_{i,t} + \varphi_{13} \mathbf{CSRCommittee}_{i,t} + \\ & \varphi_{14} \mathbf{B_Tenure}_{i,t} + \varphi_{15} \mathbf{F_Age}_{i,t} + \varphi_{16} \mathbf{F_Size}_{i,t} + \\ & \varphi_{17} \mathbf{F_ROA}_{i,t} + \varphi_{18} \mathbf{F_Leverage}_{i,t} + \varphi_{19} \mathbf{F_WorkCap}_{i,t} + \varphi_{20} \mathbf{F_R\&D}_{i,t} + \varphi_{21} \mathbf{F_Adverstising}_{i,t} + \\ & \varphi_{22} \mathbf{F_Capex}_{i,t} + \varphi_{23} \mathbf{F_Dividend}_{i,t} + \varphi_{24} \mathbf{I_Factor1}_{i,t} + \varphi_{25} \mathbf{I_Factor2}_{i,t} + \varphi_{26} \mathbf{Country}_i + \\ & \varphi_{27} \mathbf{Industry}_i + \varphi_{28} \mathbf{Year}_t + \varepsilon_{it} + \eta_i \quad [\text{Eq. 2}] \end{aligned}$$

The ESG_Perf variable corresponds to the Refinitiv ESG score available at Thomson Reuters EIKON. This score is determined by the overall score that each company obtains regarding commitment and performance in social, environmental, and corporate governance matters. The range of scores is between 0 and 100 points. Additionally, to obtain robust results, this score will be used in a disaggregated manner in relation to the scores that the company obtains in each of the three pillars: environmental (Env_Perf), social (Social_Perf), and governance (Gov_Perf). In addition, the variable Var_ESG_Perf will be used to verify whether the results are robust for the annual percentage increase in sustainability

performance, compared to the use of the delayed endogenous models that have been adopted for the four previous variables.

The independent variables designed to contrast Hypothesis H1 are: B_Diversity, Covid, and their interaction B_Diversity*Covid. The Covid variable corresponds to a dummy that takes a value of 1 if the year analysed is 2020; otherwise, the value is 0. The variable B_Diversity, proxy of the female social identity of the board of directors, following the previous literature mentioned in the theoretical framework, is determined by the relative presence of women directors, represented by their percentage as board members. This variable will represent the effect that the in-group of women directors has on the degree of sustainable business commitment throughout the period analysed. The interaction with the Covid variable determines the specific effect in the year the pandemic began. The presence of women is an adequate proxy for the behavioural aspects of the in-group of female directors because it is generally accepted that gender – female vs. masculine - is a category that determines two social groups with different cognitive traits that materialize in decision-making that reflect a greater or lesser concern for economic status, power, empathy, the common good and solidarity, among other traits conventionally considered masculine vs. feminine. In this work, this categorization is applied to directors, establishing groups based on gender and independently of other cognitive traits: in-group of women and out-group of men. Therefore, the percentage of each of this type of directors determines the prevalence of the cognitive traits of each group in decision-making.

In relation to Hypothesis H2, DSales_Decline has been included, a dummy variable with the value of 1 if the company's sales have fallen compared to the previous year and the value of 0 otherwise. Its interaction with the previous independent variables makes it possible to observe in addition to the effect that a negative year-on-year evolution in economic activity has on sustainability, in general, in companies with boards with a greater percentage of female directors (B_Diversity*Covid) and in the pandemic period, in particular (DSales_Decline*Covid and B_Diversity*DSales_Decline*Covid).

Additionally, to relieve biased results, another seventeen control variables will be included, in addition to controlling for the year, industry, and geographic zone. In this sense, the fixed effects model controls for the fact that the country and the sector to which the companies belong are fixed throughout the period. So, dummy at country and industry level are not included. However, nominal country and sector variables are included to control for the heterogeneity that exists between the different countries and industries that make up our sample.

The control variables have been selected in accordance with previous authors – i.e., Amorelli and García-Sánchez (2020), Monteiro et al. (2021), and García-Sánchez (2021), among others – and identify the most relevant characteristics of the institutional environment, the resources and capacities of the companies, and their corporate governance systems.

The variables *B_Size*, *B_Activity*, *B_Indep*, *CEOduality*, *CSRCommittee*, and *B_Tenure* identify the main characteristics of the board related to size, activity, level of independence, specialization, and experience. Specifically, the first two variables, *B_Size* and *B_Activity*, identify the capacity of the board to carry out its responsibilities in terms of sustainability according to the number of directors that make up this body and the meetings they hold. Although various authors argue that many members and meetings can hinder decision-making from an economic-financial perspective, the evidence in the case of sustainability suggests that the inclusion of social and environmental dimensions and their complexity requires a larger size and greater activity. We determine the level of specialization and concern of the directors about other dimensions of the board of directors not strictly linked to their traditional functions through the variable *CSRCommittee* – a dummy variable with a value of 1 when a specialized subcommittee on sustainability has been set up within the board. Its existence improves the business commitment to different ESG dimensions. *B_Tenure* represents the average seniority of the directors, representing the degree of knowledge they have in relation to the company's strategy and its policies and activity. This knowledge would derive from accumulated experience in the performance of their duties within the company. The variables *B_Indep* (proportion of independent directors) and *CEOduality* (a dummy with a value of 1 if the CEO of the company is also the chairman of the board) determine the degree of independence of the directors in their decision-making, as there are fewer executives on the board, which makes it difficult for them to determine the agenda of the meetings from the presidency of this body. All of them favour the independent decisions that the members of the board make relating sustainability and other firms' strategy.

Regarding the variables that identify the resources and capabilities of the company, we use as proxies: the age of the company, *F_Age* – logarithm of years elapsed since its creation; the size of the firm, *B_Size* – logarithm of total assets; its economic return, *F_ROA*; the debt to total assets ratio, *F_Leverage*; the company's short-term liquidity proxied by the working capital ratio, *F_WorkCap*; and the annual dividend distribution policy, *F_Dividend*. Likewise, we control the degree of intensity to sales of investments in R&D, capital, and advertising – *F_R&D*, *F_CAPEX*, and *F_Advertising*. All these variables represent the resources and

capabilities of the firms and are valuable and necessary factors to obtain sustainable competitive advantages and to respond to different changes in the business environment.

The effect of institutional pressures is controlled for by including two factors from a principal component analysis (PCA) that groups together the effect that regulatory frameworks can have on business commitment to sustainability. The PCA allows us to summarize a set of institutional variables in two uncorrelated factors, which represent the original data, avoiding the multicollinearity that exists between the variables. The values of the Kaiser-Meyer-Olkin test guarantee the validity of this procedure. Table 1 presents a description of the variables used and their relevance in each of the factors used in the analysis to control institutional pressures.

The institutional variables, following the work of García-Sánchez et al. (2016), represent the orientation of the legal system towards the protection of stakeholders (CivilLaw, ERRI, SSL, and LRI) and the effectiveness of the judicial system (RL and EJS), as well as aggregate indicators of the commitment at the national level of all the actors with the social and environmental dimensions (EPI, SPI, and GIWPS). These external pressures influence the decisions of the companies because they determine what actions can be promoted in accordance with the norms, values, etc. to receive social approval. By the PCA we have obtained two factors, I_Factor1 and I_Factor2 with different weight for each variable. In this sense, I_Factor1 groups the institutional variables ERRI, RL, EPI, SPI and GIWPS with a weight higher than +0.3. I_Factor2 groups the institutional variables CivilLaw, LRI, SSL and EJS with a weight higher than +0.3 due to LRL and EJS have a negative impact.

Table 1. Institutional factors composition			
Variable	Definition	I_Factor1	I_Factor2
CivilLaw	Dummy, takes value 1 for geographic zones with a civil law system	0.0225	0.5714
ERRI	Environmental Regulatory Regime Index measures major aspects of environmental regulation	0.4157	-0.1415
LRI	Labour Rights Index measures major aspects of employment regulation	-0.2561	-0.4560
SSL	Social Security Laws Index (Botero et al., 2004)	-0.0583	0.5443
RL	Assessment of the law-and-order tradition (La Porta et al., 1998)	0.4206	-0.0082
EJS	Integrity and efficiency of the legal environment (La Porta et al., 1998)	0.2205	-0.4780
EPI	Environmental Performance Index at country level	0.4406	0.2929
SPI	Social Progress Index measures social progress at country level	0.4337	0.0396
GIWPS	Women, Peace and Security Index measures women's inclusion, security and justice in countries	0.4172	-0.0141
Kaiser-Meyer-Olkin measure of sampling adequacy		0.6826	
Rotation: orthogonal varimax (Kaiser off) – Rho		0.7869	

3.6. RESULTS

3.6.1. Descriptive analysis

Table 2 shows the main descriptive statistics for the variables that will be used in the estimation of Equations 1 and 2, presented in different panels depending on their numerical or dichotomous nature. The average of the ESG_Perf variable is 45 points out of 100, with a year-on-year increase of 4%, with a sustainability subcommittee in 48% of the companies that make up the sample. The boards have an average of ten directors, almost 18% of whom are women. They perform associates functions for approximately **eight years**. **The board's** activity takes the form of an annual average of nine to ten meetings. In relation to the levels of independence of this body, it should be noted that in 64% of the companies, the CEO is also the chairman of the board and approximately half of the members are non-independent directors.

Table 2. Statistical descriptive analysis		
Panel A. Numerical variables		
Variable	Mean	Std. dev.
ESG_Perf	45.01	20.51
Var_ESG_Perf	4.00	24.00
Env_Perf	13.26	11.85
Social_Perf	43.65	19.62
Gov_Perf	39.42	31.00
B_Diversity	17.85	13.42
B_Size	9.74	3.18
B_Activity	9.48	5.52
B_Indep	51.93	36.45
B_Tenure	7.63	3.99
F_Age	3.20	0.87
F_Size	15.28	1.86
F_ROA	3.32	17.33
F_Leverage	51.88	48.28
F_WorkCap	118.00	202.00
F_R&D	11.30	2.81
F_Advertising	96.60	102.00
F_CAPEX	52.50	63.00
F_Dividend	28.10	38.00
Panel B. Dichotomous variables		
	Relative Frequency	
Covid	0.15	
DSales_Decline	0.26	
DSales_Decline*Covid	0.08	
CEOduality	0.64	
CSRCommittee	0.48	

Tabla 3. Bivariate correlation matrix.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 ESG_Perf	1													
2 Var_ESG_Perf	0,07***	1												
3 Env_Perf	0,83***	0,02***	1											
4 Social_Perf	0,87***	0,06***	0,73***	1										
5 Gov_Perf	0,48***	0,09***	0,22***	0,25***	1									
6 B_Diversity	0,32***	0,01*	0,24***	0,30***	0,19***	1								
7 Covid	0,08***	-0,02***	0,06***	0,05***	0,02***	0,14***	1							
8 DSales_Decline	0,09***	-0,02***	0,10***	0,05***	0,03***	0,07***	0,26***	1						
9 DSales_Decline*Covid	0,08***	-0,02***	0,08***	0,05***	0,02***	0,12***	0,70***	0,50***	1					
10 B_Size	0,30***	-0,01	0,32***	0,27***	0,02***	0,07***	-0,03***	0	0	1				
11 B_Activity	0,07***	-0,03***	0,06***	0,05***	0,03***	-0,01*	0,08***	0,08***	0,09***	0,02***	1			
12 B_Indep	0,18***	0,02***	0,11***	0,18***	0,13***	0,18***	0,05***	0,03***	0,03***	0,02***	0,01	1		
13 CEOduality	0,07***	0,01*	0,05***	0,02***	0,07***	0	0,02**	0,03***	0,02**	-0,01	0,13***	0,01	1	
14 CSRCommittee	0,61***	0,01	0,64***	0,56***	0,18***	0,16***	0,08***	0,09***	0,08***	0,26***	0,06***	0,08***	0,10***	1
15 B_Tenure	-0,09***	-0,02**	-0,11***	-0,11***	-0,01	-0,06***	0,01**	-0,03***	0,01	0,01	-0,20***	-0,20***	-0,26***	-0,11***
16 F_Age	0,23***	-0,06***	0,24***	0,16***	0,06***	0,03***	0,04***	0,08***	0,06***	0,22***	0,05***	-0,12***	-0,01*	0,22***
17 F_Size	0,48***	-0,01	0,47***	0,40***	0,16***	0,09***	0,01**	0,02***	0,03***	0,52***	0,11***	0,07***	-0,01	0,34***
18 F_ROA	0,11***	0,03***	0,11***	0,07***	0,06***	0,06***	-0,04***	-0,08***	-0,06***	0,06***	-0,04***	-0,02***	-0,02***	0,08***
19 F_Leverage	0,01	0	0,01*	0,03***	-0,02***	-0,08***	-0,01*	0	0	-0,08***	0,01**	-0,03***	0,05***	0,01
20 F_WorkCap	0,03***	0	0,02***	0,03***	0,02***	-0,04***	0	0	0	-0,02***	0,01	-0,01	0	0,02***
21 F_R&D	0,06***	0	0,04***	0,05***	0,05***	-0,03***	0	0	-0,01	0,01	0	0,01**	-0,02***	0,03***
22 F_Advertising	0,06***	-0,01	0,05***	0,05***	0,05***	-0,08***	-0,01	0	-0,01	-0,01	0,03***	-0,01**	0,01	0,04***
23 F_CAPEX	0,07***	-0,01	0,05***	0,06***	0,03***	-0,07***	-0,01	0	-0,01	0	0,05***	0	0,01*	0,04***
24 F_Dividend	0,05***	0	0,03***	0,06***	0,02***	-0,05***	0	0	0	-0,03***	0,09***	-0,01**	0,03***	0,02***
25 I_Factor1	0,01	0,02**	0,01	-0,04***	0,04***	0,18***	0,01	0,03***	0,02**	-0,11***	0,10***	-0,02**	0,06***	-0,09***
26 I_Factor2	0,33***	-0,02**	0,40***	0,29***	0,01	0,12	-0,01	0,06***	0,03***	0,26***	0,19***	0,01	0,18***	0,33***

Tabla 3. Bivariate correlation matrix. (continued)

	15	16	17	18	19	20	21	22	23	24	25	26
15 B_Tenure	1											
16 F_Age	0,25***	1										
17 F_Size	-0,08***	0,18***	1									
18 F_ROA	0,08***	0,08***	0,15**	1								
19 F_Leverage	-0,04***	0,04***	0	0,02***	1							
20 F_WorkCap	-0,01**	0,03***	0,05***	0,02***	0,15***	1						
21 F_R&D	-0,03***	0,02***	0,06***	0,01	0,02***	0,76***	1					
22 F_Advertising	-0,05***	0,05***	0,08***	0,02**	0,30***	0,81***	0,84***	1				
23 F_CAPEX	-0,05***	0,03***	0,08***	0,01*	0,30***	0,70***	0,77***	0,84***	1			
24 F_Dividend	-0,04***	0,02***	0,06***	0,02***	0,25***	0,47***	0,30***	0,48***	0,53***	1		
25 I_Factor1	-0,09***	-0,05***	-0,03***	-0,04***	-0,15***	-0,03***	-0,03***	-0,05***	-0,05***	-0,05***	1	
26 I_Factor2	-0,22***	0,18***	0,26***	0,06***	0,18***	0,04***	0,04***	0,07***	0,06***	0,06***	0,01**	1

Table 3 reflects the correlation matrix, whose coefficients suggest the non-existence of collinearity problems between the variables.

3.6.2. Dependency models

In the first column of Panel A of Table 4, the results obtained when estimating Equation 1 with delayed endogenous variables for the ESG_Perf variable can be observed. Columns 3 to 5 incorporate the robust results for the same model before the individualized consideration of the three subdimensions of sustainability. The second column reflects the estimate for the variable relative to the interannual variation.

In relation to the results obtained for the global sustainability score, we observe that the representative variable of gender diversity, B_Diversity, has a significant positive impact (coeff. = 0.0260) for a confidence level of 99%. These results, which are in line with Shoham et al. (2017), Elmagrhi et al. (2019), Yaseen et al. (2019), Govindan et al. (2021), Al-Najjar and Salama (2022) and Wang et al. (2022), among others, showed a positive relationship between the number of female directors and the firms' sustainability performance. In addition, when we estimate Equation 1 for the three main dimensions of sustainability, we observe that the variable B_Diversity favourably influences the social (coeff. = 0.0392) and environmental (coeff. = 0.0196) dimensions of sustainability for a level of trust of 99%, being irrelevant from the econometric point of view for the governance dimension. The results confirm the evidence from previous studies that show that the female presence does not equally affect the dimensions of sustainability (Nadeem et al., 2020; Nguyen et al., 2021), showing temporal differences in their sustainable preferences (i.e., Rodríguez-Domínguez et al., 2009; García-Sánchez et al. 2015; Nadeem et al., 2017; Monteiro et al., 2021), or due to women are more comfortable with cooperative and supportive corporate aspects (Monzani et al., 2015; Campopiano et al., 2022; García-Sánchez et al., 2023).

The Covid variable has a negative impact (coeff. = -0.473) for a confidence level of 90%, evidencing that the Covid-19 pandemic has meant a slight setback in performance on sustainability issues, although its statistical significance is marginal due to the fact this setback is limited to 2020. However, if we observe the interaction B_Diversity*Covid, it has a marginally significant positive impact (coeff. = 0.0175) at the 90% level. This last result implies that the impact of Covid on sustainability is less negative among firms with a higher board diversity. So, the presence of women directors partially corrects the slight setback that the business commitment to sustainability has suffered due to the pandemic (Covid + B_Diversity*Covid = -0.473 + 0.0175 = -0.4555). So, the results suggest that the incidental affect derived from the pandemic reinforces the role that the in-group of female directors

adopts in decision-making associated with their social identity. However, the impact of board diversity does not prevent a regression in the sustainability strategy.

In relation to the different sustainability dimensions, the variables Covid and B_Diversity*Covid are only significant in the governance model, the former with a negative impact (coeff. = -33.45) and the latter with a positive impact (coeff. = 1.098), both being significant at the 99% level. This evidence shows that directors agreed to promote social and environmental initiatives in pandemic times without affecting business performance in these dimensions. However, in relation to governance practices, the male directors supported adverse measures for the good governance of the companies, encountering opposition from their female colleagues, which partially limited their decisions. This could be indicative of the role that women are playing in organizations, starting to set the boards' agenda and changing how directors behave and the criteria they use in their decisions (Tomkins and Simpson, 2015; Bezemer et al., 2023).

The results are confirmed for the estimation of Equation 1 in the second column based on an explanatory model of the interannual variation of the business performance in terms of sustainability. So, we posit that the results obtained allow us to accept our first hypothesis because the evidence confirms the arguments of the theory of social identity, evidencing the preference that the in-group of women directors have regarding the business commitment to sustainability. In this vein, the cognitive dimensions that female directors use in their decision-making are oriented to attend the social and environmental demands of stakeholders but are less worried about governance matters because the main policies and actions of this last sustainability dimension are also aligned with the interests of male directors. In addition, in the Covid-19 scenario, in- and out-groups made many decisions that maintain environmental and social commitments due to visible effects and impacts in corporate reputations but negatively affect the internal governance dimension. This last adverse impact is lower in firms with a greater number of women directors due to the incidental affect associated with the social identity of women that introduce feminist cognitive criteria to guarantee good governance practices.

Therefore, we throw new evidence regarding the possible existence of the conflict that Becker et al. (2002) raises in relation to the fact that women, when exercising as leaders, adopt masculine patterns, incongruous with their cognitive traits of solidarity, inclusion, empathy, etc. Thus, our evidence suggests that female directors incorporate their own cognitive approach to the social identity of their gender (in-group) in the exercise of their profession, exerting influence, although limited by their minority position, on the dynamics

of traditional corporate structures. (Zhang et al., 2015; Mavin and Grandy, 2016). They promote greater solidarity and sensitivity to social problems (Williams, 2003) and make companies more aware of the business reality (Boulouta, 2013).

In relation to the negative effect that the pandemic could have had on turnover and its impact on sustainability, Panel B shows results for Hypothesis H2. It allows us to test whether this adverse situation entails a conditioning factor on decisions that the in-group of female directors can take in relation to the business commitment to ESG performance. We hope that the turnover does not affect the social identity criteria of women directors and foment an incidental affect like group.

In this regard, the variables B_Diversity and Covid and their interaction have, again, the same effect on the dependent variable ESG_Perf for higher confidence levels, namely, 95% and 99%, if they are significant.

In terms of the effect that the drop-in sales figures may have on business sustainability, we observe that the variable DSales_Decline has a negative impact (coeff. = -1.057), significant at the 99% level in any of the years analysed and being increased in the considered pandemic year (DSales_Decline*Covid: coeff. = -0.0735). This effect has a great impact on the governance dimension and is partially corrected by a greater presence of female directors (B_Diversity*DSales_Decline: coeff. = 0.0392), especially in 2020 (B_Diversity*DSales_Decline*Covid: coeff. = 1.273). This evidence allows us to accept the second hypothesis. Figure 1 includes a visual representation of the effects of the interactions between board diversity, Covid, and turnover on sustainability. It is possible to observe a positive and similar evolution of sustainability and gender diversity, independently of the effect that turnover could entails for these strategies.

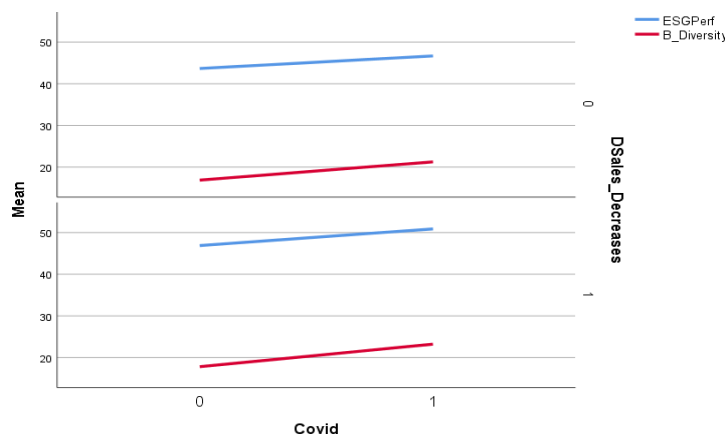


Figure 1. Plotting the effects of the interactions of Board Diversity, Covid and Turnover on sustainability

The results are robust for the model designed for the variable Var_ESG_Perf, confirming the differences already observed for the dimensions of sustainability. Additionally, we observe that in those companies that have suffered a drop in their economic activity, the presence of female directors favour initiatives on environmental issues. So, the different estimations of Equation 2 confirm that the pandemic has caused relevant adverse economic impacts for companies, but women directors understood that sustainability is the right strategy to the firm's survival, as Crane and Matten (2021) and Ajeigbe and Ganda (2023) justified. These are the reasons why they contribute to maintain sustainability commitment and anticipate the different stakeholders' demands to satisfy them. These behaviours are consequently with the feminist innate values of ethics, altruism, empathy, and community orientation (Eagly et al., 2012; Boulouta, 2013) and they have also adopted by women in their private sphere, pay more attention to childcare and housework than their male counterparts (Alon et al., 2020; Lyttelton et al., 2020; Collins et al., 2021; Kabeer et al., 2021).

Regarding the control variables, companies with a greater volume of resources and capacities linked to a greater size and profitability, as well as with more independent and specialized boards, have a higher commitment to sustainability. In such cases, less experience and activity favours business sustainability.

In summary, the results obtained suggest that a greater board diversity leads to a greater sustainable performance as a pattern of behaviour associated with the social identity of the female in-group, which is reinforced by the incidental affect of the Covid-19 pandemic. This role must be contextualized at a time of health and economic crisis that has led to a slight setback in the global business commitment to sustainability. On the other hand, when we consider the three main dimensions of sustainability, the results obtained allow us to understand the marginal effect of the Covid variables and their interaction along with the role that women directors play in this health and economic crisis (versus in periods not characterized by negative or unfavourable exogenous events).

Additionally, the individualized analyses show that the role of social identity is only observed for the social and environmental aspects of business activity, lacking any effect on governance. However, boards that have a greater number of women have limited the significant reverse effect that Covid-19 has had on issues of good governance in companies due to the centralization of decision-making in the management team, the freezing of certain policies for reasons of containing current expenses, need for liquidity, etc. This reveals the role that incidental affection has played in the in-groups of directors according to gender. It promotes masculine, individualistic traits focused on the most economic dimensions of

business activity in the out-group of male directors, who have prioritized economic decisions that have led to a setback, especially in company governance. The opposite effect is observed for the in-group of female directors, who have continued to be concerned about the demands of interest groups, including investors and shareholders, guaranteeing the proper functioning of corporate governance.

Table 4. Results from basic analysis: board diversity in a Covid-19 setting

Panel A. Board diversity in a Covid-19 setting

	Equation 1				
	ESG_Perf	Var_ESG_Perf	Env_Perf	Social_Perf	Gov_Perf
	coeff. (std.error)	coeff. (std.error)	coeff. (std.error)	coeff. (std.error)	coeff. (std.error)
B_Diversity	0.0260*** (0.00481)	0.000458*** (0.000165)	0.0196*** (0.00282)	0.0392*** (0.00517)	0.161 (0.133)
Covid	-0.473* (0.249)	-0.0154* (0.00882)	-0.0392 (0.148)	-0.0753 (0.271)	-33.45*** (7.447)
B_Diversity*Covid	0.0175* (0.00924)	0.000543* (0.000327)	0.00745 (0.00550)	-0.00341 (0.0100)	1.098*** (0.276)
ESG_Perft-1	0.893*** (0.00385)				
Env_Perft-1			0.902*** (0.00393)		
Social_Perft-1				0.877*** (0.00393)	
Gov_Perft-1					0.812*** (0.00482)
B_Size	-0.00348 (0.0211)	-0.000200 (0.000720)	-0.00552 (0.0126)	0.0361 (0.0229)	-2.014*** (0.589)
B_Activity	-0.0209* (0.0119)	-0.000821** (0.000409)	-0.0224*** (0.00708)	-0.0224* (0.0129)	0.515 (0.336)
B_Indep	0.00340** (0.00164)	0.000102* (5.64e-05)	0.000980 (0.000970)	0.00468*** (0.00177)	0.141*** (0.0463)
CEOduality	-0.140 (0.115)	-0.00487 (0.00390)	-0.0537 (0.0682)	-0.0702 (0.124)	2.184 (3.202)
CSRCommittee	0.784*** (0.139)	0.0197*** (0.00476)	0.471*** (0.0858)	0.639*** (0.146)	10.30*** (3.487)
B_Tenure	-0.074*** (0.0155)	-0.00215*** (0.000526)	-0.0244*** (0.00923)	-0.0567*** (0.0167)	-0.855** (0.430)
F_Age	-0.0587 (0.0649)	-0.00227 (0.00220)	-0.00423 (0.0387)	-0.0132 (0.0696)	-1.908 (1.773)
F_Size	0.418*** (0.0396)	0.00982*** (0.00134)	0.264*** (0.0231)	0.329*** (0.0415)	5.604*** (1.039)
F_ROA	0.0106*** (0.00274)	0.000296*** (9.48e-05)	0.00719*** (0.00164)	0.000707 (0.00297)	0.204*** (0.0783)
F_Leverage	0.000461 (0.000681)	1.24e-05 (2.31e-05)	0.000622 (0.000406)	0.000225 (0.000736)	0.0236 (0.0188)

Panel A (continued)					
F_WorkCap	0.000 (1.04e-10)	0.000 (0.000)	0.000 (6.18e-11)	9.18e-11 (1.12e-10)	-5.43e-10 (2.91e-09)
F_R&D	5.46e-10 (8.09e-10)	0.000 (0.000)	7.74e-10 (4.83e-10)	-2.57e-10 (8.75e-10)	1.04e-08 (2.24e-08)
F_Advertising	0.000 (2.00e-10)	0.000 (0.000)	-2.09e-10* (1.19e-10)	1.26e-10 (2.16e-10)	2.56e-09 (5.54e-09)
F_CAPEX	-1.38e-10 (2.04e-10)	0.000 (0.000)	0.000 (1.22e-10)	-1.24e-10 (2.21e-10)	-7.68e-09 (5.82e-09)
F_Dividend	-4.45e-10 (9.90e-10)	0.000 (0.000)	-4.40e-10 (5.90e-10)	-7.32e-10 (1.07e-09)	9.60e-09 (2.88e-08)
I_Factor1	0.0309 (0.0264)	0.00112 (0.000892)	-0.0137 (0.0158)	-0.0903*** (0.0286)	2.091*** (0.722)
I_Factor2	0.189*** (0.0481)	0.00394** (0.00163)	0.0772*** (0.0289)	0.105** (0.0518)	-0.249 (1.311)
industry	yes	yes	yes	yes	yes
country	yes	yes	yes	yes	yes
year	yes	yes	yes	yes	yes
R-squared	0.975***	0.918***	0.974***	0.968***	0.932***

Panel B. Board diversity in a Covid-19 setting: firms' sales decline					
	Equation 2				
	ESG_Perf	Var_ESG_Perf	Env_Perf	Social_Perf	Gov_Perf
	coeff.	coeff.	coeff.	coeff.	coeff.
	(std.error)	(std.error)	(std.error)	(std.error)	(std.error)
B_Diversity	0.0166*** (0.00523)	0.0351* (0.0195)	0.0196*** (0.00307)	0.0388*** (0.00563)	0.251 (0.197)
Covid	-0.882** (0.362)	-0.0257** (0.0128)	-0.222 (0.216)	-0.0271 (0.394)	-43.21*** (10.78)
B_Diversity*Covid	0.0471*** (0.0137)	0.00118** (0.000486)	0.0182** (0.00819)	0.0102 (0.0149)	1.771*** (0.408)
DSales_Decline	-1.057*** (0.209)	-0.0313*** (0.00734)	-0.154 (0.124)	-0.388* (0.227)	-35.87*** (6.144)
B_Diversity *DSales_Decline	0.0392*** (0.00876)	0.00127*** (0.000308)	-0.000244 (0.00522)	0.00104 (0.00951)	1.703*** (0.258)
DSales_Decline*Covid	-0.0735*** (0.0194)	-0.00187*** (0.000683)	-0.0178 (0.0115)	-0.0214 (0.0210)	-2.200*** (0.574)
B_Diversity *DSales_Decline*Covid	1.273** (0.516)	0.0359** (0.0182)	0.0182** (0.00819)	0.0155 (0.561)	38.15** (15.28)
ESG_Perft-1	0.893*** (0.00385)				
Env_Perft-1			0.902*** (0.00393)		
Social_Perft-1				0.877*** (0.00392)	
Gov_Perft-1					0.812*** (0.00481)
B_Size	-0.00407	-0.000199	-0.00637	0.0345	-1.985***

Panel B (continued)					
	(0.0211)	(0.000720)	(0.0126)	(0.0228)	(0.589)
B_Activity	-0.0195	-0.000785*	-0.0219***	-0.0212*	0.547
	(0.0119)	(0.000408)	(0.00708)	(0.0128)	(0.336)
B_Indep	0.00321**	9.67e-05*	0.000960	0.00466***	0.133***
	(0.00163)	(5.64e-05)	(0.000970)	(0.00177)	(0.0463)
CEOduality	-0.147	-0.00516	-0.0532	-0.0694	1.762
	(0.114)	(0.00390)	(0.0682)	(0.123)	(3.198)
CSRCommittee	0.798***	0.0201***	0.470***	0.656***	10.53***
	(0.139)	(0.00476)	(0.0858)	(0.146)	(3.484)
B_Tenure	-0.0770***	-0.00224***	-0.0251***	-0.0585***	-0.955**
	(0.0154)	(0.000526)	(0.00923)	(0.0167)	(0.430)
F_Age	-0.0410	-0.00184	0.000739	0.00214	-1.526
	(0.0648)	(0.00220)	(0.0387)	(0.0696)	(1.774)
F_Size	0.420***	0.00983***	0.265***	0.335***	5.555***
	(0.0395)	(0.00134)	(0.0231)	(0.0414)	(1.039)
F_ROA	0.0105***	0.000297***	0.00708***	0.000483	0.209***
	(0.00274)	(9.48e-05)	(0.00164)	(0.00297)	(0.0782)
F_Leverage	0.000537	1.49e-05	0.000614	0.000218	0.0270
	(0.000680)	(2.31e-05)	(0.000406)	(0.000734)	(0.0188)
F_WorkCap	0.000	0.000	0.000	8.95e-11	-5.98e-10
	(1.03e-10)	(0.000)	(6.18e-11)	(1.12e-10)	(2.90e-09)
F_R&D	5.86e-10	0.000	7.83e-10	-2.29e-10	1.15e-08
	(8.08e-10)	(0.000)	(4.83e-10)	(8.73e-10)	(2.24e-08)
F_Advertising	0.000	0.000	-2.10e-10*	1.21e-10	2.29e-09
	(1.99e-10)	(0.000)	(1.19e-10)	(2.15e-10)	(5.53e-09)
F_CAPEX	-1.39e-10	0.000	0.000	-1.24e-10	-7.70e-09
	(2.04e-10)	(0.000)	(1.22e-10)	(2.21e-10)	(5.81e-09)
F_Dividend	-4.45e-10	0.000	-4.37e-10	-7.48e-10	9.34e-09
	(9.88e-10)	(0.000)	(5.90e-10)	(1.07e-09)	(2.88e-08)
I_Factor1	0.0335	0.00118	-0.0127	-0.0874***	2.128***
	(0.0264)	(0.000891)	(0.0158)	(0.0285)	(0.721)
I_Factor2	0.194***	0.00400**	0.0792***	0.113**	-0.211
	(0.0480)	(0.00163)	(0.0289)	(0.0517)	(1.310)
industry	yes	yes	yes	yes	yes
country	yes	yes	yes	yes	yes
year	yes	yes	yes	yes	yes
R-squared	0.975***	0.906***	0.974***	0.968***	0.932***

3.6.3. Robust analysis: Is censored a problem?

The estimates summarized in Table 5 have been obtained with linear regression models and fixed effects for the panel data. To guarantee the robustness of our empirical results with other methodological approaches and given that the dependent variables take values of between 0 and 100 points, we will use a Tobit model for the panel data and censored

variables, in which the η term controls the unobservable heterogeneity and ε is the error term.

The results obtained for Equations 1 and 2 are summarized in Table 5. They are highly similar to those reflected in the previous table, guaranteeing that the evidence obtained is robust to changes in the specifications of variables and estimation methods.

Table 5. Robust analysis with Tobit regression					
Panel A. Board diversity in a Covid-19 setting					
	ESG_Perf coeff. (std.error)	Var_ESG_Perf coeff. (std.error)	Env_Perf coeff. (std.error)	Social_Perf coeff. (std.error)	Gov_Perf coeff. (std.error)
B_Diversity	0.0178*** (0.00412)	0.000717*** (0.000116)	0.0243*** (0.00375)	0.0241*** (0.00444)	0.0350 (0.109)
Covid	-0.604*** (0.220)	-0.0145** (0.00637)	-0.00355 (0.167)	-0.398* (0.239)	-6.21e-09** (2.56e-09)
B_Diversity*Covid	0.0231*** (0.00853)	0.000514** (0.000246)	0.00880 (0.00638)	0.00534 (0.00926)	0.160** (0.0691)
Panel B. Board diversity in a Covid-19 setting: firms' sales decline					
	ESG_Perf coeff. (std.error)	Var_ESG_Perf coeff. (std.error)	Env_Perf coeff. (std.error)	Social_Perf coeff. (std.error)	Gov_Perf coeff. (std.error)
B_Diversity	0.0105** (0.00458)	0.000895*** (0.000129)	0.0236*** (0.00404)	0.0256*** (0.00495)	0.0496 (0.0732)
Covid	-0.721** (0.313)	-0.0122 (0.00898)	0.0124 (0.241)	-0.272 (0.339)	-5.751 (3.661)
B_Diversity*Covid	0.0433*** (0.0125)	0.000796** (0.000357)	0.0151 (0.00947)	0.0157 (0.0135)	0.315* (0.163)
DSales_Decline	-0.812*** (0.187)	-0.0191*** (0.00542)	-0.156 (0.149)	-0.238 (0.203)	-8.819*** (2.277)
B_Diversity*DSales_Decline	0.0294*** (0.00815)	0.000726*** (0.000236)	0.00254 (0.00639)	-0.00583 (0.00885)	0.482*** (0.111)
DSales_DeclineCovid	-0.0509*** (0.0177)	-0.000879* (0.000511)	-0.0110 (0.0136)	-0.0115 (0.0192)	-0.773*** (0.235)
B_Diversity*DSales_Decline*Covid	0.709*** (0.119)	0.0526*** (0.00297)	1.118*** (0.112)	0.772 (0.626)	7.263*** (1.875)

3.6.4. Robust analysis: Instrumental variables to control potential endogeneity problems

The level of gender diversity in the boardroom is an important component of governance performance, and it is possible that this characteristic becomes a more important component of a firm's good governance during the pandemic as firm investment in other governance

issues decreases. This fact could entail a potential endogeneity issue that affects the role that female directors exert on the firm's effort to improve governance.

To reject this endogeneity problem, we replace B_Diversity with the value of this variable in the previous period. In other words, the delay of one period of the variable has been used as an instrument. It is possible to observe in Table 6 that the results obtained are similar to the previous approach. So, our results are not affected by endogeneity issues.

Table 6. Robust Results from endogeneity issues					
Panel A. Board diversity in a Covid-19 setting					
	ESG_Perf	Var_ESG_Perf	Env_Perf	Social_Perf	Gov_Perf
	coeff.	coeff.	coeff.	coeff.	coeff.
	(std.error)	(std.error)	(std.error)	(std.error)	(std.error)
B_Diversity	0.0251*** (0.00480)	0.000320** (0.000159)	0.0196*** (0.00281)	0.0377*** (0.00515)	0.168 (0.133)
Covid	-0.472* (0.249)	-0.0163* (0.00897)	-0.0392 (0.148)	-0.0716 (0.271)	-33.46*** -7.447
B_Diversity*Covid	0.0176* (0.00924)	0.000501* (0.000133)	0.00745 (0.00550)	-0.00334 (0.0100)	1.097*** (0.276)
Panel B. Board diversity in a Covid-19 setting: firms' sales decline					
	ESG_Perf	Var_ESG_Perf	Env_Perf	Social_Perf	Gov_Perf
	coeff.	coeff.	coeff.	coeff.	coeff.
	(std.error)	(std.error)	(std.error)	(std.error)	(std.error)
B_Diversity	0.0157*** (0.00522)	0.000615*** (0.000175)	0.0195*** (0.00307)	0.0373*** (0.00561)	0.245* (0.147)
Covid	-0.870** (0.362)	-0.0244* (0.0130)	-0.222 (0.216)	-0.00619 (0.394)	-43.30*** (10.78)
B_Diversity*Covid	0.0467*** (0.0137)	0.00102** (0.000492)	0.0182** (0.00819)	0.00952 (0.0149)	1.774*** (0.408)
DSales_Decline	-1.058*** (0.209)	-0.0311*** (0.00741)	-0.154 (0.124)	-0.390* (0.227)	-35.86*** -6.144
B_Diversity*DSales_Decline	0.0392*** (0.00876)	0.00121*** (0.000311)	-0.000240 (0.00522)	0.00118 (0.00952)	1.702*** (0.258)
DSales_Decline*Covid	-0.0729*** (0.0194)	-0.00162** (0.000692)	-0.0178 (0.0115)	-0.0203 (0.0211)	-2.206*** (0.574)
B_Diversity*DSales_Decline*Covid	1.256** (0.516)	0.0318* (0.0184)	0.380* (0.107)	-0.0139 (0.561)	38.29** (15.28)

3.7. COMPLEMENTARY RESULTS

The results obtained show that the decisions made by the group of directors as a reference to a social identity favour business sustainability, being reinforced by incidental affection in times of health and economic crisis, even in companies that have suffered a recession in their sales figures.

Thus, it is of interest to provide additional evidence regarding whether the incidental affect associated with Covid-19 is caused by the situations and hard times that we had to experience globally in 2020 – i.e., confinements, infections with serious symptoms, deaths – and that have caused psychological dents, reinforcing social identity or corresponding to an effect that emerges in any context of economic recession.

We have proceeded to expand the analysis sample with data relating to the years 2005–2020, a period of analysis that allows us to consider the global economic crisis that occurred in 2008 and 2009. Here, two new dummy variables have been designed, Crisis and Finan_Crisis. The second of these variables was assigned the value of 1 for two years, 2008 and 2009, and the value of 0 otherwise. The Crisis variable includes consideration of these years of the financial crisis and the year 2020, which had been reflected in the Covid variable.

The evidence obtained, presented in Table 7, shows that the joint consideration of both periods of crisis does not imply a setback in the levels of business sustainability considered in aggregate, as can be seen in the first column. The disaggregated inclusion of both crises, shown in the second column, allows us to confirm the previous results, with the marginal negative effect of the Covid variable that had been observed disappearing. However, the results of both models show that the higher number of female directors favours greater sustainability, especially in companies hit by the economic recession, indicating that, in all cases, the greatest effect of incidental affection occurs in the pandemic period.

Table 7. Results for complementary models: global Crisis effects

	Model 1		Model 2
	ESG_Perf	ESG_Perf	ESG_Perf
	coeff. (std.error)	coeff. (std.error)	coeff. (std.error)
B_Diversity	0.0329*** (0.00369)	0.0752*** (0.0200)	0.0252*** (0.00407)
Crisis (2008, 2009 & 2020)	0.000527 (0.00744)		0.0133 (0.0106)
B_Diversity*Crisis	0.684*** (0.164)		0.890*** (0.223)
Finan_Crisis (2008 & 2009)		0.00978 (0.00988)	
B_Diversity*Finan_Crisis		0.000672 (0.000679)	
Covid (2020)		-0.000200 (0.0132)	
B_Diversity*Covid		0.00162* (0.000919)	
DSales_Decline			-0.863*** (0.145)
B_Diversity*DSales_Decline			0.0319*** (0.00704)
DSales_DeclineCrisis			-0.0609 (0.337)
B_Diversity*DSales_DeclineCrisis			0.0371** (0.0153)
ESG_Perft-1	0.891*** (0.00272)	0.891*** (0.00272)	0.891*** (0.00272)
B_Size	0.0175 (0.0135)	-0.000267 (0.000654)	0.0163 (0.0135)
B_Activity	-0.0161* (0.00838)	-0.000179 (0.000405)	-0.0143* (0.00838)
B_Indep	0.00531*** (0.00119)	2.77e-05 (5.68e-05)	0.00530*** (0.00119)
CEOduality	-0.0576 (0.0819)	-0.00867** (0.00395)	-0.0670 (0.0819)
CSRCommittee	0.901*** (0.0965)	-0.0189*** (0.00410)	0.923*** (0.0965)
B_Tenure	-0.0701*** (0.0112)	-0.00146*** (0.000539)	-0.0711*** (0.0111)
F_Age	0.0346 (0.0438)	-0.00625*** (0.00210)	0.0457 (0.0438)
F_Size	0.420*** (0.0281)	0.000763 (0.00128)	0.425*** (0.0281)
F_ROA	0.0147*** (0.00255)	0.000302** (0.000123)	0.0140*** (0.00255)
F_Leverage	-3.26e-05	2.88e-07	8.73e-05

Table 7 (continued)			
	(0.000527)	(2.55e-05)	(0.000527)
F_WorkCap	0.000	0.000	0.000
	(7.23e-11)	(0.000)	(7.22e-11)
F_R&D	-3.73e-10	0.000	-3.26e-10
	(5.02e-10)	(0.000)	(5.01e-10)
F_Advertising	1.06e-10	0.000	9.85e-11
	(1.17e-10)	(0.000)	(1.17e-10)
F_CAPEX	1.21e-10	0.000	1.11e-10
	(1.39e-10)	(0.000)	(1.39e-10)
F_Dividend	-1.86e-10	0.000	-1.77e-10
	(7.85e-10)	(0.000)	(7.85e-10)
I_Factor1	-0.0186	0.000371	-0.0162
	(0.0191)	(0.000925)	(0.0191)
I_Factor2	0.209***	-0.00109	0.209***
	(0.0336)	(0.00161)	(0.0336)
industry	yes	yes	yes
country	yes	yes	yes
year	yes	yes	yes
R-squared	0.976***	0.909***	0.976***

3.8. CONCLUSIONS

Covid-19 and its containment measures entail health, economic, and social externalities that different actors – i.e., academics, politicians, investors – consider should be incorporated into business sustainability strategies in a scenario of economic slowdown with important consequences for companies. This paper analyses the impact that the incidental affect of Covid-19 entails, observing whether the effects of social identity associated with gender diversity are enhanced, causing directors to react to health, economic, and social threats in accordance with the values determined by their belonging to the in-group and foster a greater corporate commitment to sustainability.

The evidence obtained for an unbalanced sample of 4,821 multinationals in the 2015–2020 period confirms the hypotheses raised, showing that the adverse effect that the pandemic has had on the level of business commitment to its stakeholders is less in firms with a higher number of women on their boards. The setback in terms of sustainability caused by Covid-19 has mainly affected good governance policies, causing a previously unseen female involvement. In addition, the directors guarantee the social and environmental commitment of previous years, their contribution being especially relevant in companies whose turnover has been hit hardest by the pandemic.

Our evidence contribute the existing knowledge relating the consequences of the pandemic for business performance and strategies due to the papers that have analysed business reactions suggest the existence of quite different decisions, being necessary to broaden the knowledge regarding what companies have done to respond to this global crisis and the reasons that have prompted some companies to continue promoting sustainable projects in times of economic recession. Our gender hypotheses are of great interest to the academia due to the existence of a “glass ceiling” that hinders women’s access to positions of power, despite having equal or greater qualifications, skills, and merits than their male counterparts. In addition, a growing number of papers suggest that women’s opinions are not always taken into account, especially when they are a minority on boards. So, our evidence will contribute to a more sustainable business management, making firms aware of the benefits associated with gender diversity in uncertain environments.

The implications derived from this study are also important both from academics and professionals. From a theoretical side, our work contributes to show a more complete picture of the impact of female directors on corporate responsibility in different contexts and reveals areas of greatest influence within the three most important dimensions of sustainability. Thus, determining the role of women directors from a gender perspective helps to understand the findings in relation to those found in previous literature, providing explanations regarding the prioritization of issues with a more economic than social impact in a time of economic recession derived from a worldwide crisis. Thus, it is recommended that future research should focus on determining the nexus between a firm’s performance in specific social areas during the time of the pandemic and the levels of empathy of the board.

From a practical side, our research helps to understand the corporate governance structures that could promote different commitments regarding the different dimensions or areas of sustainability. Managers, regulators, investors can learn more about business sustainability strategies and how they can be affected by unforeseeable events, considering the composition of the main decision-making body. Additionally, it allows us to understand the empathy of the directors and their perception of sustainability and their priorities.

However, the existence of a set of limitations that entails unresolved issues within this line of research and that should be considered in future works cannot be ignored. An important limitation is the use of global measures of the dimensions of sustainability considered, making it necessary to address its components in a more disaggregated manner and linked to the demands arising from the pandemic. Additionally, researchers should collect primary data by surveys and/or interviews with directors to find out their opinion and influence on the

decision-making process. Also, it would be advisable to approach this research with larger samples for different countries determined by culture and gender stereotypes with the aim of contrasting whether these stereotyped behaviours are maintained in environments with different levels of gender equality or with legislative frameworks that imply the existence of gender quotas on boards. Finally, future research should improve our results by including the analysis of attributes other than gender such as background, age, among others.

GENERAL CONCLUSIONS

GENERAL CONCLUSIONS

CSR and non-financial information disclosure are essential elements in the modern business world. Various investigations suggest that gender diversity contributes to improving corporate governance mechanisms and appears to be an important factor in improving corporate social and environmental performance and disclosure. It could be assumed that boards of directors with female presence are more likely to make strategic decisions aimed at improving sustainability information transparency and meeting the demands of the main stakeholders.

In the first of the three research papers that comprise this doctoral thesis, a review of the existing literature on gender diversity and CSR is carried out, seeking to provide an overview of the state of the art to promote future lines of research. Thus, by conducting a bibliometric and content analysis of research on women on boardrooms, CSR performance and disclosure published in the most prestigious academic journals, it contributes to a better understanding of the role of gender diversity in the boards of directors and its relationship with corporate social responsibility and the disclosure of its practices.

Even though the vast majority of academic publications find a positive association when studying the aforementioned relationship, we found researches that arrives to non-significant or negative results, so in general the results are not conclusive, making it necessary to delve into the reasons that explain these differences.

Through our content analysis, we found that there are three main theoretical frameworks guiding empirical research on the relationship between corporate governance and CSR: Agency Theory, Stakeholder Theory, and Resource Dependency Theory. However, these frameworks are beginning to fall into disuse in favor of theories more focused on determining the ideal composition of the board of directors that favors decision-making aligned with the new values of society. In this sense, although researchers have begun to focus their research on the foundations of the Critical Mass Theory, the results are not always conclusive.

Secondly, there is a predominance in considering CSR as a global construct, but it must be considered that it is a multidimensional concept, whose analysis as a global could prevent us from determining the true corporate performance and the role that gender diversity can play in the different dimensions of CSR.

Third, we find an emerging line of research focused on the study of the moderating effects of the relationship between board gender diversity and CSR and CSR disclosure, making it necessary to delve into the organizational and institutional factors that reinforce the female aptitudes and abilities.

In the second research paper presented in the second chapter, an empirical study of the effects of board gender diversity on social and environmental disclosure is held, focusing on the fact that female representation reaches a critical mass (of at least three women) and introduces into the analysis the moderating role of directors' human capital.

Interesting results are obtained from this work. In the first place, it is confirmed that as the number of women on the board increases, the female stereotype is strengthened around improving the transparency of CSR information. The findings suggest that an increase in the number of female directors from tokens to a critical mass (of at least three women) exerts an effective influence on the quality of disclosure of CSR information.

Second, this effect is greater when board members possess a better background, skills, and experience. The human capital of the board members moderates—reinforces— the impact of female directors on socially responsible disclosure. In this way, we confirm the influence of the "psychological climate" or *boardplace* in the decision-making process, which influences the female perception of equal board members and then on the CSR reporting policy.

Third, regarding the complementary analysis of women as president, we provide clear evidence that female directors adopt a masculine stereotype in voluntary disclosure when they also occupy the position of president, regardless of the human capital of the board members. Supporting then that the similarities in the leadership styles of men and women are greater than their differences.

In the third chapter, the third work carries out an empirical investigation of the effects of board gender diversity on sustainable business commitment in the context of a pandemic, analysing the impact of the incidental affect of Covid-19. The Covid-19 containment measures entail negative health and social externalities and economic slowdown, with important consequences for companies, that had to configure and adapt their sustainability strategies.

In this scenario, the paper analyses whether the effects of social identity associated with gender diversity are enhanced, causing female directors to react to health, economic and social threats in accordance with the values determined by their belonging to the in-group and foster a greater corporate commitment to sustainability.

The evidence obtained confirms the hypotheses raised. Showing that the negative impact that the pandemic has had on the level of socially responsible commitment is less in firms with a greater presence of women on their boards.

The setback in terms of sustainability caused by Covid-19 has mainly affected good governance policies, causing previously unseen female involvement. In addition, female directors guarantee the social and environmental commitment of previous years, their contribution being especially relevant in companies whose turnover has been hit hardest by the pandemic.

Lastly, this work contributes to existing knowledge by incorporating the moderating effect that an environment of economic recession and health crisis has on the decisions made by female directors and if they differ from those of their male counterparts, confirming the arguments of social theory and the existence of an incidental affect with respect to the female in-group.

The knowledge generated in this research carries different theoretical and practical implications that are detailed below, being subject to a set of limitations that should be considered in future studies.

Theoretical contributions

This doctoral thesis contributes to advance in the understanding of the role played by women on boards regarding the disclosure of CSR voluntary information, given the previous inconclusive evidence, reinforcing the debate about the critical mass of women on boards, incorporating the importance of their number. On the other hand, by analysing the moderating role that members' background, skills and experience play as board human capital, we provide evidence on how human capital creates a favorable *boardplace* for women on boardrooms. Additionally, we examine the role of women when they occupy leadership positions, advancing in the different environments in which women operate on boards.

In addition, we offer a more complete explanation of the impact of women directors on corporate responsibility in different contexts and reveals areas of greatest influence within the three most important dimensions of sustainability.

Thus, by determining the impact of women on boardrooms through a gender perspective, we also help to explain findings found in previous literature, providing explanations regarding the prioritization of issues with more economic than social impact due to part of the board members at a time of economic recession derived from a global health crisis.

Practical contributions

For managers, owners and investors it is important to know the size of the minority group of women that is necessary to reinforce and enhance their engagement with stakeholders and their sustainability policy disclosure. These decisions bring benefits to companies that can materialize in higher performance, financial advantages and a better image and reputation, among others. Moreover, they must be aware of the effect that the human capital of board members has, reinforcing the perception of female directors are equal to their peers. Our evidence contributes to these demands and knowledge, providing evidence on how the gender, background, skills and experience of the directors favor the economic, social, environmental and good governance decision-making process.

In addition, corporate governance structures are determined that could promote commitments regarding the different dimensions or areas of sustainability. In this sense, economic agents can learn more about business sustainability strategies and how they can be affected by unforeseeable events, considering the composition of the main decision-making body. Additionally, it allows knowing the empathy of the directors and their perception of sustainability and their priorities.

Finally, the work also shows relevant results for regulatory bodies on the presence of women on boards. Currently, there is a global trend to change the composition of boards of directors. The development of good corporate governance practices and legal or regulatory changes is intended to increase transparency regarding the representation of women on boards and in senior management positions. Although some European countries have established actions to promote the inclusion of women (for example, France, Italy, Norway and Spain), the percentage of women in boards remains low.

Limitations and future lines of research

From a conceptual level, although attributes of board members that contribute to the effect of women on CSR disclosure are identified, there are others that could be examined as moderators, such as: age, managerial skills or nationality.

On the other hand, even though the use of an international sample is one of the contributions of this doctoral thesis to academia, it denotes a bias towards companies from the United States and the United Kingdom, in addition to considering only listed companies.

Another important limitation is the globality in the measurement of the dimensions of sustainability considered, making it necessary to address its components in a more

disaggregated manner and linked to the demands arising from the pandemic. Additionally, it would be advisable to collect primary data through surveys and/or interviews with directors to find out their opinion and influence in decision-making processes.

Finally, it would be recommendable to undertake this research in larger samples for different countries determined by culture and gender stereotypes in order to test whether these stereotyped behaviours are maintained in environments with different levels of gender equality or with legislative frameworks that suppose the existence of gender quotas in the boards of directors.

CONCLUSIONES GENERALES

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En el mundo de los negocios modernos, la responsabilidad social corporativa y la divulgación voluntaria de información son elementos esenciales. Diversas investigaciones sugieren que la diversidad de género contribuye a mejorar los mecanismos de gobierno corporativo y parece ser un factor importante para mejorar el desempeño social y medioambiental e informar sobre el mismo. Podría asumirse que los consejos de administración que cuentan con presencia de mujeres tienen más probabilidades de tomar decisiones estratégicas tendientes a mejorar la transparencia informativa en materia de sostenibilidad y satisfacer las demandas de los principales grupos de interés.

En el primero de los tres trabajos de investigación que componen esta tesis doctoral, se realiza una revisión de la literatura existente sobre diversidad de género y la RSC, buscando proporcionar una visión general del estado del arte para facilitar futuras líneas de investigación. Así, mediante la realización de análisis bibliométrico y de contenido de los artículos académicos publicados sobre mujeres en consejos de administración, desempeño de RSC y divulgación en las revistas más prestigiosas, se contribuye a una mayor comprensión del rol de la diversidad de género en los consejos y su relación con la responsabilidad empresarial y la divulgación de sus prácticas.

A pesar de que la gran mayoría de las publicaciones académicas encuentran una asociación positiva al estudiar la antedicha relación, encontramos investigaciones que arrojan resultados no-significativos o negativos, por lo que en general los resultados no son totalmente concluyentes, siendo necesario profundizar en los motivos que explican estas diferencias.

A través de nuestro análisis de contenido, encontramos que hay tres marcos teóricos principales que guían la investigación empírica en la relación entre el gobierno corporativo y responsabilidad empresarial: la Teoría de Agencia, la Teoría de los Stakeholders y la Teoría de Dependencia de Recursos. No obstante, estos marcos comienzan a quedar en desuso a favor de teorías más enfocadas en determinar la composición ideal del consejo de administración que favorezca la toma de decisiones alineada a los nuevos valores de la sociedad. En este sentido, aunque los investigadores han comenzado a centrar sus investigaciones en los fundamentos de la Teoría de la Masa Crítica, los resultados no son siempre concluyentes.

En segundo lugar, existe un predominio en considerar la RSC como un constructo global, pero debe tenerse en cuenta que es un concepto multidimensional cuyo análisis conjunto

podría impedir determinar el verdadero performance corporativo y el papel que la diversidad de género puede desempeñar en las diferentes dimensiones de la RSC.

En tercer lugar, encontramos una línea de investigación emergente centrada en el estudio de los efectos moderadores de la relación entre la diversidad de género en los consejos de administración y la RSC o su divulgación, siendo necesario profundizar en los factores organizativos e institucionales que refuercen las aptitudes y capacidades femeninas.

En el segundo trabajo de investigación que se presenta en el segundo capítulo, se realiza un estudio empírico de los efectos de la diversidad de género en el consejo en la divulgación de información social y medioambiental, centrándose en que la representación femenina alcance una masa crítica (de al menos tres mujeres) e introduce al análisis el rol moderador del capital humano de los miembros del consejo.

De este trabajo obtienen resultados muy interesantes. En primer lugar, se confirma que a medida que aumenta el número de mujeres en el consejo se potencia el estereotipo femenino en torno a mejorar la transparencia informativa de la RSC. Los hallazgos sugieren que un aumento en el número de mujeres desde tokens a una masa crítica (de al menos tres mujeres) proporciona una influencia efectiva en la calidad de la transparencia informativa empresarial.

En segundo lugar, este efecto es mayor cuando los miembros del consejo poseen mayor formación, habilidades y experiencia. El capital humano de los miembros del consejo refuerza el impacto de las mujeres en la divulgación de información socialmente responsable. De esta manera, confirmamos la influencia del “clima psicológico” o *boardplace* en el proceso de toma de decisiones, que influye en la percepción de igualdad de los miembros del consejo y por lo tanto en la política de divulgación de RSC.

En tercer lugar, respecto al análisis complementario de la mujer como presidente, proporcionamos clara evidencia de que las mujeres consejeras adoptan un estereotipo masculino en la divulgación voluntaria de información cuando ocupan también la posición de presidente, independientemente del capital humano de los miembros del consejo. Apoyando entonces que las similitudes en los estilos de liderazgo de hombres y mujeres son mayores que sus diferencias.

Por último, en el tercer capítulo, el tercer trabajo realiza una investigación empírica de los efectos de la diversidad de género en el consejo de administración en el compromiso con la sostenibilidad en el contexto de pandemia, analizando el impacto que supone el afecto incidental de la Covid-19. Las medidas de contención de la Covid-19 conllevan externalidades sanitarias y sociales negativas y de desaceleración económica con importantes

consecuencias para las compañías, las cuales debieron configurar y adaptar sus estrategias de sostenibilidad.

En este escenario, se busca analizar si los efectos de la identidad social asociados a la diversidad de género son potenciados, provocando que las consejeras reaccionen ante las amenazas sanitarias, económicas y sociales de acuerdo con los valores determinados por su pertenencia al endogrupo y fomenten un mayor compromiso empresarial con la sostenibilidad.

La evidencia obtenida confirma las hipótesis planteadas. Observando que el impacto negativo que la pandemia ha supuesto sobre el nivel de compromiso socialmente responsable es menor en empresas que cuentan con mayor presencia de mujeres en sus consejos de administración.

El efecto negativo que la Covid-19 supone sobre las cuestiones de sostenibilidad ha afectado principalmente a las políticas de buen gobierno, provocando una involucración femenina no observada con anterioridad. Además, las consejeras garantizan el compromiso social y medioambiental de ejercicios previos, siendo especialmente relevante su contribución en compañías cuya cifra de negocios ha sido más duramente golpeada por la pandemia.

Por último, este trabajo complementa el conocimiento existente incorporando el efecto moderador que un entorno de recesión económica y crisis sanitaria supone en las decisiones tomadas por las consejeras y si difieren de las de sus homólogos masculinos, confirmando los argumentos de la teoría social y la existencia de un afecto incidental respecto al endogrupo femenino.

El conocimiento generado en los trabajos de investigación realizados conlleva diferentes implicaciones teóricas y prácticas que se detallan a continuación, estando sujetos a un conjunto de limitaciones que deben ser abordadas en estudios futuros.

Contribuciones teóricas

Esta tesis doctoral permite avanzar en la comprensión del papel que desempeñan las consejeras respecto a la divulgación de información sobre RSC frente a la evidencia previa no concluyente, reforzando el debate sobre la masa crítica de mujeres en los consejos, incorporando la importancia de su número. Por otra parte, mediante el análisis del rol moderador que desempeñan la formación, habilidades y experiencia de los miembros como capital humano del consejo, proporcionamos evidencia sobre como el capital humano crea un *boardplace* favorable para las mujeres en el consejo. Adicionalmente, se examina el papel

de las mujeres cuando ocupan puestos de liderazgo, avanzando en los diferentes entornos en que se desenvuelven las mujeres en los consejos.

Además, ofrece una explicación más completa del impacto de las mujeres consejeras sobre la responsabilidad empresarial en diferentes contextos y revelamos la existencia de áreas de mayor influencia dentro de las tres dimensiones más importantes de la sostenibilidad. Así, determinando el impacto de las mujeres en el consejo a través de una perspectiva de género también se explican los hallazgos en relación a la literatura previa, proporcionando explicaciones con respecto a la priorización de temas con un impacto más económico que social por parte de las consejeras en un momento de recesión económica derivada de una crisis sanitaria a nivel mundial.

Contribuciones prácticas

Para gerentes, propietarios e inversores es importante conocer el tamaño del grupo minoritario de mujeres necesario para reforzar y mejorar su compromiso con los grupos de interés y la política de divulgación en materia de sostenibilidad. Estas decisiones conllevan beneficios a las compañías que pueden materializarse en un mayor desempeño, ventajas financieras y una mejor imagen y reputación, entre otros. Además, deben ser conscientes del efecto que el capital humano de los consejeros supone y que favorece la percepción de que las consejeras son iguales a sus compañeros. Los resultados de este trabajo contribuyen a estas demandas y conocimientos, aportando evidencia sobre cómo el género, la formación, la trayectoria, las habilidades y la experiencia de los consejeros favorecen el proceso de toma de decisiones económicas, sociales, medioambientales y de buen gobierno.

Además, determinados las estructuras de gobierno corporativo que podrían fomentar diferentes compromisos respecto a las distintas dimensiones o áreas de la sostenibilidad. En este sentido, los agentes económicos pueden conocer en mayor medida las estrategias de sostenibilidad empresarial y como pueden verse afectadas ante eventos imprevisibles, considerando la composición del principal órgano de decisiones. Adicionalmente, permite conocer la empatía de los consejeros y su percepción de la sostenibilidad y sus prioridades.

Finalmente, el trabajo también evidencia resultados relevantes para los organismos reguladores sobre la presencia de mujeres en los consejos de administración. En la actualidad, existe una tendencia mundial a cambiar la composición de este órgano. El desarrollo de buenas prácticas de gobierno corporativo y los cambios legales o regulatorios tienen como objetivo aumentar la transparencia con respecto a la representación de las mujeres en los consejos y en los puestos de alta dirección. Aunque algunos países europeos han establecido

acciones para promover la inclusión de mujeres (por ejemplo, Francia, Italia, Noruega y España), el porcentaje de mujeres en puestos de poder sigue siendo bajo.

Limitaciones y futuras líneas de investigación

Desde el plano conceptual, si bien se identifican atributos de los miembros del consejo que contribuyen al efecto de las mujeres sobre la divulgación de RSC, existen otros que podrían examinarse como moderadores, como, por ejemplo: la edad, las capacidades gerenciales o la nacionalidad.

Por otra parte, aun cuando el uso de una muestra internacional es una de las contribuciones de esta tesis doctoral a la academia, la misma denota un sesgo hacia las empresas de Estados Unidos y Reino Unido, además de considerar únicamente empresas cotizadas.

Otra limitación importante es la globalidad en la medición de las dimensiones de sostenibilidad consideradas, siendo necesario abordar sus componentes de manera más desagregada y vinculada a las demandas surgidas por la pandemia. Adicionalmente, sería recomendable recopilar datos primarios a través de encuestas y/o entrevistas con los consejeros para conocer su opinión e influencia en los procesos de toma de decisiones. Finalmente, sería recomendable abordar esta investigación en muestras de mayor tamaño para diferentes países determinados por la cultura y los estereotipos de género con el objetivo de contrastar si estos comportamientos estereotipados se mantienen en entornos con diferentes niveles de igualdad de género o con marcos legislativos que suponen la existencia de cuotas de género en los consejos.

REFERENCES

REFERENCES

- Ajaz, A., Shenbei, Z., & Sarfraz, M. (2020). Delineating the influence of boardroom gender diversity on corporate social responsibility, financial performance and reputation. *LogForum: Scientific Journal of Logistics*, 16(1), 61–74.
- Ajeigbe, K., & Ganda, F. (2023). The Implications of the Pandemic for the Corporate Governance, Remuneration and Sustainability Performance of South African Listed Companies. *International Journal of Innovative Research and Scientific Studies*, 6(1), 174–184. <https://doi.org/10.53894/ijirss.v6i1.1174>
- Akhmetshin, E., Danchikov, E., Polyanskaya, T., Plaskova, N., Prodanova, N., & Zhiltsov, S. (2018). Analysis of innovation activity of enterprises in modern business environment. *Journal of Advanced Research in Law and Economics*, 8(8), 2311.
- Alazzani, A., Hassanein, A., & Aljanadi, Y. (2017). Impact of gender diversity on social and environmental performance: Evidence from Malaysia. *Corporate Governance: The International Journal of Business in Society*, 17(2), 266–283.
- Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). Resiliency of environmental and social stocks: an analysis of the exogenous COVID-19 market crash. *Review of Corporate Financial Studies*, 9(3), 593–621.
- Ali Gull, A., Hussain, N., Akbar Khan, S., Nadeem, M., & Mansour Zalata, A. (2022). Walking the talk? A corporate governance perspective on corporate social responsibility decoupling. *British Journal of Management*.
- Allemand, I., Bédard, J., Brullebaut, B., & Deschênes, J. (2022). Role of Old Boys' Networks and Regulatory Approaches in Selection Processes for Female Directors. *British Journal of Management*, 33(2), 784–805.
- Al-Najjar, B., & Salama, A. (2022). Mind the gap: Are female directors and executives more sensitive to the environment in high-tech us firms? *Technological Forecasting and Social Change*, 184, 122024.
- Al-Qahtani, M., & Elgharbawy, A. (2020). The effect of board diversity on disclosure and management of greenhouse gas information: Evidence from the United Kingdom. *Journal of Enterprise Information Management*. <https://doi.org/10.1108/JEIM-08-2019-0247>
- Al-Shaer, H., & Zaman, M. (2016). Board gender diversity and sustainability reporting quality. *Journal of Contemporary Accounting & Economics*, 12(3), 210–222. <https://doi.org/10.1016/j.jcae.2016.09.001>
- Alon, T., Doepke, M., Olmstead-Rumsey, J., Tertilt, M. (2020). The impact of COVID-19 on gender equality, Working paper [26947], National Bureau of Economic Research, Cambridge, MA, available at: www.nber.org/papers/w26947
- Amorelli, M. F., & García-Sánchez, I. M. (2020). Critical mass of female directors, human capital, and stakeholder engagement by corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 27(1), 204–221.
- Amorelli, M. F., & García-Sánchez, I. M. (2021). Trends in the dynamic evolution of board gender diversity and corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 28(2), 537–554.

- Amorelli, M. F., & García-Sánchez, I. M. (2023). Leadership in heels: Women on boards and sustainability in times of COVID-19. *Corporate Social Responsibility and Environmental Management*.
- Amor-Esteban, V., Galindo-Vicente, P., & García-Sánchez, I. M. (2020). Bias in composite indexes of CSR practice: An analysis of CUR matrix decomposition. *Corporate Social Responsibility and Environmental Management*, 27(4), 1914–1936. <https://doi.org/10.1002/csr.1936>
- Amor-Esteban, V., García-Sánchez, I. M., & Galindo-Vicente, P. (2019). A multivariate proposal for a national corporate social responsibility practices index (NCSRPI) for international settings. *Social Indicators Research*, 140, 435–452. <https://doi.org/10.1007/s11205-017-1782-2>
- Amran, A., Lee, S. P., & Devi, S. S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, 23(4), 217–235. <https://doi.org/10.1002/bse.1767>.
- Andrew, A., Cattan, S., Dias, M. C., Farquharson, C., Kraftman, L., Krutikova, S., Phimister, A., & Sevilla, A. (2020). How are mothers and fathers balancing work and family under lockdown? Institute for Fiscal Studies <https://ifs.org.uk/publications/14860>
- Anggadwita, G., Permatasari, A., Alamanda, D., & Profityo, W. (2022). Exploring Women's Initiatives for Family Business Resilience during the COVID-19 Pandemic. *Journal of Family Business Management*. <https://doi.org/10.1108/JFBM-02-2022-0014>
- Apestequia, J., Azmat, G., & Iriberry, N. (2012). The impact of gender composition on team performance and decision making: Evidence from the field. *Management Science*, 58(1), 78–93.
- Arayakarnkul, P., Chatjuthamard, P., & Treepongkaruna, S. (2022). Board gender diversity, corporate social commitment and sustainability. *Corporate Social Responsibility and Environmental Management*, 29(5), 1706-1721.
- Arayssi, M., Dah, M., & Jizi, M. (2016). Women on boards, sustainability reporting and firm performance. *Sustainability Accounting, Management and Policy Journal*, 7(3), 376–401. <https://doi.org/10.1108/SAMPJ-07-2015-0055>
- Ardito, L., Dangelico, R. M., & Messeni Petruzzelli, A. (2021). The link between female representation in the boards of directors and corporate social responsibility: Evidence from B corps. *Corporate Social Responsibility and Environmental Management*, 28, 704–720. <https://doi.org/10.1002/csr.2082>
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2), 277–297. <https://doi.org/10.2307/2297968>
- Arfken, D. E., Bellar, S. L., & Helms, M. M. (2004). The ultimate glass ceiling the presence of revisited: Women boards. *Journal of Business Ethics*, 50(2), 177–186. <https://doi.org/10.1023/B:BUSI.0000022125.95758.98>
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Journal of Business Ethics*, 14(1), 20–39. <https://doi.org/10.1097/EDE.ObO13e31812e5535>
- Atena, F. W., & Tiron-Tudor, A. (2020). Gender as a dimension of inequality in accounting organizations and developmental HR strategies. *Administrative Sciences*, 10(1), 1. <https://doi.org/10.3390/admsci10010001>

- Athanasopoulou, A., Moss-Cowan, A., Smets, M., & Morris, T. (2018). Claiming the corner office: Female CEO careers and implications for leadership development. *Human Resource Management, 57*(2), 617–639. <https://doi.org/10.1002/hrm.21887>
- Athenstaedt, U., Heinzle, C., Lerchbaumer, G. (2008). Gender subgroup selfcategorization and gender role self-concept. *Sex Roles, 58*(3-4): 266-278.
- Atif, M., Alam, M. S., & Hossain, M. (2020). Firm sustainable investment: Are female directors greener? *Business Strategy and the Environment, (June)*, 1–21. <https://doi.org/10.1002/bse.2588>
- Azmat, F., & Rentschler, R. (2017). Gender and Ethnic Diversity on Boards and Corporate Responsibility: The Case of the Arts Sector. *Journal of Business Ethics, 141*(2), 317–336.
- Babío Arcay, M. R., & Muiño Vázquez, M. F. (2005). Corporate characteristics, governance rules and the extent of voluntary disclosure in Spain. *Advances in Accounting, 21*(05), 299–331. [https://doi.org/10.1016/S0882-6110\(05\)21013-1](https://doi.org/10.1016/S0882-6110(05)21013-1)
- Bae, K. H., El Ghouli, S., Gong, Z., & Guedhami, O. (2021). Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *Journal of Corporate Finance, 67*, 101876.
- Bannò, M., Filippi, E., & Trento, S. (2021). Women in top echelon positions and their effects on sustainability: a review, synthesis and future research agenda. *Journal of Management and Governance. https://doi.org/10.1007/s10997-021-09604-7*
- Bansal, P., Grewatsch, S., & Sharma, G. (2021). How COVID-19 Informs Business Sustainability Research: It's Time for a Systems Perspective. *Journal of Management Studies, 58*, 602–606. <https://doi.org/10.1111/joms.12669>
- Barako, D. G., & Brown, A. M. (2008). Corporate social reporting and board representation: Evidence from the Kenyan banking sector. *Journal of Management and Governance, 12*(4), 309–324. <https://doi.org/10.1007/s10997-008-9053-x>
- BBC Mundo (2017). Marilyn Loden, la mujer que inventó la expresión techo de cristal (2017, 13 de diciembre). Available at: <https://www.bbc.com/mundo/noticias-42338736>
- Bear, S., Rahman, N., & Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics, 97*(2), 207–221.
- Bebchuk, L. A., & Tallarita, R. (2020). The illusory promise of stakeholder governance. *Cornell Law Review, 106*, 91–178. Becker, J., Ayman, R., & Korabik, K. (2002). Discrepancies in self/subordinates' perceptions of leadership behavior: Leader's gender, organizational context, and leader's self-monitoring. *Group and Organization Management, 27*(2), 226–244.
- Beji, R., Yousfi, O., Loukil, N., & Omri, A. (2021). Board Diversity and Corporate Social Responsibility: Empirical Evidence from France. *Journal of Business Ethics, (0123456789)*. <https://doi.org/10.1007/s10551-020-04522-4>
- Bektur, C., & Arzova, S. B. (2022). The effect of women managers in the board of directors of companies on the integrated reporting: Example of Istanbul Stock Exchange (ISE) Sustainability Index. *Journal of Sustainable Finance & Investment, 12*(2), 638–654. <https://doi.org/10.1080/20430795.2020.1796417>

- Ben-Amar, W., Chang, M., & McIlkenny, P. (2017). Board gender diversity and corporate response to sustainability initiatives: Evidence from the carbon disclosure project. *Journal of business ethics*, 142(2), 369-383.
- Bénabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica*, 77, 1–19.
- Bennouri, M., Chtioui, T., Nagati, H., & Nekhili, M. (2018). Female board directorship and firm performance: What really matters? *Journal of Banking and Finance*, 88, 267–291.
- Benschop, Y., Mills, J. H., Mills, A., & Tienari, J. (2012). Editorial: Gendering change: The next step. *Gender, Work and Organization*, 19(1), 1–9. <https://doi.org/10.1111/j.1468-0432.2011.00580.x>
- Bernardi, R. A., & Threadgill, V. H. (2010). Women directors and corporate social responsibility. *Electronic Journal of Business Ethics and Organization Studies*, 15(2), 15–21. <https://doi.org/10.1111/j.1468-0335.2009.00843.x>
- Bezemer, P.-J., Nicholson, G., & Pugliese, A. (2018). The influence of board chairs on director engagement: A case based exploration of boardroom decision-making. *Corporate Governance: An International Review*, 26 (October 2016), 1–16. <https://doi.org/10.1111/corg.12234>
- Bezemer, P.-J., Pugliese, A., Nicholson, G., & Zattoni, A. (2023). Toward a synthesis of the board-strategy relationship: A literature review and future research agenda. *Corporate Governance: An International Review*, 31(1), 178–197.
- Bhuiyan, M. B. U., Huang, H. J., & de Villiers, C. (2021). Determinants of environmental investment: Evidence from Europe. *Journal of Cleaner Production*, 292, 125990.
- Birindelli, G., Dell’Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. *Sustainability (Switzerland)*, 10(12), 1–20.
- Birindelli, G., Iannuzzi, A. P., & Savioli, M. (2019). The impact of women leaders on environmental performance: Evidence on gender diversity in banks. *Corporate Social Responsibility and Environmental Management*, 26(6), 1485–1499. <https://doi.org/10.1002/csr.1762>
- Boiral, O., & Henri, J. F. (2017). Is sustainability performance comparable? A study of GRI reports of mining organizations. *Business & Society*, 56(2), 283–317. <https://doi.org/10.1177/0007650315576134>
- Borghesi, R., Houston, J. F., & Naranjo, A. (2014). Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance*, 26, 164–181.
- Boukattaya, S., & Omri, A. (2021). Impact of board gender diversity on corporate social responsibility and irresponsibility: Empirical evidence from France. *Sustainability*, 13(9), 4712.
- Bose, S., Shams, S., Ali, M. J., & Mihret, D. (2022). COVID-19 impact, sustainability performance and firm value: international evidence. *Accounting and Finance*, 62, 597–643.
- Botero, J. C., Djankov, S., Porta, R. L., Lopez-de-Silanes, F., & Shleifer, A. (2004). The regulation of labor. *The Quarterly Journal of Economics*, 119(4), 1339–1382.

- Boubaker, S., Cellier, A., Manita, R., & Saeed, A. (2020). Does corporate social responsibility reduce financial distress risk? *Economy Model*, 91, 835–851
- Boulouta, I. (2013). Hidden Connections: The Link Between Board Gender Diversity and Corporate Social Performance. *Journal of Business Ethics*, 113(2), 185–197.
- Bradshaw, P., & Wicks, D. (2000). The experiences of white women on corporate boards in Canada. In *Women on corporate boards of directors* (pp. 197–212). Dordrecht: Springer.
- Bristy, H. J., How, J., Verhoeven, P. (2020). Gender diversity: The corporate social responsibility and financial performance nexus. *International Journal of Managerial Finance*. <https://doi.org/10.1108/IJMF-04-2020-0176>
- Bruna, M. G., Đăng, R., Ammari, A., & Houanti, L. H. (2021). The effect of board gender diversity on corporate social performance: An instrumental variable quantile regression approach. *Finance Research Letters*, 40, 101734.
- Buallay, A., Hamdan, R., Barone, E., & Hamdan, A. (2022). Increasing female participation on boards: Effects on sustainability reporting. *International Journal of Finance & Economics*, 27(1), 111-124.
- Buertey, S. (2021). Board gender diversity and corporate social responsibility assurance: The moderating effect of ownership concentration. *Corporate Social Responsibility and Environmental Management*, 28(6), 1579-1590.
- Buil-Fabrega, M., del Alonso-Almeida, M., & Bagur-Femenias, L. (2017). Individual dynamic managerial capabilities: Influence over environmental and social commitment under a gender perspective. *Journal of Cleaner Production*, 151, 371–379.
- Byron, K., & Post, C. (2016). Women on Boards of Directors and Corporate Social Performance: A Meta-Analysis. *Corporate Governance: An International Review*, 24(4), 428–442.
- Cabeza-García, L., Fernández-Gago, R., & Nieto, M. (2018). Do board gender diversity and director typology impact CSR reporting?. *European Management Review*, 15(4), 559-575.
- Cabral, C., & Sasidharan, A. (2021). Do regulatory mechanisms affect corporate social performance? Evidence from emerging economies. *Journal of Cleaner Production*, 326, 129383.
- Cambrea, D. R., Paolone, F., & Cucari, N. (2023). Advisory or monitoring role in ESG scenario: Which women directors are more influential in the Italian context?. *Business Strategy and the Environment*.
- Campopiano, G., Gabaldon, P., & Gimenez-Jimenez, D. (2022). Women Directors and Corporate Social Performance: An Integrative Review of the Literature and a Future Research Agenda. *Journal of Business Ethics*, 182, 717–746. <https://doi.org/10.1007/s10551-021-04999-7>
- Campopiano, G., Rinaldi, F. R., Sciascia, S., & De Massis, A. (2019). Family and non-family women on the board of directors: Effects on corporate citizenship behavior in family-controlled fashion firms. *Journal of Cleaner Production*, 214(2019), 41–51. <https://doi.org/10.1016/j.jclepro.2018.12.319>

- Cao, J., Liang, H., & Zhan, X. T. (2019). Peer effects of corporate social responsibility. *Management Science*, 65, 5487–5503.
- Carli, L. L. (2020). Women, Gender equality and COVID-19. *Gender in Management: An International Journal*, 35(7/8), 647–655.
- Carlson, D. L., Petts, R., & Pepin, J. R. (2020). US couples' Divisions of Housework and Childcare during COVID-19 Pandemic. University of UT.
- Carroll, A.B. (2021). Corporate social responsibility (CSR) and the COVID-19 pandemic: organizational and managerial implications. *Journal of Strategy and Management*, 14 (3): pp. 315-330.
- Cha, W., & Abebe, M. A. (2016). Board of directors and industry determinants of corporate philanthropy. *Leadership and Organization Development Journal*. Emerald Group Publishing Limited, 37(5), 672–688. <https://doi.org/10.1108/LODJ-09-2014-0189>
- Chang, Y. K., Oh, W. Y., Park, J. H., & Jang, M. G. (2017). Exploring the relationship between board characteristics and CSR: Empirical evidence from Korea. *Journal of Business Ethics*, 140(2), 225–242. <https://doi.org/10.1007/s10551-015-2651-z>
- Cheng, B. T., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35, 1–23.
- Christensen, L. J., Mackey, A., Whetten, D. (2014). Taking responsibility for corporate social responsibility: The role of leaders in creating, implementing, sustaining, or avoiding socially responsible firm behaviors. *Academy of Management Perspectives*, 28(2): 164–178.
- Cicchello, A. F., Fellegara, A. M., Kazemikhasragh, A., & Monferrà, S. (2021). Gender diversity on corporate boards: How Asian and African women contribute on sustainability reporting activity. *Gender in Management: An International Journal*, 36(7), 801-820.
- Clark, M. S., & Isen, A. M. (1982). Towards understanding the relationship between feeling states and social behavior. In E. A. H. Hastorf y & A. M. Isen (Eds.), *Cognitive Social Psychology* (pp. 73–108). Elsevier-North Holland.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4–5), 303–327. <https://doi.org/10.1016/j.aos.2007.05.003>
- Collins, C. Landivar, L.C. Ruppanner, L., Scarborough, W.J. (2021). COVID-19 and the gender gap in work hours. *Gender, Work, and Organization*, 28(1): 101-112.
- Cook, A., & Glass, C. (2017). Women on corporate boards: Do they advance corporate social responsibility? *Human Relations*, 71(7), 897–924.
- Cordeiro, J. J., Profumo, G., & Tutore, I. (2020). Board gender diversity and corporate environmental performance: The moderating role of family and dual-class majority ownership structures. *Business Strategy and the Environment*, 29(3), 1127–1144. <https://doi.org/10.1002/bse.2421>
- Cosma, S., Schwizer, P., Nobile, L., & Leopizzi, R. (2021). Environmental attitude in the board. Who are the “green directors”? Evidences from Italy. *Business Strategy and the Environment*, 30(7), 3360-3375.

- Crane, A., & Matten, D. (2021). COVID-19 and the future of CSR research. *Journal of Management Studies*, 58(1), 280–284.
- Cruz, C., Justo, R., Larraza-Kintana, M., & Garcés-Galdeano, L. (2019). When do women make a better table? Examining the influence of women directors on family firm's corporate social performance. *Entrepreneurship: Theory and Practice*, 43(2 Special Issue), 282–301. <https://doi.org/10.1177/1042258718796080>
- Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017). Board Structure to Enhance Social Responsibility Development: A Qualitative Comparative Analysis of US Companies. *Corporate Social Responsibility and Environmental Management*, 24(6), 524–542.
- Cubilla-Montilla, M., Nieto-Librero, A. B., Galindo-Villardón, M. P., Vicente Galindo, M. P., & García-Sánchez, I. M. (2019). Are cultural values sufficient to improve stakeholder engagement human and labour rights issues? *Corporate Social Responsibility and Environmental Management*, 1–18. <https://doi.org/10.1002/csr.1733>
- Cullinan, C. P., Mahoney, L., & Roush, P. B. (2019). Directors & Corporate Social Responsibility: Joint Consideration of Director Gender and the Director's Role. *Social and Environmental Accountability Journal*, 0(0), 1–24.
- Czymara, C. S., Langenkamp, A., & Cano, T. (2021). Cause for concerns: gender inequality in experiencing the COVID-19 lockdown in Germany. *European Societies*, 23(Supp 1), S68–S81.
- Dahlin, K. B., Weingart, L. R., & Hinds, P. J. (2005). Team diversity and information use. *Academy of Management Journal*, 48(6), 1107–1123. <https://doi.org/10.5465/amj.2005.19573112>
- Dai, R., Liang, H., & Ng, L. (2021). Socially responsible corporate customers. *Journal of Financial Economics*, 142(2), 598–626.
- De Abreu, M. C. S., Soares, R. A., Daniel-Vasconcelos, V., & Crisóstomo, V. L. (2022). Does board diversity encourage an environmental policy focused on resource use, emission reduction and innovation? The case of companies in Latin America. *Corporate Social Responsibility and Environmental Management*.
- De Masi, S., Słomka-Golebiowska, A., & Paci, A. (2022). Women on boards and corporate environmental performance in Italian companies: The importance of nomination background. *Business Ethics, the Environment & Responsibility*, 31, 981–998.
- Demers, E., Hendrikse, J., Joos, P., & Lev, B. (2020). ESG Didn't Immunize Stocks Against the COVID-19 Market Crash (Available at SSRN 3675920).
- Deng, X., Kang, J. K., & Low, B. S. (2013). Corporate social responsibility and stakeholder value maximization: evidence from mergers. *Journal of Finance and Economics*, 110, 87–109.
- Dhaliwal, D., Li, O. Z., Tsang, A., & Yang, Y. G. (2014). Corporate social responsibility disclosure and the cost of equity capital: The roles of stakeholder orientation and financial transparency. *Journal of Accounting and Public Policy*, 33(4), 328–355. <https://doi.org/10.1016/j.jaccpubpol.2014.04.006>
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility

- disclosure. *The Accounting Review*, 87(3), 723–759. <https://doi.org/10.2308/accr-10218>
- Di Giuli, A., & Kostovetsky, L. (2014). Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Finance and Economics*, 111, 158–180.
- Ding, W. Z., Levine, R., Lin, C., & Xie, W. S. (2021). Corporate immunity to the COVID-19 pandemic. *Journal of Financial Economics*, 141, 802–830.
- Disli, M., Yilmaz, M. K., & Mohamed, F. F. M. (2022). Board characteristics and sustainability performance: empirical evidence from emerging markets. *Sustainability Accounting, Management and Policy Journal*, 13(4), 929-952.
- Doldor, E., Sealy, R., & Vinnicombe, S. (2016). Accidental activists: Headhunters as marginal diversity actors in institutional change towards more women on boards. *Human Resource Management Journal*, 26(3), 285–303.
- Dovidio, J.F., Gaertner, S., Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes & Intergroup Relations*, 6(1): 5-21
- Eagly, A. H., Eaton, A., Rose, S. M., Riger, S., & McHugh, M. C. (2012). Feminism and psychology: Analysis of a half-century of research on women and gender. *American Psychologist*, 67(3), 211–230.
- Easton, P. D. (2004). PE ratios, PEG ratios, and estimating the implied expected rate of return on equity capital. *The Accounting Review*, 79(1), 73–95. <https://doi.org/10.2308/accr.2004.79.1.73>
- Elmagrhi, M. H., Ntim, C. G., Elamer, A. A., & Zhang, Q. (2018). A study of environmental policies and regulations, governance structures, and environmental performance: The role of female directors. *Business Strategy and the Environment*, 28(1), 206–220. <https://doi.org/10.1002/bse.2250>
- Elstad, B., & Ladegard, G. (2012). Women on corporate boards: key influencers or tokens? *Journal of Management & Governance*, 16, 595–615.
- Endrikat, J., de Villiers, C., Guenther, T. W., & Guenther, E. M. (2020). Board characteristics and corporate social responsibility: A metanalytic investigation. *Business & Society*, 60(8), 2099–2135. <https://doi.org/10.1177/0007650320930638>
- Erhardt, N., Werbel, J., & Shrader, C. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review*, 11(2), 102–110.
- Erin, O., Adegboye, A., & Bamigboye, O. A. (2021). Corporate governance and sustainability reporting quality: evidence from Nigeria. *Sustainability Accounting, Management and Policy Journal*, 13(3), 680-707.
- Fakir, A. N. M. A., Jusoh, R. (2020). Board gender diversity and corporate sustainability performance: Mediating role of enterprise risk management. *The Journal of Asian Finance, Economics and Business*, 7(6): 351–363.
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, XXVI(June), 301–325.
- Fan, P., Qian, X., & Wang, J. (2023). Does gender diversity matter? Female directors and firm carbon emissions in Japan. *Pacific-Basin Finance Journal*, 77, 101931.

- Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019). Women in the boardroom and corporate social performance: negotiating the double bind. *Management Decision*, 57(9), 2201–2222. <https://doi.org/10.1108/MD-08-2017-0738>
- Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2014). Women on boards: Do they affect sustainability reporting? *Corporate Social Responsibility and Environmental Management*, 21(6), 351–364.
- Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2016). Corporate social responsibility, board of directors, and firm performance: an analysis of their relationships. *Review of Managerial Science*, 10(1), 85–104.
- Fernández-Torres, Y., Gutiérrez-Fernández, M., & Gallego-Sosa, C. (2021). Environmental performance of the tourism sector from a gender diversity perspective. *International Journal of Environmental Research and Public Health*, 18(16), 8834.
- Ferramosca, S., Verona, R. (2020). Framing the evolution of corporate social responsibility as a discipline (1973–2018): A large-scale scientometric analysis. *Corporate Social Responsibility and Environmental Management*, 27(1): 178–203.
- Ferrell, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122, 585–606.
- Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61, 2549–2568.
- Flammer, C. (2021). Corporate green bonds. *Journal of Financial Economics*, 142, 499–516.
- Fondevila, M., Moneva, J. M., & Scarpellini, S. (2019). Divulgación ambiental y la interrelación de la ecoinnovación. El caso de las empresas españolas. *Revista De Contabilidad—Spanish Accounting Review*, 22(1), 73–87. <https://doi.org/10.6018/rcsar.22.1.354321>
- Forgas, J. P. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological Bulletin*, 117, 1–28.
- Francoeur, C., Labelle, R., Balti, S., & EL Bouzaidi, S. (2019). To What Extent Do Gender Diverse Boards Enhance Corporate Social Performance? *Journal of Business Ethics*, 155(2), 343–357.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Marshfield, MA: Pittman Publishing.
- Frías-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2013). The role of the board in the dissemination of integrated corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 20(4), 219–233. <https://doi.org/10.1002/csr.1294>
- Fuente, J. A., García-Sánchez, I. M., & Lozano, M. B. (2017). The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information. *Journal of Cleaner Production*, 141, 737–750. <https://doi.org/10.1016/j.jclepro.2016.09.155>
- Gabaldon, P., De Anca, C., Mateos de Cabo, R., & Gimeno, R. (2016). Searching for women on boards: An analysis from the supply and demand perspective. *Corporate Governance: An International Review*, 24(3), 371–385.

- Galia, F., Lentz, F., Max, S., Sutan, A., & Zenou, E. (2017). Selecting board members: The impact of common knowledge on gender diversity—an experimental investigation. *Managerial and Decision Economics*, 38(6), 806–821.
- Gallego-Sosa, C., Gutiérrez-Fernández, M., Fernández-Torres, Y., & Nevado-Gil, M. T. (2021). Corporate social responsibility in the European banking sector: commitment to the 2030 agenda and its relationship with gender diversity. *Sustainability*, 13(4), 1731.
- Galletta, S., Mazzù, S., Naciti, V., & Vermiglio, C. (2022). Gender diversity and sustainability performance in the banking industry. *Corporate Social Responsibility and Environmental Management*, 29(1), 161–174.
- Gangi, F., Daniele, L. M., D'Angelo, E., Varrone, N., & Coscia, M. (2022). The impact of board gender diversity on banks' environmental policy: The moderating role of gender inequality in national culture. *Corporate Social Responsibility and Environmental Management*.
- Gao, H., Li, K., & Ma, Y. (2021). Stakeholder orientation and the cost of debt: Evidence from state-level adoption of constituency statutes. *Journal of Financial and Quantitative Analysis*, 56(6), 1908–1944.
- García Martín, C. J., & Herrero, B. (2020). Do board characteristics affect environmental performance? A study of EU firms. *Corporate Social Responsibility and Environmental Management*, 27, 74–94.
- García-Sánchez, I. M. (2021). Corporate social reporting and assurance: The state of the art. *Revista De Contabilidad - Spanish Accounting Review*.
- García-Sánchez, I. M., Aibar-Guzmán, C., Núñez-Torrado, M., & Aibar-Guzmán, B. (2023). Women leaders and female same-sex groups: The same 2030 Agenda objectives along different roads. *Journal of Business Research*, 157, 113582.
- García-Sánchez, I.-M., Amor-Esteban, V., & García-Sánchez, A. (2021). Different Leaders in a COVID-19 Scenario: CEO Altruism and Generous Discourse. *Sustainability*, 13(7), 3841.
- García-Sánchez, I. M., Cuadrado-Ballesteros, B., & Frias-Aceituno, J. V. (2016). Impact of the institutional macro context on the voluntary disclosure of CSR information. *Long Range Planning*, 49(1), 15–35. <https://doi.org/10.1016/j.lrp.2015.02.004>
- García-Sánchez, I., Gallego-Alvarez, I., & Zafra-Gomez, J. (2021). Do independent, female and specialist directors promote eco-innovation and eco-design in agri-food firms? *Business Strategy and the Environment*, 30, 1136–1152. <https://doi.org/10.1002/bse.2676>
- García-Sánchez, I. M., & García-Sánchez, A. (2020). Corporate social responsibility during COVID-19 pandemic. *Journal of Open Innovation: Technology, Market Complexity*, 6, 126.
- García-Sánchez, I. M., Gómez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019a). Analyst coverage and forecast accuracy when CSR reports improve stakeholder engagement: The GRI-IFC disclosure strategy. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.1755>
- García-Sánchez, I. M., Gómez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019b). Board independence and GRI-IFC performance standards: The mediating effect of the

- CSR committee. *Journal of Cleaner Production*, 225, 554–562. <https://doi.org/10.1016/j.jclepro.2019.03.337>
- García-Sánchez, I. M., Hussain, N., Martínez-Ferrero, J., & Ruiz-Barbadillo, E. (2018). Impact of disclosure and assurance quality of corporate sustainability reports on access to finance. *Corporate Social Responsibility & Environmental Management*. <https://doi.org/10.1002/csr.1724>
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2017). Independent directors and CSR disclosures: The moderating effects of proprietary costs. *Corporate Social Responsibility and Environmental Management*, 24(1), 28–43. <https://doi.org/10.1002/csr.1389>
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2018a). How do independent directors behave with respect to sustainability disclosure? *Corporate Social Responsibility and Environmental Management*, 25, 609–627. <https://doi.org/10.1002/csr.1481>
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2018b). Chief executive officer ability, corporate social responsibility and financial performance: The moderating role of the environment. *business strategy and the environment*, 28(4), 542–555. <https://doi.org/10.1002/bse.2263>
- García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2018). Board of directors and CSR in banking: The moderating role of bank regulation and investor protection strength. *Australian Accounting*
- García-Sánchez, I. M., Minutiello, V., & Tettamanzi, P. (2022). Gender disclosure: The impact of peer behaviour and the firm's equality policies. *Corporate Social Responsibility and Environmental Management*, 29(2), 385–405.
- García-Sánchez, I. M., Oliveira, M. C., & Martínez-Ferrero, J. (2020). Female directors and gender issues reporting: The impact of stakeholder engagement at country level. *Corporate Social Responsibility and Environmental Management*, 27(1), 369–382. <https://doi.org/10.1002/csr.1811>
- García-Sánchez, I. M., Rodríguez-Domínguez, L., & Frías-Aceituno, J. V. (2015). Board of directors and ethics codes in different corporate governance systems. *Journal of Business Ethics*, 131(3), 681–698. <https://doi.org/10.1007/s10551-014-2300-y>
- García-Sánchez, I. M., Suárez-Fernández, O., & Martínez-Ferrero, J. (2019). Female directors and impression management in sustainability reporting. *International Business Review*, 28(2), 359–374. <https://doi.org/10.1016/j.ibusrev.2018.10.007>
- Garel, A., & Petit-Romec, A. (2021). Investor rewards to environmental responsibility: Evidence from the COVID-19 crisis. *Journal of Corporate Finance*, 68, 1–20.
- Garrido-Miralles, P., Zorio-Grima, A., & García-Benau, M. A. (2016). Sustainable development, stakeholder engagement and analyst forecasts' accuracy: Positive evidence from the Spanish setting. *Sustainable Development*, 24(2), 77–88. <https://doi.org/10.1002/sd.1607>
- Gavana, G., Gottardo, P., & Moisello, A. M. (2023). Board diversity and corporate social performance in family firms. The moderating effect of the institutional and business environment. *Corporate Social Responsibility and Environmental Management*.

- Giannarakis, G. (2014). Corporate governance and financial characteristic effects on the extent of corporate social responsibility disclosure. *Social Responsibility Journal*, 10(4), 569–590. <https://doi.org/10.1108/SRJ-02-2013-0008>
- Giannarakis, G., Konteos, G., & Sariannidis, N. (2014). Financial, governance and environmental determinants of corporate social responsible disclosure. *Management Decision*, 52(10), 1928–1951. <https://doi.org/10.1108/MD-05-2014-0296>
- Giannarakis, G., Mallidis, I., Sariannidis, N., & Konteos, G. (2022). The impact of corporate governance attributes on environmental and social performance: The case of European region excluding companies from the Eurozone. *Business Strategy and the Environment*.
- Gonenc, H., & Krasnikova, A. V. (2022). Board Gender Diversity and Voluntary Carbon Emission Disclosure. *Sustainability*, 14(21), 14418.
- Govindan, K., Kilic, M., Uyar, A., Karaman, A. S. (2021). Drivers and value-relevance of CSR performance in the logistics sector: A cross-country firm-level investigation. *International Journal of Production Economics*, 231: 107835.
- Gregorić, A., Randøy, T., & Oxelheim, L. (2018). Resistance to change in the corporate elite: Female directors' appointments onto nordic boards. *Journal of Business Ethics*, 141(2), 267–287.
- Gürlek, M., & Kılıç, I. (2021). A true friend becomes apparent on a rainy day: corporate social responsibility practices of top hotels during the COVID-19 pandemic. *Current Issues Tourism*, 24, 905–918.
- Gulzar, M. A., Cherian, J., Hwang, J., Jiang, Y., & Sial, M. S. (2019). The impact of board gender diversity and foreign institutional investors on the corporate social responsibility (CSR) engagement of Chinese listed companies. *Sustainability (Switzerland)*, 11(2), 1–19.
- Guping, C., Safdar Sial, M., Wan, P., Badulescu, A., Badulescu, D., & Vianna Brugni, T. (2020). Do board gender diversity and non-executive directors affect CSR Reporting? Insight from agency theory perspective. *Sustainability*, 12(20), 8597.
- Gutiérrez-Fernández, M., Gallego-Sosa, C., & Fernández-Torres, Y. (2023). Commitment to sustainability in large European banks and its relationship with board gender diversity: a 2030 Agenda perspective. *Journal of Management & Organization*, 1-27.
- Hafsi, T., & Turgut, G. (2013). Boardroom Diversity and its Effect on Social Performance: Conceptualization and Empirical Evidence. *Journal of Business Ethics*, 112(3), 463–479.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391–430. <https://doi.org/10.1016/j.jaccpubpol.2005.06.001>
- Haque, F. (2017). The effects of board characteristics and sustainable compensation policy on carbon performance of UK firms. *British Accounting Review*, 49(3), 347–364. <https://doi.org/10.1016/j.bar.2017.01.001>
- Haque, F., & Jones, M. J. (2020). European firms' corporate biodiversity disclosures and board gender diversity from 2002 to 2016. *The British Accounting Review*, 52(2), 100893.

- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board Diversity and Corporate Social Responsibility. *Journal of Business Ethics*, 132(4), 641–660.
- Harjoto, M. A., & Rossi, F. (2019). Religiosity, female directors, and corporate social responsibility for Italian listed companies. *Journal of Business Research*, 95, 338–346.
- He, H., & Harris, L. (2020). The impact of Covid–19 pandemic on corporate social responsibility and marketing philosophy. *Journal of Business Research*, 116, 176–182.
- Helfaya, A., & Moussa, T. (2017). Do board's corporate social responsibility strategy and orientation influence environmental sustainability disclosure? UK evidence. *Business Strategy and the Environment*, 26(8), 1061–1077. <https://doi.org/10.1002/bse.1960>
- Hernandez Bark, A. S., Escartín, J., Schuh, S. C., & van Dick, R. (2016). Who leads more and why? A mediation model from gender to leadership role occupancy. *Journal of Business Ethics*, 139(3), 473–483.
- Herremans, I. M., Nazari, J. A., & Mahmoudian, F. (2016). Stakeholder relationships, engagement, and sustainability reporting. *Journal of Business Ethics*, 138(3), 417–435. <https://doi.org/10.1007/s10551-015-2634-0>
- Hillman, A. J. (2014). Board diversity: Beginning to unpeel the onion. *Corporate Governance (Oxford)*, 23(2), 104–107. <https://doi.org/10.1111/corg.12090>
- Hillman, A. J., Cannella Jr., A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: how do they differ? *Journal of Management*, 28(6), 747–763.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396. <https://doi.org/10.5465/amr.2003.10196729>
- Hillman, A. J., Nicholson, G., & Shropshire, C. (2008). Directors' multiple identities, identification, and board monitoring and resource provision. *Organization Science*, 19(3), 441–456. <https://doi.org/10.1287/orsc.1080.0355>
- Hipp, L., & Bünning, M. (2021). Parenthood as a driver of increased gender inequality during COVID-19? Exploratory evidence from Germany. *European Societies*, 23, S658–S673.
- Hollindale, J., Kent, P., Routledge, J., & Chapple, L. (2019). Women on boards and greenhouse gas emission disclosures. *Accounting and Finance*, 59(1), 277–308. <https://doi.org/10.1111/acfi.12258>
- Hyun, E., Yang, D., Jung, H., & Hong, K. (2016). Women on boards and corporate social responsibility. *Sustainability (Switzerland)*, 8(4), 1–26. <https://doi.org/10.3390/su8040300>
- Issa, A., Zaid, M. A. A., & Hanaysha, J. R. (2022). Exploring the relationship between female director's profile and sustainability performance: Evidence from the Middle East. *Managerial and Decision Economics*, 43(6), 1980–2002.
- Islam, R., French, E., & Ali, M. (2022). Evaluating board diversity and its importance in the environmental and social performance of organizations. *Corporate Social Responsibility and Environmental Management*, 29(5), 1134–1145.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, 81(12), 1096–1112. <https://doi.org/10.1037/h0037511>
- Javidan, M., Bullough, A., & Dibble, R. (2016). Mind the gap: Gender differences in global

- leadership self-efficacies. *Academy of Management Perspectives*, 30(1), 59–73.
- Jehn, K. A., & Bezrukova, K. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior*, 25(6), 703–729. <https://doi.org/10.1002/job.257>
- Jia, M., & Zhang, Z. (2013). Critical Mass of Women on BODs, Multiple Identities, and Corporate Philanthropic Disaster Response: Evidence from Privately Owned Chinese Firms. *Journal of Business Ethics*, 118(2), 303–317.
- Jiang, X., & Akbar, A. (2018). Does increased representation of female executives improve corporate environmental investment? Evidence from China. *Sustainability (Switzerland)*, 10(12).
- Jin, R., Jiang, X., & Hu, H. W. (2021). Internal and external CSR in China: How do women independent directors matter?. *Asia Pacific Journal of Management*, 1-36.
- Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, 26(5), 640–655. <https://doi.org/10.1002/bse.1943>
- Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics*, 103 (3), 351–383.
- Joecks, J., Pull, K., & Scharfenkamp, K. (2019). Perceived roles of women directors on supervisory boards: First insights from a qualitative study. *German Journal of Human Resource Management*, 33(1), 5–31.
- Johnsen, T. E., Miemczyk, J., Howard, M. (2017). A systematic literature review of sustainable purchasing and supply research: Theoretical perspectives and opportunities for IMP-based research. *Industrial Marketing Management*, 61: 130–143.
- Johns, G. (2001). In praise of context. *Journal of Organizational Behavior*, 22(1), 31–42. <https://doi.org/10.1002/job.80>
- Kabeer, N., Razavi, S., & van der Meulen Rodgers, Y. (2021). Feminist Economic Perspectives on the COVID-19 Pandemic. *Feminist Economics*, 27(1–2), 1–29.
- Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82(5), 965–990. <https://doi.org/10.1086/226425>
- Kaplan, S. N., & Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints? *The Quarterly Journal of Economics*, 112(1), 169–215. <https://doi.org/10.1162/003355397555163>
- Kassinis, G., Panayiotou, A., Dimou, A., & Katsifaraki, G. (2016). Gender and Environmental Sustainability: A Longitudinal Analysis. *Corporate Social Responsibility and Environmental Management*, 23(6), 399–412.
- Kassinis, G., & Vafeas, N. (2002). Corporate boards and outside stakeholders as determinants of environmental litigation. *Strategic Management Journal*, 23(5), 399–415. <https://doi.org/10.1002/smj.230>
- Khan, H. (2010). The effect of corporate governance elements on corporate social responsibility (CSR) reporting. *International Journal of Law and Management*, 52(2), 82–109. <https://doi.org/10.1108/17542431011029406>

- Khan, I., Khan, I., & bin Saeed, B. (2019). Does board diversity affect quality of corporate social responsibility disclosure? Evidence from Pakistan. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.1753>
- Khan, H. U. R., Khidmat, W. B., Awan, S., Al Hares, O., & Saleem, K. (2022). How do Independent Directors View Carbon Information Disclosure? Evidence From China. *Frontiers in Environmental Science*, 257.
- Kılıç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures. *International Journal of Climate Change Strategies and Management*, 11(1), 35–53. <https://doi.org/10.1108/IJCCSM-07-2017-0144>
- Kim, H. D., Kim, T., Kim, Y., & Park, K. (2019). Do long-term institutional investors promote corporate social responsibility activities? *Journal of Banking and Finance*, 101, 256–269.
- Kirsch, A. (2018). The gender composition of corporate boards: A review and research agenda. *The Leadership Quarterly*, 29(2), 346–364. <https://doi.org/10.1016/j.leaqua.2017.06.001>
- Klettner, A., Clarke, T., & Boersma, M. (2016). Strategic and regulatory approaches to increasing women in leadership: Multilevel targets and mandatory quotas as levers for cultural change. *Journal of Business Ethics*, 133(3), 395–419.
- Konrad, A. M., Kramer, V., & Erkut, S. (2008). Critical Mass: The Impact of Three or More Women on Corporate Boards. *Organizational Dynamics*, 37(2), 145–164.
- Krüger, P. (2009). Corporate social responsibility and the board of directors. Job Market Paper. Toulouse School of Economics, France.
- La Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155.
- La Porta, R., Lopez-de-Silanes, F., Pop-Eleches, C., & Shleifer, A. (2004). Judicial checks and balances. *Journal of Political Economy*, 112(2), 445–470. <https://doi.org/10.1086/381480>
- Landry, E. E., Bernardi, R. A., & Bosco, S. M. (2016). Recognition for sustained corporate social responsibility: Female directors make a difference. *Corporate Social Responsibility and Environmental Management*, 23(1), 27–36.
- Lawton, T. C., Dorobantu, S., Rajwani, T. S., & Sun, P. (2020). The implications of COVID-19 for nonmarket strategy research. *Journal of Management Studies*, 57, 1732–1736.
- Lee-Gosselin, H., Briere, S., & Hawo, A. (2013). Resistances to gender mainstreaming in organizations: Toward a new approach. *Gender in Management: An International Journal*, 28(8), 468–485. <https://doi.org/10.1108/GM-10-2012-0081>
- Li, J., Zhao, F., Chen, S., Jiang, W., Liu, T., & Shi, S. (2017). Gender Diversity on Boards and Firms' Environmental Policy. *Business Strategy and the Environment*, 26(3), 306–315.
- Liao, L., Lin, T., & Zhang, Y. (2018). Corporate board and corporate social responsibility assurance: Evidence from China. *Journal of Business Ethics*, 150(1), 211–225.
- Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *British Accounting Review*, 47(4), 409–424. <https://doi.org/10.1016/j.bar.2014.01.002>

- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: the value of corporate social responsibility during the financial crisis. *Journal of Finance*, 72, 1785–1823.
- Liu, C. (2018). Are women greener? Corporate gender diversity and environmental violations. *Journal of Corporate Finance*, 52(July), 118–142.
- Liu, Z., Cai, L., & Zhang, Y. (2022). Gender Diversity and Environmental Performance: New Evidence from China. *Sustainability*, 14(21), 13775.
- Lu, J., & Herremans, I. M. (2019). Board gender diversity and environmental performance: An industries perspective. *Business Strategy and the Environment*, 28(7), 1449–1464. <https://doi.org/10.1002/bse.2326>
- Lorenzo, J. M. P., Sánchez, I. M. G., & Gallego-Álvarez, I. (2009). Características del consejo de administración e información en materia de responsabilidad social corporativa. *Revista Española de Financiación y Contabilidad*, 38(141), 107–135. <https://doi.org/10.1080/02102412.2009.10779664>
- Loukil, N., Yousfi, O., & Yerbanga, R. (2019). Does gender diversity on boards influence stock market liquidity? Empirical evidence from the French market. *Corporate Governance: The International Journal of Business in Society*, 19(4), 669–703.
- Lyttelton, T., Zang, E. Musick, K. (2020). Gender Differences in Telecommuting and Implications for Inequality at Home and Work, Yale University, New Haven, CT.
- Macaulay, C. D., Richard, O. C., Peng, M. W., & Hasenhuttl, M. (2018). Alliance Network Centrality, Board Composition, and Corporate Social Performance. *Journal of Business Ethics*, 151(4), 997–1008.
- Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., & Salman, T. (2018). Does corporate governance affect sustainability disclosure? A mixed methods study. *Sustainability (Switzerland)*, 10(1), 1–20. <https://doi.org/10.3390/su10010207>
- Majumder, M. T. H., Akter, A., & Li, X. (2017). Corporate governance and corporate social disclosures: A meta-analytical review. *International Journal of Accounting & Information Management*, 25(4), 434–458.
- Mallin, C., Michelon, G., & Raggi, D. (2013). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure? *Journal of Business Ethics*, 114(1), 29–43. <https://doi.org/10.1007/s10551-012-1324-4>
- Mallin, C. A., & Michelon, G. (2011). Board reputation attributes and corporate social performance: An empirical investigation of the US Best Corporate Citizens. *Accounting and Business Research*, 41(2), 119–144.
- Marano, V., Sauerwald, S., & Van Essen, M. (2022). The influence of culture on the relationship between women directors and corporate social performance. *Journal of International Business Studies*, 53, 1315–1342. <https://doi.org/10.1057/s41267-022-00503-z>
- Marchini, P. L., Tibiletti, V., Mazza, T., & Gabrielli, G. (2022). Gender quotas and the environment: Environmental performance and enforcement. *Corporate Social Responsibility and Environmental Management*, 29(1), 256–272.
- Martínez, M. D. C. V., Martín-Cervantes, P. A., & del Mar Miralles-Quirós, M. (2022). Sustainable development and the limits of gender policies on corporate boards in

- Europe. A comparative analysis between developed and emerging markets. *European Research on Management and Business Economics*, 28(1), 100168.
- Martínez-Córdoba, P. J., Benito, B., & García-Sánchez, I. M. (2021). Efficiency in the governance of the COVID-19 pandemic: political and territorial factors. *Globalization and Health*, 17, 113.
- Martínez-Ferrero, J., Ruiz-Cano, D., & García-Sánchez, I. M. (2016). The causal link between sustainable disclosure and information asymmetry: The moderating role of the stakeholder protection context. *Corporate Social Responsibility and Environmental Management*, 23(5), 319–332. <https://doi.org/10.1002/csr.1379>
- Martínez-Ferrero, J., Suárez-Fernández, O., & García-Sánchez, I. M. (2019). Obfuscation versus enhancement as corporate social responsibility disclosure strategy. *Corporate Social Responsibility and Environmental Management*, 26(2), 468–480. <https://doi.org/10.1002/csr.1697>
- Masulis, R. W., & Reza, S. W. (2015). Agency problems of corporate philanthropy. *Review of Financial Studies*, 28, 592–636.
- Mathisen, G. E., Ogaard, T., & Marnburg, E. (2013). Women in the boardroom: How do female directors of corporate boards perceive boardroom dynamics? *Journal of Business Ethics*, 116(1), 87–97. <https://doi.org/10.1007/s10551-012-1461-9>
- Mavin, S., & Grandy, G. (2016). A theory of Abject Appearance: Women elite leaders' intra-gender 'management' of bodies and appearance. *Human Relations*, 69(5), 1095–1120.
- Mayer, C. (2020). Shareholderism versus stakeholderism—A misconceived contradiction. A comment on 'the illusory promise of stakeholder governance' by Lucian Bebchuk and Roberto Tallarita. ECGI-Law Working Paper No. 522.
- McGuinness, P. B., Vieito, J. P., & Wang, M. (2017). The role of board gender and foreign ownership in the CSR performance of Chinese listed firms. *Journal of Corporate Finance*, 42, 75–99.
- McGuinness, P. B., Vieito, J. P., & Wang, M. (2020). Proactive government intervention, board gender balance, and stakeholder engagement in China and Europe. *Asia Pacific Journal of Management*, 37, 719-762.
- Menicucci, E., & Paolucci, G. (2022). Board Diversity and ESG Performance: Evidence from the Italian Banking Sector. *Sustainability*, 14(20), 13447.
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21(2), 402–433. <https://doi.org/10.5465/amr.1996.9605060217>
- Mohan, G., Seijts, G., & Miller, R. (2022). Does leader character have a gender? *Journal of Business Ethics*, 1–18. <https://doi.org/10.1007/s10551-022-05313-9>
- Molinero-Díez, P., Blanco-Mazagatos, V., Garcia-Rodriguez, I., & Romero-Merino, M. E. (2022). Women directors, educational background and firm value of Spanish listed companies. *Gender in Management: An International Journal*, (ahead-of-print).
- Monteiro, A.P., García-Sánchez, IM., Aibar-Guzmán, B. (2021). Labour Practice, Decent Work and Human Rights Performance and Reporting: The Impact of Women Managers. *Journal of Business Ethics*, <https://doi.org/10.1007/s10551-021-04913-1>

- Monzani, L., Hernandez Bark, A. S., van Dick, R., & Peiró, J. M. (2015). The synergistic effect of prototypicality and authenticity in the relation between leaders' biological gender and their organizational identification. *Journal of Business Ethics*, 132(4), 737–752.
- Moratis, L., & Brandt, S. (2017). Corporate stakeholder responsiveness? Exploring the state and quality of GRI-based stakeholder engagement disclosures of European firms. *Corporate Social Responsibility and Environmental Management*, 24(4), 312-325.
- Moreno-Ureba, E., Bravo-Urquiza, F., & Reguera-Alvarado, N. (2022). An analysis of the influence of female directors on environmental innovation: When are women greener? *Journal of Cleaner Production*, 374, 133871.
- Muhammad, H., & Migliori, S. (2022). Effects of board gender diversity and sustainability committees on environmental performance: a quantile regression approach. *Journal of Management & Organization*, 1-26.
- Naciti, V., Cesaroni, F., & Pulejo, L. (2022). Corporate governance and sustainability: A review of the existing literature. *Journal of Management and Governance*, 26, 55–74. <https://doi.org/10.1007/s10997-020-09554-6>
- Nadeem, M., Bahadar, S., Gull, A. A., Iqbal, U. (2020). Are women eco-friendly? Board gender diversity and environmental innovation. *Business Strategy and the Environment*, 29(8): 3146–3161.
- Nadeem, M., Zaman, R., & Saleem, I. (2017). Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange listed firms. *Journal of Cleaner Production*, 149, 874–885.
- Naveed, K., Voinea, C. L., Ali, Z., Rauf, F., & Fratostiteanu, C. (2021). Board gender diversity and corporate social performance in different industry groups: Evidence from China. *Sustainability*, 13(6), 3142.
- Nekhili, M., Chakroun, H., & Chtioui, T. (2018). Women's leadership and firm performance: Family versus nonfamily firms. *Journal of Business Ethics*, 15, 291–316.
- Nekhili, M., Nagati, H., Chtioui, T., & Nekhili, A. (2017). Gender-diverse board and the relevance of voluntary CSR reporting. *International Review of Financial Analysis*, 50, 81–100. <https://doi.org/10.1016/j.irfa.2017.02.003>
- Nerantzidis, M., Tzeremes, P., Koutoupis, A., & Pourgias, A. (2022). Exploring the black box: Board gender diversity and corporate social performance. *Finance Research Letters*, 48, 102987.
- Nguyen, T. H. H., Elmagrhi, M. H., Ntim, C. G., Wu, Y. (2021). Environmental performance, sustainability, governance and financial performance: Evidence from heavily polluting industries in China. *Business Strategy and the Environment*, <https://doi.org/10.1002/bse.2748>
- Nguyen, T. T. P., & Thai, H. M. (2022). Effects of female directors on gender diversity at lower organization levels and CSR performance: Evidence in Japan. *Global Finance Journal*, 53, 100749.
- 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. *International Review of Financial Analysis*, 71, 101554.

- Nielsen, S., & Huse, M. (2010a). The contribution of women on boards of directors: Going beyond the surface. *Corporate Governance: An International Review*, 18(2), 136–148. <https://doi.org/10.1111/j.1467-8683.2010.00784.x>
- Nielsen, S., & Huse, M. (2010b). Women directors' contribution to board decision-making and strategic involvement: The role of equality perception. *European Management Review*, 7(1), 16–29. <https://doi.org/10.1057/emr.2009.27>
- OECD. (2019). SIGI 2019 global report: Transforming challenges into opportunities, social institutions and gender index. OECD Publishing. <https://doi.org/10.1787/bc56d212-en>
- OECD. (2020). OECD policy responses to coronavirus (COVID-19). Women at the core of the fight against COVID-19 crisis. OECD Publishing <https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/>
- Odriozola, M. D., & Baraibar-Diez, E. (2017). Is corporate reputation associated with quality of CSR reporting? Evidence from Spain. *Corporate Social Responsibility and Environmental Management*, 24(2), 121–132. <https://doi.org/10.1002/csr.1399>
- Orazalin, N., & Baydauletov, M. (2020). Corporate social responsibility strategy and corporate environmental and social performance: The moderating role of board gender diversity. *Corporate Social Responsibility and Environmental Management*, 27(4), 1664–1676. <https://doi.org/10.1002/csr.1915>
- Orazalin, N., & Mahmood, M. (2021). Toward sustainable development: Board characteristics, country governance quality, and environmental performance. *Business Strategy and the Environment*, 30(8), 3569–3588.
- Overberg, P., Kamp, J. Michaels, D. (2021). COVID-19 death toll is even worse than it looks. *Wall Street Journal*, January 15: A1.
- Pan, C., Guo, H., Jiang, Y., Wang, H., & Qi, W. (2020). The double effects of female executives' participation on corporate sustainable competitive advantage through unethical environmental behavior and proactive environmental strategy. *Business Strategy and the Environment*, 29, 2324–2337. <https://doi.org/10.1002/bse.2505>
- Phang, S., Adrian, C., Garg, M., Pham, A., & Truong, C. (2023). COVID-19 pandemic resilience: An analysis of firm valuation and disclosure of sustainability practices of listed firms. *Managerial Auditing Journal*, 38(1), 85–128.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence approach*. NY: Harper and Row Publishers.
- Pitofsky, M. (2020). Infectious Disease Research Warns Coronavirus Pandemic Could Last Two Years. *The Hill*, Washington, USA. <https://thehill.com/policy/healthcare/495623-infectious-disease-research-warns-coronavirus-pandemic-could-last-two-years>.
- Post, C., Rahman, N., & Rubow, E. (2011). **Green governance: Boards of directors' composition and environmental corporate social responsibility**. In *Business and Society* (Vol. 50).
- Prado-Lorenzo, J.-M., & Garcia-Sanchez, I.-M. (2010). The Role of the Board of Directors in Disseminating Relevant Information on Greenhouse Gases. *Journal of Business Ethics*, 97(3), 391–424. <https://doi.org/10.1007/s10551-010-0515-0>

- Provasi, R., & Harasheh, M. (2020). Gender diversity and corporate performance: Emphasis on sustainability performance. *Corporate Social Responsibility and Environmental Management*, 28, 127–137. <https://doi.org/10.1002/csr.2037>
- Pucheta-Martínez, M. C., Bel-Oms, I. & Olcina-Sempere, G. (2018). Female institutional directors on boards and firm value. *J Bus Ethics* 152, 343–363. <https://doi.org/10.1007/s10551-016-3265-9>
- Pucheta-Martínez, M. C., Bel-Oms, I., & Nekhili, M. (2019). The contribution of financial entities to the sustainable development through the reporting of corporate social responsibility information. *Sustainable Development*, 27(3), 388–400. <https://doi.org/10.1002/sd.1911>
- Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2019). Commitment of independent and institutional women directors to corporate social responsibility reporting. *Business Ethics: A European Review*, 28(3), 290–304. <https://doi.org/10.1111/beer.12218>
- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019). An international approach of the relationship between board attributes and the disclosure of corporate social responsibility issues. *Corporate Social Responsibility and Environmental Management*, 26(3), 612–627. <https://doi.org/10.1002/csr.1707>
- Pucheta-Martínez, M. C., Olcina-Sempere, G., & López-Zamora, B. (2020). Female directorship on boards and corporate sustainability policies: Their effect on sustainable development. *Sustainable Development*, 28 (1), 56–72. <https://doi.org/10.1002/sd.1965>
- Qiu, S., Jiang, J., Liu, X., Chen, M. H., & Yuan, X. (2021). Can corporate social responsibility protect firm value during the COVID-19 pandemic? *International Journal of Hospitality Management*, 93, 102759.
- Qureshi, M. A., Kirkerud, S., Theresa, K., & Ahsan, T. (2020). The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity. *Business Strategy and the Environment*, 29(3), 1199–1214.
- Ramon-Llorens, M. C., Garcia-Meca, E., & Pucheta-Martínez, M. C. (2020). Female directors on boards. The impact of faultlines on CSR reporting. *Sustainability Accounting, Management and Policy Journal*. <https://doi.org/10.1108/SAMPJ-07-2019-0273>
- Rao, K., & Tilt, C. (2016). Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making. *Journal of Business Ethics*, 138(2), 327–347.
- Raucci, D., & Tarquinio, L. (2020). Sustainability performance indicators and non-financial information reporting. Evidence from the Italian Case. *Administrative Sciences*, 10(1), 13. <https://doi.org/10.3390/admsci10010013>
- Rehman, S., Orij, R., Khan, H. (2020). The search for alignment of board gender diversity, the adoption of environmental management systems, and the association with firm performance in Asian firms. *Corporate Social Responsibility and Environmental Management*, 27(5): 2161–2175.
- Rodríguez-Ariza, L., Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017). The role of female directors in promoting CSR practices: An international

- comparison between family and non-family businesses. *Business Ethics*, 26(2), 162–174.
- Rodríguez-Ariza, L., Frías Aceituno, J. V., & García Rubio, R. (2014). El consejo de administración y las memorias de sostenibilidad. *Revista de Contabilidad*, 17(1), 5–16. <https://doi.org/10.1016/j.rcsar.2013.02.002>
- Rodriguez-Dominguez, L., Gallego-Alvarez, I., & Garcia-Sanchez, I. M. (2009). Corporate Governance and Codes of Ethics. *Journal of Business Ethics*, 90(2), 187–202. <https://doi.org/10.1007/s10551-009-0035-y>
- Rodriguez-Gomez, S., Arco-Castro, M. L., Lopez-Perez, M. V., & Rodríguez-Ariza, L. (2020). Where does CSR come from and where does it go? A review of the state of the art. *Administrative Sciences*, 10(3), 60. <https://doi.org/10.3390/admsci10030060>
- Romano, M., Cirillo, A., Favino, C., Netti, A. (2020). ESG (Environmental, Social and Governance) performance and board gender diversity: The moderating role of CEO duality. *Sustainability*, 12(21): 9298.
- Saheed Olanrewaju, I., Kayode Ishola, A., Olawale Nurudeen, S., Abubakar, Ayuba. (2020). Impact of board diversity on corporate social responsibility of listed oil and gas firms in Nigeria. *International Journal of Management and Sustainability*, 9(4): 194–206.
- Sanan, N. K. (2016). Board gender diversity, financial and social performance of Indian firms. *Vision: The Journal of Business Perspective*, 20(4), 361–367.
- Schwartz-Ziv, M. (2017). Gender and Board Activeness: The Role of a Critical Mass. *Journal of Financial and Quantitative Analysis*, 52(2), 751–780.
- Sekarlangit, L. D., & Wardhani, R. (2021). The effect of the characteristics and activities of the board of directors on sustainable development goal (SDG) disclosures: Empirical evidence from Southeast Asia. *Sustainability*, 13(14), 8007.
- Setó-Pamies, D. (2015). The Relationship between Women Directors and Corporate Social Responsibility. *Corporate Social Responsibility and Environmental Management*, 22(6), 334–345.
- Sharif, A., Aloui, C., Yarovaya, L. (2020). COVID–19 pandemic, oil prices, stock market, geopolitical risk and policy uncertainty nexus in the U.S. economy: fresh evidence from the wavelet-based approach. *International Rev. Financial Analysis* 70: 101496.
- Shaukat, A., Qiu, Y., & Trojanowski, G. (2016). Board Attributes, Corporate Social Responsibility Strategy, and Corporate Environmental and Social Performance. *Journal of Business Ethics*, 569–585.
- Shoham, A., Almor, T., Lee, S. M., & Ahammad, M. F. (2017). Encouraging environmental sustainability through gender: A micro-foundational approach using linguistic gender marking. *Journal of Organizational Behavior*, 38(9), 1356–1379.
- Siueia, T., & Wang, J. (2019). La asociación entre las Actividades de Responsabilidad Social Corporativa y la calidad de los ingresos: Evidencia de la industria extractiva. *Revista de Contabilidad—Spanish Accounting Review*, 22(1), 112–121. <https://doi.org/10.6018/rcsar.22.1.354361>
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Erwin, K. S., Jackson, L. A., McNatt, P. S., & Renfro, C. L. (2002). The role of threats in the racial attitudes of blacks and whites. *Personality and Social Psychological Bulletin*, 28, 1242–1254.

- Tajfel, H. (1981). *Human groups and social categories*. Cambridge University Press.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33(1), 1–39. <https://doi.org/https://doi.org/10.1146/annurev.ps.33.020182.000245>
- Tajfel, H., Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin, & W. S (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Talbot, D., & Ordonez-Ponce, E. (2022). Canadian banks' responses to COVID-19: A strategic positioning analysis. *Journal of Sustainable Finance Investment*, 12(2), 423–430. <https://doi.org/10.1080/20430795.2020.1771982>
- Tamimi, N., & Sebastianelli, R. (2017). Transparency among S&P 500 companies: An analysis of ESG disclosure scores. *Management Decision*, 55 (8), 1660–1680. <https://doi.org/10.1108/MD-01-2017-0018>
- Tejedo-Romero, F., Rodrigues, L. L., & Craig, R. (2017). Women directors and disclosure of intellectual capital information. *European Research on Management and Business Economics*, 23(3), 123–131. <https://doi.org/10.1016/j.iedeen.2017.06.003>
- Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance*, 17(3), 320–337.
- Tettamanzi, P., Venturini, G., & Murgolo, M. (2022). Sustainability and Financial Accounting: a Critical Review on the ESG Dynamics. *Environmental Science and Pollution Research*, 29, 16758–16761.
- Thatcher, S. M., & Jehn, K. A. (1998). A model of group diversity profiles and categorization processes in bicultural organizational teams. *Research on Managing Groups and Teams*, 1, 1–20.
- Tilly, C. (1978). *From mobilization to revolution*. Addison-Wesley.
- Tomkins, L., & Simpson, P. (2015). Caring leadership: A heideggerian perspective. *Organization Studies*, 36(8), 1013–1031.
- Tingbani, I., Chithambo, L., Tauringana, V., & Papanikolaou, N. (2020). Board gender diversity, environmental committee and greenhouse gas voluntary disclosures. *Business Strategy and the Environment*, 29(6), 2194–2210. <https://doi.org/10.1002/bse.2495>
- Torchia, M., Calabrò, A., & Huse, M. (2011). Women Directors on Corporate Boards: From Tokenism to Critical Mass. *Journal of Business Ethics*, 102(2), 299–317.
- Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D., Wetherell, M.S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. III (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37, 549–579. <https://doi.org/10.2307/2393472>
- Tsui, A. S., Porter, L. W., & Egan, T. D. (2002). When both similarities and dissimilarities matter: Extending the concept of relational demography. *Human Relations*, 55(8), 899–929. <https://doi.org/10.1177/0018726702055008176>
- UN Women. (2021). Covid-19 and women's leadership. From an effective response to building back better. <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections>

- UN Women. (2020a). Surveys show that COVID-19 has gendered effects in Asia and the Pacific, Bangkok. <https://data.unwomen.org/resources/surveys-show-covid-19-has-genderedeffects-asia-andpacific>
- UN Women. (2020b). The impact of COVID-19 on women's and men's lives and livelihoods in Europe and Central Asia: Preliminary results from a rapid gender assessment, Istanbul. <https://data.unwomen.org/publications/impact-covid-19-womens-and-mens-lives-andlivelihoodseurope-and-central-asia>
- Upadhyay, A., & Zeng, H. (2014). Gender and ethnic diversity on boards and corporate information environment. *Journal of Business Research*, 67(11), 2456–2463. <https://doi.org/10.1016/j.jbusres.2014.03.005>
- Uyar, A., Kilic, M., Koseoglu, M. A., Kuzey, C., & Karaman, A. S. (2020). The link among board characteristics, corporate social responsibility performance, and financial performance: Evidence from the hospitality and tourism industry. *Tourism Management Perspectives*, 35(June), 100714.
- Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021). Board structure, financial performance, corporate social responsibility performance, CSR committee, and CEO duality: Disentangling the connection in healthcare. *Corporate Social Responsibility and Environmental Management*, 28, 1730–1748. <https://doi.org/10.1002/csr.2141>
- Valls Martínez, M. D. C., Martin Cervantes, P. A., & Cruz Rambaud, S. (2020). Women on corporate boards and sustainable development in the American and European markets: Is there a limit to gender policies?. *Corporate Social Responsibility and Environmental Management*, 27(6), 2642-2656.
- Van Knippenberg, D., De Dreu, C. K., & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89(6), 1008–1022. <https://doi.org/10.1037/0021-9010.89.6.1008>
- Vaz Ogando, N., Ruiz Blanco, S., & Fernández-Feijoo Souto, B. (2018). The assurance market of sustainability reports in Spain: An analysis from the demand perspective. *Revista de Contabilidad—Spanish Accounting Review*, 21(1), 48–62. <https://doi.org/10.1016/j.rcsar.2017.07.003>
- Velte, P. (2017). Does board composition have an impact on CSR reporting? *Problems and Perspectives in Management*, 15(2), 19–35.
- Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, 33, 885–913.
- Walt, N., & Ingley, C. (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate Governance: An International Review*, 11(3), 218–234. <https://doi.org/10.1111/1467-8683.00320>
- Wang, Y., Chang, X., Wang, T., & Wang, S. (2022). Female directors and environmental innovation: is stakeholder orientation a missing link? *Gender in Management*, 37(5), 587–602.
- Wang, C., Deng, X., Álvarez-Otero, S., Sial, M. S., Comite, U., Cherian, J., & Oláh, J. (2021). Impact of women and independent directors on corporate social responsibility and financial performance: empirical evidence from an emerging

- economy. *Sustainability*, 13(11), 6053.
- Wang, Y., Luo, X., Wang, T., & Hu, D. (2021). Go beyond tokens: Number and type both matter. *Business Ethics, the Environment & Responsibility*, 30(4), 639-656.
- Wang, Y., Ma, J., & Wang, T. (2021). Do all female directors have the same impact on corporate social responsibility? The role of their political connection. *Asia Pacific Journal of Management*, 1-28.
- Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*.
- Wei, F., Ding, B., & Kong, Y. (2017). Female directors and corporate social responsibility: Evidence from the environmental investment of Chinese listed companies. *Sustainability (Switzerland)*, 9(12).
- Wieczorek-Szymańska, A. (2020). **Gender diversity in academic sector-Case study.** *Administrative Sciences*, 10(3), 41. <https://doi.org/10.3390/admsci10030041>
- Wilder, D. A., & Simon, A. F. (2001). Affect as a cause of intergroup bias. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology. Intergroup processes.* Blackwell Publishing.
- Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics*, 42(1), 1–10.
- Williams, K. Y., & O'Reilly, C. A. III (1998). Demography and. *Research in Organizational Behavior*, 20, 77–140.
- Wonsuk, C., & Abebe, M. A. (2016). Board of directors and industry determinants of corporate philanthropy. *Leadership & Organization Development Journal*, 7(1), 1–55.
- Yang, W., Yang, J., & Gao, Z. (2019). Do Female Board Directors Promote Corporate Social Responsibility? An Empirical Study Based on the Critical Mass Theory. *Emerging Markets Finance and Trade*, 55(15), 3452–3471. <https://doi.org/10.1080/1540496X.2019.1657402>
- Yarram, S. R., & Adapa, S. (2021). Board gender diversity and corporate social responsibility: Is there a case for critical mass?. *Journal of Cleaner Production*, 278, 123319.
- Yaseen, H., Iskandrani, M., Ajina, A., & Hamad, A. (2019). Investigating the relationship between board diversity & corporate social responsibility (CSR) performance: Evidence from France. *Academy of Accounting and Financial Studies Journal*, 23(4), 1–11.
- Yasser, Q. R., Al Mamun, A., & Ahmed, I. (2017). Corporate social responsibility and gender diversity: Insights from Asia Pacific. *Corporate Social Responsibility and Environmental Management*, 24(3), 210–221.
- Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Imran Qureshi, M., & Jan, A. (2020). Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *Journal of Cleaner Production*, 244, 118683. <https://doi.org/10.1016/j.jclepro.2019.118683>
- Zaid, M. A. A., Wang, M., Adib, M., Sahyouni, A., & Abuhijleh, T. F. (2020). Boardroom nationality and gender diversity: Implications for corporate sustainability performance. *Journal of Cleaner Production*, 251, 119652.

- Zhang, J., Han, J., & Yin, M. (2018). A female style in corporate social responsibility? Evidence from charitable donations. *International Journal of Disclosure and Governance*, 15(3), 185–196.
- Zhang, J. Q., Zhu, H., & Ding, H. B. (2013). Board composition and corporate social responsibility: An empirical investigation in the post Sarbanes-Oxley Era. *Journal of Business Ethics*, 114(3), 381–392.
- Zhang, L. (2012). Board demographic diversity, independence, and corporate social performance. *Corporate Governance The International Journal of Business in Society*, 12(5), 686–700.
- Zhang, X.-A., Li, N., Ullrich, J., & van Dick, R. (2015). Getting everyone on board: The effect of differentiated transformational leadership by CEOs on top management team effectiveness and leader-rated firm performance. *Journal of Management*, 41(7), 1898–1933.
- Zhuang, Y., Chang, X., & Lee, Y. (2018). Board composition and corporate social responsibility performance: Evidence from Chinese public firms. *Sustainability (Switzerland)*, 10(8). <https://doi.org/10.3390/su10082752>
- Zhang, J. Q., Zhu, H., & Ding, H. B. (2013). Board composition and corporate social responsibility: An empirical investigation in the post Sarbanes-Oxley era. *Journal of Business Ethics*, 114(3), 381–392. <https://doi.org/10.1007/s10551-012-1352-0>
- Zhao, L., Yang, M. M., Wang, Z., & Michelson, G. (2022). Trends in the dynamic evolution of corporate social responsibility and leadership: A literature review and bibliometric analysis. *Journal of Business Ethics*, 182, 135–157. <https://doi.org/10.1007/s10551-022-05035-y>
- Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, 101528.
- Zimmer, L. (1988). Tokenism and women in the workplace: The limits of gender-neutral theory. *Social Problems*, 35(1), 64–77. <https://doi.org/10.1525/sp.1988.35.1.03a00050>

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Facultad de Economía y Empresa**



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RESUMEN

Han transcurrido más de 40 años desde que Marilyn Loden, consultora y escritora estadounidense, utilizase el término *techo de cristal* para referirse a las barreras invisibles que condicionaban las aspiraciones de las mujeres (BBC Mundo 2017). Con ese término describía la existencia de obstáculos que dificultan que las profesionales, con igual o superior cualificación, capacidades y méritos, puedan ocupar los puestos de poder que se encuentran en manos de sus colegas masculinos.

Son muy diferentes las causas que mantienen vigente el techo de cristal, a pesar de los esfuerzos que diferentes instituciones y organismos vienen realizando y que han dado lugar a la aparición normativa de cuotas de género que tratan de garantizar la presencia de mujeres en los consejos de administración. Bien fijando un número mínimo de consejeras o estableciendo la obligación de que este órgano esté balanceado en temas de género. En este órgano se toman decisiones sobre la estrategia y el diseño organizativo de las compañías, ejercen el control sobre su ejecución, entre otras múltiples responsabilidades. El interés por incrementar la presencia femenina viene determinado por las innumerables ventajas que la diversidad de género lleva aparejadas.

En esta línea, esta tesis doctoral tiene como objetivo analizar los efectos de la presencia de mujeres en el consejo de administración en el compromiso con la sostenibilidad y la transparencia empresarial. Para ello, este trabajo se estructura en tres capítulos vinculados a tres investigaciones interrelacionadas que pretenden determinar el estado de la cuestión y las brechas a las que dar respuesta. Abordando, a partir del conocimiento acumulado, las demandas más actuales respecto a la influencia que un grupo minoritario puede desempeñar en el seno de grandes compañías.

Más concretamente, en el primer capítulo se revisa la literatura existente sobre gobierno corporativo y sostenibilidad o responsabilidad empresarial (RSC), en particular sobre la diversidad de género en los consejos de administración y su relación con el desempeño social y la divulgación de información relacionada con la sostenibilidad, buscando proporcionar una visión general del estado del arte para proponer futuras líneas de investigación.

En el segundo capítulo se estudian los efectos que la diversidad de género en el consejo de administración tiene en la divulgación de información social y medioambiental, centrándonos en la masa crítica de este grupo minoritario y en el rol moderador del capital humano de los miembros del consejo.

En el tercer capítulo se analizan los efectos de una mayor presencia femenina en las decisiones que las compañías han tomado en materia de sostenibilidad en un contexto de incertidumbre y recesión, estudiando el impacto de la Covid-19 sobre diferentes iniciativas sostenibles y cómo estos compromisos empresariales difieren según la identidad social de los consejeros determinada por su género.

INTRODUCCIÓN

En el mundo de los negocios modernos, las principales compañías del mundo están inmersas en la contribución al desarrollo sostenible mediante el establecimiento de estrategias de sostenibilidad que persiguen el equilibrio de los impactos sociales, medioambientales y económicos de sus actividades. En este contexto, el comportamiento corporativo responsable (RSC) y la transparencia informativa son elementos esenciales (García-Sánchez et al., 2018). Las empresas deben incorporar políticas y acciones responsables, integrando a la estrategia empresarial las necesidades de los diversos stakeholders, i.e. los trabajadores, comunidad y medioambiente (Cook & Glass, 2017; Al-Najjar & Salama, 2022). Estas estrategias deben ser comunicadas con la divulgación de informes más detallados e involucrar a las partes interesadas (Johnsen et al., 2017).

La divulgación de información social y medioambiental permite que los diferentes grupos de interés conozcan en detalle el compromiso de las empresas con la sostenibilidad. La RSC y la comunicación de las practicas sostenibles conllevan una serie de beneficios para las organizaciones, entre los que se destacan una mayor performance financiera (Wang & Sarkis, 2017), mejor reputación corporativa (Bear, Rahman, & Post, 2010), obteniendo las organizaciones un mejor desempeño y una ventaja competitiva a largo plazo (McGuinness et al., 2017; Shaukat et al., 2016, Birindelli, et al., 2018). Con la divulgación de estas prácticas, logran alcanzar una mayor credibilidad ante los grupos de interés (Fernandez-Feijoo et al., 2014; Amran et al., 2014).

Este enfoque supone que las preocupaciones empresariales van más allá del beneficio de los accionistas, a favor de otros grupos de interés, y que las contribuciones de la empresa a la sociedad son más amplias que lo establecido en las normas legales. Bajo esta versión más altruista del mundo empresarial, se configuran estrategias de sostenibilidad orientadas al desarrollo sostenible y al bien social, siendo fuente de ventajas competitivas (Christensen et al., 2014). Sin embargo, no todas las empresas se preocupan de igual manera por los intereses y las demandas de información de los stakeholders, existiendo una diferencia considerable en la cantidad y calidad de la información de RSC divulgada (Moratis & Brandt, 2017; Boiral & Henri, 2017). Bajo esta heterogeneidad, los mecanismos de gobierno corporativo deben diseñarse con el objetivo de satisfacer las necesidades de una variedad de grupos de interés, incluyendo a los individuos y la sociedad, así como también el medioambiente.

En este escenario, el estudio del consejo de administración ha adquirido especial preeminencia pues no solo es considerado como uno de los principales mecanismos de gobierno corporativo relevante en la supervisión de las acciones gerenciales (Fama & Jensen, 1983) sino que también, es el órgano donde se toman decisiones de impacto en los objetivos estratégicos de las organizaciones, entre las cuales se encuentran las relacionadas con el comportamiento social responsable y la sostenibilidad (Nielsen & Huse, 2010; Setó-Pamies, 2015; Shaukat et al., 2016; Uyar et al., 2021), desempeñando un rol relevante en la política de divulgación voluntaria de información. (Uyar et al., 2021)

La eficacia de este órgano está fuertemente asociada a su composición y es abordada en las investigaciones académicas desde diferentes aspectos como la existencia de dualidad de funciones en la figura del CEO-chairman (Giannarakis, Konteos, & Sariannidis, 2014; Gavana et al, 2023), la independencia de sus miembros (Wonsuk & Abebe, 2016) y la diversidad de género (Nadeem, Zaman, & Saleem, 2017), entre otros.

En la actualidad, las organizaciones se enfrentan a una creciente presión por parte de los grupos de interés de tomar decisiones tendientes a mejorar su desempeño social y medioambiental, a su vez las iniciativas gubernamentales promueven integrar más mujeres en sus consejos de administración con el fin de que exista una proporción equilibrada de hombres y mujeres (Li et al., 2017). Un claro ejemplo es la legislación de cuota de género que ha sido adoptada en muchos países de la Unión Europea y la corriente de género que ha surgido internacionalmente para lograr la equidad (Lee-Gosselin, Briere, & Hawo, 2013).

Este contexto se ha convertido en el foco de atención de muchos investigadores, centrandose especialmente su atención en el análisis del papel que el consejo de administración puede desempeñar al respecto (Cuadrado-Ballesteros, Martínez-Ferrero, & García-Sánchez, 2017; Hafsi & Turgut, 2013; Harjoto, Laksmana, & Lee, 2015; Shaukat et al., 2016; Menicucci & Paolucci, 2022). En esta línea, la academia está interesada en analizar el efecto que la diversidad de género supone en el mundo de los negocios en general, tratando demostrar si su presencia explica por qué algunas firmas obtienen un mejor desempeño en RSC que otras o por qué tienden a adoptar mejores prácticas de divulgación. En este sentido, recientes investigaciones han reconocido la influencia del rol de las mujeres en el consejo de administración (Rao & Tilt, 2016) evidenciando que las mujeres tienden a ser especialmente sensibles a los problemas sociales y medioambientales (Boulouta, 2013).

La investigación empírica sobre la diversidad de género en el consejo de administración, la RSC y la transparencia informativa ha crecido exponencialmente en la última década (Amorelli & García-Sánchez, 2021).

Las investigaciones más recientes han asociado la presencia de mujeres en el consejo de administración y un desempeño corporativo con un concepto más amplio que el económico (i.e., Rao & Tilt, 2016; Nadeem et al., 2017; Gulzar et al. 2019; Gutiérrez-Fernández et al., 2023), contemplando la implementación de prácticas de sostenibilidad en relación con aspectos medioambientales, sociales y éticos del comportamiento empresarial (Kirsch, 2018). Así, la literatura argumenta múltiples razones para la diversidad de género en los consejos de administración, entre las que se destacan que las mujeres poseen estándares morales más fuertes y son socialmente más sensibles, emocionales y empáticas que los hombres (Boulouta, 2013; Liao et al., 2015; Cook & Glass, 2017; Rodríguez-Ariza et al., 2017; Macaulay et al., 2018).

Bajo estos fundamentos teóricos, en general, la gran mayoría de la evidencia empírica sugiere una relación positiva entre la presencia de mujeres en el consejo de administración, la sostenibilidad y la responsabilidad empresarial (Byron & Post, 2016; Cook & Glass, 2017; Zhuang et al., 2018; Francoeur et al., 2019; Beji et al., 2021; Rehman et al., 2020; Saheed Olanrewaju et al., 2020; Romano et al., 2020; Uyar et al., 2020; Govindan et al., 2021; Nerantzidis et al., 2022) y una mayor divulgación de las prácticas de RSC (Amorelli & García-Sánchez, 2020; Arayssi et al., 2016; I.-M. García-Sánchez et al., 2019; Rodríguez-Ariza et al., 2014; Guping et al., 2020). A pesar de estos hallazgos, encontramos también investigaciones que arrojan resultados no-significativos o negativos (Francoeur et al., 2019; Yang et al., 2019; Zhuang et al., 2018; Prado-Lorenzo & Garcia-Sanchez, 2010; Pucheta-Martínez et al., 2019; García-Sánchez et al., 2020; Fakir & Jusoh, 2020; Bristy et al., 2020; Orazalin & Baydauletov, 2020; Fan, Qian, & Wang, 2023), presentando divergencias a favor de las dimensiones económicas frente a las sociales y medioambientales (Nadeem et al., 2020; Nguyen et al., 2021). Además, puede existir un efecto temporal que indica cambios en el papel que las consejeras desempeñan, pues se ha observado un cambio en el interés que muestran respecto a la adopción de políticas y la gestión ética de las actividades de la firma (i.e., Nadeem et al., 2017; Gulzar et al., 2019; Monteiro et al., 2021), algo que no ocurría en épocas anteriores (i.e., Rodríguez-Domínguez et al., 2009; García-Sánchez et al. 2015).

Los resultados no concluyentes han motivado a diversos autores a argumentar que el vínculo positivo entre la diversidad de género en el consejo y la RSC o la transparencia informativa

está condicionada a la existencia de una masa crítica de mujeres en el consejo (Ben-Amar et al., 2017; Post et al., 2011).

En la actualidad, a pesar de que las mujeres han logrado importantes avances en lo que se refiere a su representación, la integración de los principales órganos estratégicos continúa siendo dominada por hombres (Birindelli et al., 2019). Bajo estas circunstancias, algunos estudios académicos hacen referencia a la Teoría de la Masa Crítica, como una de las explicaciones para el impacto de la representación femenina en los consejos y las cuestiones de RSC (Atif et al., 2020; Cabeza-García et al., 2018; Jia & Zhang, 2013; Wei et al., 2017; Cambrea et al., 2023). Esta teoría sugiere que la influencia de un subgrupo depende de su tamaño. Cuando el grupo minoritario alcanza una masa crítica, la naturaleza de las interacciones grupales cambia y el grado de influencia de los subgrupos aumenta (Torchia, Calabrò, & Huse, 2011). Estos argumentos se basan principalmente en que los grupos minoritarios son a menudo considerados “tokens” y son generalmente ignorados y pueden encontrar barreras para expresar sus opiniones. La Teoría Token (Kanter, 1977) expone las dificultades a las que se enfrentan las mujeres en las organizaciones y sugiere que el comportamiento femenino en estos entornos tradicionalmente dominados por hombres se debe a su representación numérica. Una o dos mujeres en los consejos de administración enfrentan los posibles riesgos de “tokenismo”: ser estereotipadas, ignoradas y tener que trabajar duro para ser escuchadas (Konrad et al., 2008).

Para superar estas limitaciones, estudios recientes sugieren que la masa crítica de mujeres en el consejo de administración se alcanza cuando poseen al menos tres mujeres (Konrad, Kramer, & Erkut, 2008; Torchia et al., 2011). En estos contextos, el género ya no es una barrera y las mujeres se sentirán más cómodas y libres para expresar sus opiniones y es más probable que sean escuchadas y apoyadas por la mayoría, ejerciendo una mayor influencia en los resultados (Cook & Glass, 2017; Schwartz-Ziv, 2017).

En base a los argumentos anteriores, las consecuencias positivas de la presencia de mujeres se obtienen si alcanza un número mínimo de tres, suficiente para que su influencia genere cambios significativos y puedan influir en las decisiones tomadas en el seno del consejo (Ben-Amar et al., 2017; Fernandez-Feijoo et al., 2014; Post et al., 2011; Yarram & Adapa, 2021). Así, los estudios académicos dan relevancia a la representación numérica de las mujeres en los consejos para que las mismas influyan en las decisiones estratégicas de las empresas. Cuando el consejo de administración cuenta solo con una o dos mujeres, no hay un impacto significativo en la inversión medioambiental corporativa (McGuinness, Vieito, & Wang, 2017) o en la filantropía corporativa (Jia & Zhang, 2013). Una mayor representación

femenina en el consejo se asocia con una mejora significativa del compromiso de RSC (Cook & Glass, 2017), alcanzando con una mayor diversidad de género un mejor desempeño social y medioambiental (Kassinis et al. 2016; Cambrea et al., 2023).

En suma, un mínimo de tres mujeres en el consejo es suficiente para que puedan generar cambios significativos, habrá mayor probabilidad que sus opiniones sean escuchadas y respaldadas por la mayoría, generando un impacto en el compromiso de la firma con una mayor transparencia en la divulgación de información sobre RSC (Amorelli & García-Sánchez, 2020). La probabilidad de divulgación voluntaria aumenta cuando aumenta el porcentaje de mujeres en los órganos de decisión.

Si bien en general los hallazgos asocian positivamente una mayor número de mujeres en los consejos con la responsabilidad empresarial y la sostenibilidad; algunos estudios no respaldan estos resultados (Post, Rahman, & Rubow, 2011; Fernández-Torres et al., 2021) o sugieren que incluso incluir solo una mujer es suficiente para promover un mejor desempeño social (Cook & Glass, 2017; Gulzar et al. 2019; Naveed et al., 2021). Otros estudios no respaldan la Teoría de la masa crítica y sugieren que después de alcanzarla, una presencia creciente de consejeras no necesariamente tiene un impacto positivo en la sostenibilidad (Birindelli et al., 2018).

Con el fin de contribuir al conocimiento actual, esta tesis doctoral se estructura en tres trabajos de investigación que tiene como objetivo el estudio del papel que las consejeras desempeñan en relación con la estrategia de sostenibilidad empresarial, enfocándose específicamente en conocer su impacto en el nivel de compromiso de las compañías con sus grupos de interés y la transparencia corporativa. Las implicaciones de los resultados obtenidos permiten dar respuesta a las brechas de conocimiento relativas al papel que un grupo minoritario puede desempeñar en el seno de grandes compañías, considerando los efectos moderados del contexto interno y externo en el que se producen.

Así, en el primer capítulo, se realiza una revisión bibliométrica y bibliográfica para determinar el efecto que la diversidad de género del consejo de administración tiene en el nivel de compromiso empresarial con la sostenibilidad y el involucramiento con diversos grupos de interés a través de la divulgación de información social y ambiental. La revisión incluyó 89 artículos publicados en las 66 revistas más prestigiosas sobre negocios, administración, ética y ciencias ambientales según los informes de citas de revistas en ISI Web of Knowledge. Se observa un crecimiento espectacular de esta línea de investigación desde 2016, siendo liderada por investigadores españoles y estadounidenses. Actualmente existe un cambio de

paradigma en los marcos teóricos que sustentan estas investigaciones al examinar los entornos organizacionales e institucionales que favorecen las ventajas asociadas a la presencia de mujeres en los órganos responsables de la estrategia empresarial. Adicionalmente, se presenta un anexo complementario a este capítulo que extiende el periodo de análisis hasta abril de 2023. La actualización incorpora a la investigación 52 artículos, llegando a un total de 141 artículos académicos analizados que cumplen con los parámetros anteriormente mencionados publicados en el periodo comprendido entre 2000 y abril de 2023. Se observa que el interés de los académicos en esta línea de investigación mantiene la tendencia creciente, observándose un crecimiento exponencial en los últimos tres años.

En el segundo capítulo se examinan dos cuestiones estrechamente relacionadas: primera, el efecto de la presencia de mujeres consejeras sobre la divulgación de información en materia de sostenibilidad, centrándonos en la existencia de una masa crítica de este grupo minoritario; y, en segundo lugar, el efecto moderador del capital humano de los miembros del consejo – determinado por su formación, competencias y experiencia- que podría favorecer las características intrínsecas de las consejeras a través del efecto cognitivo de la igualdad de los consejos. Para una muestra de compañías internacionales configurada por 9.744 observaciones para el periodo 2007 a 2016, se proponen diferentes regresiones de datos de panel. Los hallazgos revelan un impacto positivo de la diversidad de género en la transparencia corporativa con la presencia de al menos tres mujeres en el consejo. Además, observamos que este efecto se potencia con mayores niveles de formación, habilidades y experiencia del resto de consejeros. Como análisis complementario, la evidencia muestra que el rol femenino no se mantiene cuando la mujer alcanza el cargo de presidente; es decir, las mujeres adoptan un estereotipo masculino en cuanto a la divulgación voluntaria de información cuando también son presidentas del consejo, independientemente del capital humano de los miembros del consejo. Este capítulo presenta un anexo que actualiza los últimos hallazgos académicos en este campo de estudio.

En el tercer capítulo, ante los efectos que la pandemia Covid-19 conlleva tanto desde el punto de vista económico como respecto a los efectos sanitarios y socioeconómicos que afectaron en diversa medida a los stakeholders de las compañías, resulta relevante conocer si éstas desarrollaron iniciativas sostenibles que permitieron satisfacer las necesidades de sus grupos de interés. Decisiones que fueron tomadas e implementadas en un entorno de recesión en el que las empresas se debaten sobre si económicamente es razonablemente impulsar las mismas y si pueden permitirse no hacerlo. En esta investigación, basándonos en la teoría de la identidad social, argumentamos que estos compromisos empresariales habrán sido

promovidos en empresas con consejos de administración que cuentan con una mayor presencia femenina. Los resultados obtenidos para una muestra de 4.821 firmas internacionales permiten confirmar que la incidencia del afecto incidental sobre la identidad social del endogrupo de consejeras ha frenado parcialmente el retroceso que la sostenibilidad empresarial ha sufrido por la pandemia, especialmente importante respecto a políticas y prácticas de buen gobierno, garantizado el compromiso social y medioambiental de ejercicios previos.

Finalmente, se presentan las conclusiones de esta tesis doctoral, discutiendo las implicaciones del análisis, tanto desde el punto de vista teórico como práctico, identificando las limitaciones de la investigación realizada y presentando oportunidades de investigación.

RESUMEN CAPÍTULO I EN ESPAÑOL

En este trabajo se busca entender el estado del arte de las investigaciones académicas en materia de diversidad de género en los consejos de administración y como los diferentes autores han estudiado su relación con las practicas sostenibles y políticas de transparencia corporativa. Se realizó una revisión bibliométrica y bibliográfica del efecto que tiene la diversidad de género en el consejo de administración en el nivel de compromiso empresarial con la sostenibilidad y la divulgación de información de naturaleza social y medioambiental.

Esta revisión se basó en el análisis de artículos sobre mujeres en el consejo de administración, RSC y divulgación de información relacionada con la sostenibilidad publicados en las revistas más prestigiosos sobre “Business”, “Management”, “Ethics”; and “Environmental Sciences” de acuerdo con el Journal Citation Reports de la base de datos ISI Web of Knowledge entre el 2000 y 2020, periodo en el cual el número de artículos académicos publicados sobre estos temas han proliferado notablemente. Se analizaron en total 89 artículos académicos.

De la revisión bibliométrica y bibliográfica se observa un crecimiento espectacular de esta línea de investigación a partir de 2016. De hecho el 74% de las publicaciones académicas se realizaron entre los años 2016 y 2020, sugiriendo una tendencia creciente. En la revisión de contenido se analizaron también algunos detalles adicionales, se identifican los objetivos propios de cada publicación y los hallazgos abordados al estudiar la relación entre la presencia de mujeres en el consejo de administración y la RSC y/o divulgación de la RSC. Asimismo, se estudió la evolución y trayectoria de las publicaciones sobre diversidad de género en el consejo de administración, desempeño y divulgación de la RSC, clasificando los artículos publicados por año, por revista y por país del primer autor. Se observa una tendencia creciente que es liderada por investigadores españoles y estadounidenses.

Aunque existe predominio en considerar la RSC como un constructo global, debe tenerse en cuenta que la RSC es un concepto multidimensional, por lo que los académicos han utilizado diferentes constructos para medirla. Al no existir un enfoque único, el análisis de contenido realizado identifica también las múltiples variables dependientes utilizadas para medirla. Entre ellas se destacan, responsabilidad social corporativa o desempeño social o desempeño en sustentabilidad, (Beji et al., 2021; Cruz et al., 2019; Francoeur et al., 2019; I. M. García-Sánchez et al., 2018), desempeño ambiental (Cordeiro et al., 2020; Birindelli et al., 2019; Lu & Herremans, 2019), inversión ambiental (Atif et al., 2020; Jiang & Akbar, 2018; Wei et al., 2017), demandas ambientales (Liu, 2018), filantropía corporativa o contribuciones caritativas

(Campopiano et al., 2019; Jia & Zhang, 2013; Williams, 2003), entre otros. El uso de medidas alternativas a un score o puntaje sobre el desempeño de la RSC tiene diversas justificaciones. Liu (2018) analiza el número de demandas medioambientales presentadas contra las firmas de S&P 1500 en Tribunales federales en USA entre 2000–2015, argumentando que las demandas medioambientales constituyen el proxy más directo de la mala conducta medioambiental corporativa y que a diferencia de los ratings de RSC no son susceptibles de la manipulación empresarial. Por su parte, Haque (2017), examina los efectos de las características del consejo de administración en la implementación de iniciativas que reduzcan la emisión de carbón y emisiones de gas efecto invernadero (GEI). Sus resultados sugieren una asociación positiva entre la presencia de mujeres en el consejo y la implementación de iniciativas que reduzcan las emisiones de carbón, sin embargo no encuentra los mismos resultados para emisiones de GEI.

Estas divergencias también se identifican en las investigaciones sobre la relación entre la diversidad de género del consejo y la transparencia corporativa de información social y medioambiental. Si bien, la mayoría de las publicaciones académicas miden la divulgación de RSC como informes sociales y/o ambientales, o puntajes como la variable ESG de Thomson Reuters, más recientemente los investigadores han comenzado a desarrollar medidas propias para medir la calidad de los informes de sostenibilidad (Al-Shaer & Zaman, 2016; Amran et al., 2014; García-Sánchez et al., 2019) con el fin de corregir las deficiencias y sesgos de las medidas previas. En general, estos trabajos concluyen en que la presencia de consejeras favorece la transparencia empresarial en materia de RSC. Así, García-Sánchez et al. (2019) analizan la relación entre la presencia de mujeres en el consejo y la calidad de los informes de sostenibilidad y sugiere que una mayor presencia femenina mejora la gestión de la divulgación de la sostenibilidad. Las mujeres se asocian a informes de sostenibilidad más fiables. Francoeur et al. (2019) argumenta que el impacto de las consejeras en el desempeño social corporativo varía de una dimensión de RSC a otra, en este sentido, el estudio de la relación entre la diversidad de género y la divulgación específica de determinada información social y/o medioambiental, y su impacto sobre las diferentes dimensiones de la sostenibilidad corporativa es un área relativamente inexplorada (Mahmood et al., 2018). Ello podría ser debido a que, de acuerdo con Lu & Herremans (2019), cada dimensión involucra conceptos distintos y deben ser estudiadas por separado si deseamos conocer la realidad para alcanzar la mejor performance de cada una.

En lo que se refiere a los resultados de nuestro análisis, más del 75% de los estudios sugieren un efecto positivo en la relación de mujeres consejeras, RSC y las prácticas de divulgación de

RSC. A pesar de que la gran mayoría de las publicaciones académicas encuentran una asociación positiva al estudiar la antedicha relación, encontramos investigaciones que arrojan resultados no-significativos o negativos (Azmat & Rentschler, 2017; Francoeur, et al., 2019; Khan, 2010), por lo que en general los resultados no son totalmente concluyentes.

A través de nuestro análisis de contenido, encontramos que hay tres marcos teóricos principales que guían la investigación empírica en la relación entre el gobierno corporativo en general, la presencia de mujeres en los consejos de administración en particular y la RSC: la Teoría de agencia, la Teoría de los stakeholders y la Teoría de dependencia de recursos. Aunque se visualiza una tendencia a quedar en desuso a favor de teorías más enfocadas en determinar la composición ideal del consejo de administración, las mismas han proporcionado el marco teórico mayoritariamente utilizado en las investigaciones empíricas para sustentar cómo la composición del consejo de administración y la diversidad de género pueden afectar el compromiso organizacional con temas sociales y medioambientales y la divulgación de información relacionada con la RSC y la sostenibilidad (Bear et al., 2010; Setó-Pamies, 2015).

Desde la perspectiva de la Teoría de la Agencia, el consejo de administración es considerado como un mecanismo relevante en la supervisión y control de las acciones gerenciales para garantizar los intereses de los accionistas (Fama & Jensen, 1983). La Teoría de la Agencia suele combinarse con los fundamentos de la Teoría de los Stakeholders (Freeman, 1984) determinando el marco de la mayoría de las investigaciones sobre diversidad de género y RSC. La misma extiende el problema de la agencia a una relación multilateral con diversos stakeholders (Prado-Lorenzo & García-Sánchez, 2010). La independencia de los miembros se aborda como consecuencia de la diversidad de género, que mejora la gestión de las relaciones con los diferentes stakeholders. Adicionalmente, un número significativo de investigaciones hacen referencia a la Teoría de dependencia de recursos (Pfeffer & Salancik, 1978) para predecir la relación entre la presencia de mujeres en el consejo y la RSC. Desde esta perspectiva, la diversidad de género aporta diferentes perspectivas, habilidades y recursos a los consejos (e.g. atributos personales, experiencias y valores) que mejoran su desempeño. A mayor diversidad en el consejo, mejor acceso a recursos, minimizando la dependencia de los recursos del entorno, proporcionando diferentes puntos de vista, asesoramiento, legitimidad, contactos empresariales y canales de información (Terjesen et al., 2009; Pfeffer & Salancik, 1978) que desembocan en una mejora de la dinámica en la toma de decisiones con respecto a la adopción de políticas de RSC (Cullinan, Mahoney, & Roush, 2019).

Adicionalmente, si bien los investigadores han comenzado a centrar sus investigaciones en los fundamentos de la Teoría de la Masa Crítica para explicar el impacto de la diversidad de género en los consejos de administración y las cuestiones de RSC (Atif et al., 2020; Wei et al., 2017), los resultados no son concluyentes.

Si bien ha surgido la Teoría de la masa crítica como paradigma que da respuesta a la divergencia de resultados, los investigadores han comenzado a centrarse en identificar factores moderadores en la relación diversidad de género en el consejo de administración y la sostenibilidad, concretando nuevas áreas de especialización dentro de esta línea de investigación. La inconsistencia en la evidencia empírica puede atribuirse a moderadores, como factores de contexto organizacional e institucional, que podrían disminuir o potenciar los efectos positivos de la representación femenina en los consejos (Fernandez et al., 2019). En este sentido, los investigadores han considerado diferentes variables como moderadoras de dicha relación. Factores institucionales como la regulación y protección del inversor en el sector bancario (García-Sánchez et al., 2018) pueden jugar un papel significativo en el efecto de la diversidad de género en el compromiso con la RSC. Resultados similares obtienen Byron & Post (2016) considerando diversas características a nivel país. Asimismo, el contexto en el que opera una empresa también podría moderar la relación positiva entre la diversidad de género y las políticas sociales y medioambientales de las empresas. Así, una variable moderadora medida en términos de probabilidad de creación de contaminación (Li et al., 2017) tendría un efecto negativo sobre dicha relación. Otros autores sugieren que la composición y estructura del consejo de administración también podrían moderar la influencia que ejerce la presencia de mujeres sobre la responsabilidad empresarial. Si la estructura del consejo es diversa, en cuanto a su tamaño, independencia, directores externos y dualidad de liderazgo, se obtiene un efecto positivo de la presencia de mujeres en el consejo y la performance social de las empresas (Hafsi & Turgut, 2013). Una mayor presencia de directores externos se asocia con resultados sociales más favorables (Post et al., 2011) y podría reforzar positivamente la contribución de las mujeres en el desempeño social corporativo (Macaulay et al., 2018). También, el impacto positivo de la presencia de al menos tres mujeres en el consejo sobre la calidad de la divulgación de RSC se ve reforzado cuanto mayor sea el bagaje educacional, habilidades y experiencia de sus miembros (Amorelli & García-Sánchez, 2020).

De esta manera, podemos concluir que actualmente se está produciendo un cambio de paradigma en los marcos teóricos que sustentan estas investigaciones con el fin de

profundizar en los entornos organizacionales e institucionales que favorecen las ventajas asociadas a la presencia de mujeres en el órgano responsable de la estrategia empresarial.

RESUMEN CAPÍTULO II EN ESPAÑOL

Este capítulo tiene como objetivo examinar dos cuestiones estrechamente relacionadas. Primero, la relación entre la presencia de mujeres en el consejo de administración y la revelación de información sobre RSC, centrándose en la masa crítica necesaria de este grupo minoritario. Segundo, el rol moderador del capital humano de los miembros del consejo - antecedentes, habilidades y experiencia de los consejeros - que podría favorecer las características intrínsecas de las mujeres por el efecto cognitivo de igualdad de sus miembros.

En primer lugar, se busca analizar las condiciones necesarias para que los beneficios tradicionalmente asignados a la diversidad de género, de acuerdo con la Teoría de dependencia de los recursos y las Teorías de la identidad social, puedan conducir a mejores prácticas informativas de RSC. Por lo tanto, es interesante identificar en qué condiciones las mujeres consejeras imponen sus estereotipos e identidades femeninas en la política de divulgación de RSC.

En referencia a la Teoría de dependencia de los recursos, las mujeres consejeras aportan valores y experiencias profesionales diferentes a los hombres y son más propensas a representar el estereotipo femenino (i.e. comportamiento empático y más sensible socialmente) lo que permite mejorar el desempeño social de las empresas (Boulouta, 2013). De acuerdo con la Teoría de la identidad social (Tajfel & Turner, 1979) los individuos se categorizan como proceso de orden y simplificación de la realidad social, utilizando atributos demográficos, como el género, la raza o la edad, para clasificarse tanto a ellos mismos como a otros, entre varias categorías sociales (e.g. consejeras y consejeros) y poseen una identidad social basada en su pertenencia a dichos grupos o categorías. Al definirse a sí mismos en términos de las membresías de grupo el comportamiento de los individuos se ve afectado por la pertenencia a las categorías sociales con las que se identifican (Ashforth & Mael, 1989). Por lo tanto, la identidad de género se constituye indudablemente como una de las principales formas de división social que explica las implicancias diferenciales que existen en el seno de los órganos empresariales en los que se toman decisiones, tales como el consejo de administración. Esto lleva a que las mujeres en los consejos tiendan a actuar en concordancia con el estereotipo femenino (Boulouta, 2013) aportando diferentes puntos de vista y heterogeneidad al proceso de toma de decisiones y pueden ejercer influencia sobre las decisiones relativas a ciertas prácticas de organización como el desempeño en RSC y sus políticas de divulgación (Nielsen & Huse, 2010a). Una mayor presencia de mujeres en el consejo de administración parece influir positivamente en el alcance de la divulgación social,

confirmando la percepción de que las mujeres son más sensibles a las preocupaciones sociales (Giannarakis et al., 2014), con ello mejoran la relación con los stakeholders y promueven el comportamiento ético de las empresas, favoreciendo y promoviendo la transparencia informativa.

En base a lo anteriormente expuesto, la evidencia previa condice que a medida que aumenta la diversidad de género en el consejo, más amplio es el compromiso de una empresa con las políticas y prácticas relevantes para la RSC (Bear et al., 2010; Cook & Glass, 2017), favoreciendo y promoviendo la transparencia informativa.

Es importante considerar que la integración de las mujeres en los consejos constituye una pequeña minoría, por lo que los consejos de administración continúan siendo entornos dominados por hombres. En este contexto, los individuos tienden a exhibir un sesgo favorable hacia otros que perciben como miembros de su grupo, afectando la toma de decisiones individual, por lo que generalmente habrá una tendencia a escuchar más las opiniones de los miembros de la mayoría (e.g., hombres) y rechazar las ideas que provienen de los representantes de las minorías (e.g., mujeres) (Mathisen, Ogaard, & Marnburg, 2013). Bajo estas circunstancias los beneficios propuestos de la diversidad de género en la divulgación voluntaria de RSC tienen menos posibilidades de materializarse (Hillman et al., 2008). Desde la perspectiva de la Teoría de la Masa Crítica, para comprender el impacto de la diversidad de género en los consejos en la divulgación voluntaria de RSC es importante considerar no solo su presencia sino también su número (Fernandez-Feijoo et al., 2014; Torchia et al., 2011). La teoría de la masa crítica postula que son necesarias tres o más mujeres para superar las antedichas limitaciones, así las mujeres tendrán más probabilidad de que sus opiniones sean escuchadas y apoyadas por la mayoría, ejerciendo mayor influencia en la toma de decisiones sobre las políticas y prácticas corporativas de RSC (Cook & Glass, 2017).

Los argumentos anteriores nos permiten sustentar la siguiente hipótesis: “las mujeres ejercen un efecto positivo en la divulgación de RSC cuando alcanzan una masa crítica en el consejo”.

Adicionalmente, se introduce al análisis el clima psicológico del consejo, conocido como *boardplace*. Es necesario que exista un clima que favorezca la inserción de las mujeres y no limite su contribución potencial a la toma de decisiones del consejo. Se entiende que el capital humano de los miembros asociado a sus antecedentes, habilidades y experiencia podría reflejar un entorno contextual en el consejo donde las mujeres tienen la percepción de ser miembros iguales del consejo (Bear et al., 2010) y debido a estas características intangibles,

mejorar la discusión de grupo y la consideración de diferentes opiniones en el proceso de toma de decisiones (Van Knippenberg et al., 2004).

Este trabajo vincula el "clima psicológico" del consejo con el capital humano de sus miembros. Dada la influencia del *boardplace* en el compromiso de las consejeras sobre la divulgación de la RSC, se investiga en mayor profundidad cómo el contexto del consejo influye en las mujeres y en su compromiso de divulgación de la RSC.

En este sentido Bear et al. (2010) afirman que el capital humano del consejo está asociado con la experiencia, el conocimiento y las capacidades de sus miembros; estos son recursos que favorecen la comprensión y la solución efectiva de los problemas por parte del consejo, así como el compromiso con la RSC, que puede extenderse a la divulgación. Así, como determinantes del *boardplace*, nos centramos en los antecedentes educativos, las habilidades y la experiencia de los miembros del consejo. Esperamos que la estrategia de divulgación de RSC se pueda beneficiar de los antecedentes, habilidades y experiencia de los miembros del consejo si las mujeres son percibidas como miembros iguales y pueden reforzar el compromiso de RSC de la empresa.

Los argumentos anteriores nos permiten sustentar la siguiente hipótesis: “los antecedentes educativos, las habilidades y la experiencia de los miembros del consejo refuerzan positivamente el compromiso de divulgación de RSC cuando las consejeras representan una masa crítica en el consejo”.

Para probar las hipótesis de investigación, se considera una muestra de firmas internacionales listadas para el período 2007 a 2016 y se proponen diferentes regresiones de datos de panel que permiten controlar la heterogeneidad inobservable y la endogeneidad. Los hallazgos de este estudio revelan el impacto positivo de la diversidad de género en el consejo en la revelación voluntaria de información socialmente responsable cuando las mujeres están representadas en el consejo y alcanzan una masa crítica de al menos tres mujeres. El resultado principal revela el papel moderador de los antecedentes, las habilidades y la experiencia de los miembros del consejo. A mayor capital humano, mayor es el efecto positivo de las mujeres consejeras en la promoción de las políticas de divulgación de RSC.

Estos resultados se complementan con un análisis de la relación entre la diversidad de género en el consejo de administración, la divulgación de la RSC y el rol moderador del capital humano del consejo cuando una consejera alcanza la posición de presidente del consejo. La evidencia del análisis complementario muestra que el rol femenino no permanece cuando las mujeres logran una posición de liderazgo; es decir, las mujeres adoptan un estereotipo

masculino en la divulgación voluntaria de información cuando también son presidentes del consejo, independientemente del capital humano de los miembros del consejo. Se evidencia que las mujeres que siguen carreras gerenciales generalmente rechazan los estereotipos femeninos y adoptan características masculinas que son más valoradas en posiciones de liderazgo. El cargo de presidente cambia el estereotipo femenino y su enfoque en las divulgaciones de RSC, independientemente del capital humano de los miembros del consejo.

RESUMEN CAPÍTULO III EN ESPAÑOL

Las innumerables consecuencias sanitarias, económicas y sociales provocadas por la Covid-19 y las medidas de contención necesarias para frenar su transmisibilidad afectan a organizaciones, familias e individuos (Overberg et al., 2021), los cuales, desde un enfoque empresarial, se configuran como los grupos de interés afectados por esta pandemia, cuyas necesidades deben ser tenidas en cuenta por las compañías dentro de sus estrategias de sostenibilidad.

Estos desafíos ocurren en un entorno de desaceleración económica, en el que las compañías tienen que enfrentarse a enormes amenazas, surgiendo con fuerza un debate que había perdido intensidad, “shareholderism” versus “stakeholderism” (Bebchuk and Tallarita, 2020; Mayer, 2020), tratando de reflexionar sobre si las empresas deben maximizar el valor de los accionistas o el bienestar de los stakeholders. En este sentido, aunque no existe unanimidad debido a los costes de agencia (Demers et al., 2020; Bae et al., 2021), en general, la literatura previa sugiere que el stakeholderism aumenta el valor de la empresa para los shareholders (i.e., Deng et al., 2013; Borghesi et al., 2014; Flammer, 2015, 2021; Ferrell et al., 2016; Lins et al., 2017; Kim et al., 2019; Cao et al., 2019; Albuquerque et al., 2020; Dai et al., 2021; Gao et al., 2021), especialmente en periodos de crisis (i.e., Bénabou and Tirole, 2010; Cheng et al., 2014; Di Giuli and Kostovetsky, 2014; Masulis and Reza, 2015).

Los resultados de los trabajos que han analizado las reacciones empresariales en los momentos más duros de la pandemia sugieren la existencia de decisiones muy dispares entre sí respecto a la preferencia que han otorgado a los intereses de los shareholders y stakeholders (García-Sánchez and García-Sánchez, 2020; Talbot y Ordoñez-Ponce, 2020; Mahmud et al., 2021; Gürlek y Kılıç, 2021), siendo necesario ampliar el conocimiento respecto a lo que han hecho las empresas para responder a esta crisis mundial (Carroll, 2021) y los motivos que han impulsado a algunas empresas a ser más éticas y socialmente responsables (He and Harris, 2020).

En esta línea, sin considerar contextos de recesión, un relevante número de académicos han centrado sus investigaciones en conocer el papel que las mujeres juegan en puestos de alto nivel en materia de sostenibilidad (i.e., Amorelli y García-Sánchez, 2020; Bannò et al., 2021; Campopiano et al., 2022; Zhao et al., 2022), en especial, respecto a las funciones que desempeñan dentro del consejo de administración, debido a que: (i) en el seno del consejo de administración se toman las decisiones estratégicas de las empresas, incluidas las

relacionadas con la sostenibilidad; (ii) es el órgano responsable de la supervisión de las actuaciones de los directivos; y (iii) en los últimos años se ha presenciado un incremento de la presencia de consejeras como consecuencia de las exigencias vigentes en numerosos países respecto a la paridad de género que debe caracterizar a este órgano.

Además, el interés por estudiar el rol que las mujeres consejeras han tenido respecto a las decisiones empresariales que se han tomado durante la Covid-19, está justificado por la tradicional diferencia entre los roles que hombres y mujeres adoptan en la esfera pública y privada, la cual se ha exacerbado durante la pandemia. Por poner un ejemplo, las mujeres han sido las que han estado al frente de la batalla contra la Covid-19, ya que, según la OCED (2020), representan casi el 70 % de la fuerza laboral en el sector de la atención de la salud a nivel mundial. Además, durante el confinamiento, las mujeres han asumido mayores obligaciones domésticas que los hombres (i.e., Hipp and Bünning, 2021), incrementando la diferencia de hasta diez veces lo previamente identificado por la OCDE (2019) en el Índice de Instituciones Sociales y Género del Centro de Desarrollo (2019). Así, entendemos que una potencial explicación de las divergencias en el comportamiento empresarial observado durante la pandemia puede explicarse por la prevalencia de criterios económicos e individualistas vs. interés colectivo o bien común, que caracteriza a los géneros, tal y como se ha expuesto de manifiesto en las decisiones profesionales y familiares señaladas. Por otra parte, diversos estudios han puesto de manifiesto que, aunque la representación de las mujeres en política es limitada, su liderazgo ha permitido respuestas más eficaces, especialmente enfocada en una mejor reconstrucción de los países (UN Women, 2021).

En este sentido, el objetivo de este trabajo se enfoca en ampliar el conocimiento del efecto que las capacidades, competencias y otros rasgos cognitivos relacionados con el género de los miembros del consejo (Akhmetshin et al. 2018; Ferramosca y Verona, 2020) puede suponer respecto a las decisiones que las compañías han tomado en materia de sostenibilidad en 2020, un año de desaceleración económica, vulnerabilidad sanitaria y aumento de la desigualdad social. Basándonos en la teoría de la identidad social, argumentamos que aquellos consejos con un mayor número de asientos ocupados por mujeres habrán sido más favorables a mantener las iniciativas de sostenibilidad para hacer frente a las nuevas demandas derivadas de la pandemia Covid-19.

Al respecto, sabemos que la identidad social de las mujeres consejeras es un aspecto importante de su autoconcepto, lo que las lleva a hacer esfuerzos para conseguir que el sentido de esa identidad grupal se mantenga, presentando una alta motivación hacia la sostenibilidad y acción social. Sin embargo, la evidencia empírica previa no resulta

concluyente. En el presente trabajo extendemos las contribuciones que nos preceden, analizando el impacto que el afecto incidental que la Covid-19 supone. Para ello, se observará si los efectos de la identidad social asociados a la diversidad de género son potenciados dependiendo de las características del entorno estratégico en el que se encuadra la empresa. Defendiendo que, en el caso de la pandemia, el afecto incidental sería consecuencia de que las mujeres siguen siendo un colectivo minoritario que reacciona ante las amenazas sanitarias, económicas y sociales de acuerdo con los valores determinados por su pertenencia al endogrupo más vulnerable.

Para una muestra no balanceada de 4.821 firmas internacionales en el periodo 2015-2020, los resultados obtenidos son indicativos de la incidencia del afecto incidental sobre la identidad social del endogrupo de consejeras, respecto a las decisiones que se han tomado en materia de sostenibilidad. Al respecto, los compromisos empresariales con sus grupos de interés se han visto afectados negativamente por la pandemia. Este retroceso ha sido inferior en empresas con consejos más diversos, en especial, respecto a las políticas de buen gobierno, garantizando el compromiso social y medioambiental de ejercicios previos. Evidencia que confirma las diferencias de roles por género que se han puesto de manifiesto en varios trabajos enfocados a analizar el papel que las féminas trabajadoras han asumido en los periodos de confinamiento respecto a diferentes obligaciones familiares, en especial, lo relativo al cuidado de hijos y mayores (Andrew et al., 2020; Carlson et al., 2020; UN Women, 2020a y 2020b; Carli, 2020).

Nuestro trabajo contribuye al debate académico respecto al papel que las mujeres desempeñan dentro de un órgano que asume importantes responsabilidades empresariales en relación con la sostenibilidad. En este sentido, diversas investigaciones que han sintetizado el conocimiento actual indican que el contexto en el que opera la empresa modera la relación de diversidad del consejo y la sostenibilidad, considerando principalmente el efecto institucional a nivel país (i.e., Endrikat et al., 2020; Majumder et al., 2017; García-Sánchez et al., 2021). Así, nuestro trabajo complementa el conocimiento existente incorporando el efecto moderador que un entorno de recesión económica y crisis sanitaria ha supuesto en las decisiones tomadas por estas profesionales y si difieren de las de sus homólogos masculinos, confirmando los argumentos de la teoría social y la existencia de un afecto incidental respecto al endogrupo femenino. Adicionalmente, contribuimos al avance teórico identificando las principales lagunas de investigación y sugerir futuras vías de investigación. Estos aspectos son esenciales para avanzar en el conocimiento de cómo la presencia de mujeres en puestos de liderazgo afecta a la estrategia empresarial en general y la sostenibilidad, en particular.

Metodológicamente, para aislar mejor el papel de la identidad social de género y el afecto incidental asociado a la pandemia respecto a la sostenibilidad, incluimos varias variables a nivel de empresa e institución. Además, debido al uso de un panel de datos, se ha controlado la posible causalidad relativa a la posibilidad de que las empresas más sostenibles aumenten el número de consejeras y la heterogeneidad inobservable que lleva a comportamientos temporales homogéneos en cada empresa y otros factores no observados que puede provocar que muchas compañías respondan de manera similar en el tiempo.

CONCLUSIONES GENERALES

En el mundo de los negocios modernos, la responsabilidad social corporativa y la divulgación voluntaria de información son elementos esenciales. Diversas investigaciones sugieren que la diversidad de género contribuye a mejorar los mecanismos de gobierno corporativo y parece ser un factor importante para mejorar el desempeño social y medioambiental e informar sobre el mismo. Podría asumirse que los consejos de administración que cuentan con presencia de mujeres tienen más probabilidades de tomar decisiones estratégicas tendientes a mejorar la transparencia informativa en materia de sostenibilidad y satisfacer las demandas de los principales grupos de interés.

En el primero de los tres trabajos de investigación que componen esta tesis doctoral, se realiza una revisión de la literatura existente sobre diversidad de género y la RSC, buscando proporcionar una visión general del estado del arte para facilitar futuras líneas de investigación. Así, mediante la realización de análisis bibliométrico y de contenido de los artículos académicos publicados sobre mujeres en consejos de administración, desempeño de RSC y divulgación en las revistas más prestigiosas, se contribuye a una mayor comprensión del rol de la diversidad de género en los consejos y su relación con la responsabilidad empresarial y la divulgación de sus prácticas.

A pesar de que la gran mayoría de las publicaciones académicas encuentran una asociación positiva al estudiar la antedicha relación, encontramos investigaciones que arrojan resultados no-significativos o negativos, por lo que en general los resultados no son totalmente concluyentes, siendo necesario profundizar en los motivos que explican estas diferencias.

A través de nuestro análisis de contenido, encontramos que hay tres marcos teóricos principales que guían la investigación empírica en la relación entre el gobierno corporativo y responsabilidad empresarial: la Teoría de Agencia, la Teoría de los Stakeholders y la Teoría de Dependencia de Recursos. No obstante, estos marcos comienzan a quedar en desuso a favor de teorías más enfocadas en determinar la composición ideal del consejo de administración que favorezca la toma de decisiones alineada a los nuevos valores de la sociedad. En este sentido, aunque los investigadores han comenzado a centrar sus investigaciones en los fundamentos de la Teoría de la Masa Crítica, los resultados no son siempre concluyentes.

En segundo lugar, existe un predominio en considerar la RSC como un constructo global, pero debe tenerse en cuenta que es un concepto multidimensional cuyo análisis conjunto

podría impedir determinar el verdadero performance corporativo y el papel que la diversidad de género puede desempeñar en las diferentes dimensiones de la RSC.

En tercer lugar, encontramos una línea de investigación emergente centrada en el estudio de los efectos moderadores de la relación entre la diversidad de género en los consejos de administración y la RSC o su divulgación, siendo necesario profundizar en los factores organizativos e institucionales que refuercen las aptitudes y capacidades femeninas.

En el segundo trabajo de investigación que se presenta en el segundo capítulo, se realiza un estudio empírico de los efectos de la diversidad de género en el consejo en la divulgación de información social y medioambiental, centrándose en que la representación femenina alcance una masa crítica (de al menos tres mujeres) e introduce al análisis el rol moderador del capital humano de los miembros del consejo.

De este trabajo obtienen resultados muy interesantes. En primer lugar, se confirma que a medida que aumenta el número de mujeres en el consejo se potencia el estereotipo femenino en torno a mejorar la transparencia informativa de la RSC. Los hallazgos sugieren que un aumento en el número de mujeres desde tokens a una masa crítica (de al menos tres mujeres) proporciona una influencia efectiva en la calidad de la transparencia informativa empresarial.

En segundo lugar, este efecto es mayor cuando los miembros del consejo poseen mayor formación, habilidades y experiencia. El capital humano de los miembros del consejo refuerza el impacto de las mujeres en la divulgación de información socialmente responsable. De esta manera, confirmamos la influencia del “clima psicológico” o *boardplace* en el proceso de toma de decisiones, que influye en la percepción de igualdad de los miembros del consejo y por lo tanto en la política de divulgación de RSC.

En tercer lugar, respecto al análisis complementario de la mujer como presidente, proporcionamos clara evidencia de que las mujeres consejeras adoptan un estereotipo masculino en la divulgación voluntaria de información cuando ocupan también la posición de presidente, independientemente del capital humano de los miembros del consejo. Apoyando entonces que las similitudes en los estilos de liderazgo de hombres y mujeres son mayores que sus diferencias.

Por último, en el tercer capítulo, el tercer trabajo realiza una investigación empírica de los efectos de la diversidad de género en el consejo de administración en el compromiso con la sostenibilidad en el contexto de pandemia, analizando el impacto que supone el efecto incidental de la Covid-19. Las medidas de contención de la Covid-19 conllevan externalidades sanitarias y sociales negativas y de desaceleración económica con importantes

consecuencias para las compañías, las cuales debieron configurar y adaptar sus estrategias de sostenibilidad.

En este escenario, se busca analizar si los efectos de la identidad social asociados a la diversidad de género son potenciados, provocando que las consejeras reaccionen ante las amenazas sanitarias, económicas y sociales de acuerdo con los valores determinados por su pertenencia al endogrupo y fomenten un mayor compromiso empresarial con la sostenibilidad.

La evidencia obtenida confirma las hipótesis planteadas. Observando que el impacto negativo que la pandemia ha supuesto sobre el nivel de compromiso socialmente responsable es menor en empresas que cuentan con mayor presencia de mujeres en sus consejos de administración.

El efecto negativo que la Covid-19 supone sobre las cuestiones de sostenibilidad ha afectado principalmente a las políticas de buen gobierno, provocando una involucración femenina no observada con anterioridad. Además, las consejeras garantizan el compromiso social y medioambiental de ejercicios previos, siendo especialmente relevante su contribución en compañías cuya cifra de negocios ha sido más duramente golpeada por la pandemia.

Por último, este trabajo complementa el conocimiento existente incorporando el efecto moderador que un entorno de recesión económica y crisis sanitaria supone en las decisiones tomadas por las consejeras y si difieren de las de sus homólogos masculinos, confirmando los argumentos de la teoría social y la existencia de un afecto incidental respecto al endogrupo femenino.

El conocimiento generado en los trabajos de investigación realizados conlleva diferentes implicaciones teóricas y prácticas que se detallan a continuación, estando sujetos a un conjunto de limitaciones que deben ser abordadas en estudios futuros.

Contribuciones teóricas

Esta tesis doctoral permite avanzar en la comprensión del papel que desempeñan las consejeras respecto a la divulgación de información sobre RSC frente a la evidencia previa no concluyente, reforzando el debate sobre la masa crítica de mujeres en los consejos, incorporando la importancia de su número. Por otra parte, mediante el análisis del rol moderador que desempeñan la formación, habilidades y experiencia de los miembros como capital humano del consejo, proporcionamos evidencia sobre como el capital humano crea un *boardplace* favorable para las mujeres en el consejo. Adicionalmente, se examina el papel

de las mujeres cuando ocupan puestos de liderazgo, avanzando en los diferentes entornos en que se desenvuelven las mujeres en los consejos.

Además, ofrece una explicación más completa del impacto de las mujeres consejeras sobre la responsabilidad empresarial en diferentes contextos y revelamos la existencia de áreas de mayor influencia dentro de las tres dimensiones más importantes de la sostenibilidad. Así, determinando el impacto de las mujeres en el consejo a través de una perspectiva de género también se explican los hallazgos en relación a la literatura previa, proporcionando explicaciones con respecto a la priorización de temas con un impacto más económico que social por parte de las consejeras en un momento de recesión económica derivada de una crisis sanitaria a nivel mundial.

Contribuciones prácticas

Para gerentes, propietarios e inversores es importante conocer el tamaño del grupo minoritario de mujeres necesario para reforzar y mejorar su compromiso con los grupos de interés y la política de divulgación en materia de sostenibilidad. Estas decisiones conllevan beneficios a las compañías que pueden materializarse en un mayor desempeño, ventajas financieras y una mejor imagen y reputación, entre otros. Además, deben ser conscientes del efecto que el capital humano de los consejeros supone y que favorece la percepción de que las consejeras son iguales a sus compañeros. Los resultados de este trabajo contribuyen a estas demandas y conocimientos, aportando evidencia sobre cómo el género, la formación, la trayectoria, las habilidades y la experiencia de los consejeros favorecen el proceso de toma de decisiones económicas, sociales, medioambientales y de buen gobierno.

Además, determinados las estructuras de gobierno corporativo que podrían fomentar diferentes compromisos respecto a las distintas dimensiones o áreas de la sostenibilidad. En este sentido, los agentes económicos pueden conocer en mayor medida las estrategias de sostenibilidad empresarial y como pueden verse afectadas ante eventos imprevisibles, considerando la composición del principal órgano de decisiones. Adicionalmente, permite conocer la empatía de los consejeros y su percepción de la sostenibilidad y sus prioridades.

Finalmente, el trabajo también evidencia resultados relevantes para los organismos reguladores sobre la presencia de mujeres en los consejos de administración. En la actualidad, existe una tendencia mundial a cambiar la composición de este órgano. El desarrollo de buenas prácticas de gobierno corporativo y los cambios legales o regulatorios tienen como objetivo aumentar la transparencia con respecto a la representación de las mujeres en los consejos y en los puestos de alta dirección. Aunque algunos países europeos han establecido

acciones para promover la inclusión de mujeres (por ejemplo, Francia, Italia, Noruega y España), el porcentaje de mujeres en puestos de poder sigue siendo bajo.

Limitaciones y futuras líneas de investigación

Desde el plano conceptual, si bien se identifican atributos de los miembros del consejo que contribuyen al efecto de las mujeres sobre la divulgación de RSC, existen otros que podrían examinarse como moderadores, como, por ejemplo: la edad, las capacidades gerenciales o la nacionalidad.

Por otra parte, aun cuando el uso de una muestra internacional es una de las contribuciones de esta tesis doctoral a la academia, la misma denota un sesgo hacia las empresas de Estados Unidos y Reino Unido, además de considerar únicamente empresas cotizadas.

Otra limitación importante es la globalidad en la medición de las dimensiones de sostenibilidad consideradas, siendo necesario abordar sus componentes de manera más desagregada y vinculada a las demandas surgidas por la pandemia. Adicionalmente, sería recomendable recopilar datos primarios a través de encuestas y/o entrevistas con los consejeros para conocer su opinión e influencia en los procesos de toma de decisiones. Finalmente, sería recomendable abordar esta investigación en muestras de mayor tamaño para diferentes países determinados por la cultura y los estereotipos de género con el objetivo de contrastar si estos comportamientos estereotipados se mantienen en entornos con diferentes niveles de igualdad de género o con marcos legislativos que suponen la existencia de cuotas de género en los consejos.

REFERENCIAS

- Ajaz, A., Shenbei, Z., & Sarfraz, M. (2020). Delineating the influence of boardroom gender diversity on corporate social responsibility, financial performance and reputation. *LogForum: Scientific Journal of Logistics*, 16(1), 61–74.
- Ajeigbe, K., & Ganda, F. (2023). The Implications of the Pandemic for the Corporate Governance, Remuneration and Sustainability Performance of South African Listed Companies. *International Journal of Innovative Research and Scientific Studies*, 6(1), 174–184. <https://doi.org/10.53894/ijrsv6i1.1174>
- Akhmetshin, E., Danchikov, E., Polyanskaya, T., Plaskova, N., Prodanova, N., & Zhiltsov, S. (2018). Analysis of innovation activity of enterprises in modern business environment. *Journal of Advanced Research in Law and Economics*, 8(8), 2311.
- Alazzani, A., Hassanein, A., & Aljanadi, Y. (2017). Impact of gender diversity on social and environmental performance: Evidence from Malaysia. *Corporate Governance: The International Journal of Business in Society*, 17(2), 266–283.
- Albuquerque, R., Koskinen, Y., Yang, S., & Zhang, C. (2020). Resiliency of environmental and social stocks: an analysis of the exogenous COVID-19 market crash. *Review of Corporate Financial Studies*, 9(3), 593–621.
- Ali Gull, A., Hussain, N., Akbar Khan, S., Nadeem, M., & Mansour Zalata, A. (2022). Walking the talk? A corporate governance perspective on corporate social responsibility decoupling. *British Journal of Management*.
- Allemand, I., Bédard, J., Brullebaut, B., & Deschênes, J. (2022). Role of Old Boys' Networks and Regulatory Approaches in Selection Processes for Female Directors. *British Journal of Management*, 33(2), 784–805.
- Al-Najjar, B., & Salama, A. (2022). Mind the gap: Are female directors and executives more sensitive to the environment in high-tech us firms? *Technological Forecasting and Social Change*, 184, 122024.
- Al-Qahtani, M., & Elgharbawy, A. (2020). The effect of board diversity on disclosure and management of greenhouse gas information: Evidence from the United Kingdom. *Journal of Enterprise Information Management*. <https://doi.org/10.1108/JEIM-08-2019-0247>
- Al-Shaer, H., & Zaman, M. (2016). Board gender diversity and sustainability reporting quality. *Journal of Contemporary Accounting & Economics*, 12(3), 210–222. <https://doi.org/10.1016/j.jcae.2016.09.001>
- Alon, T., Doepke, M., Olmstead-Rumsey, J., Tertilt, M. (2020). The impact of COVID-19 on gender equality, Working paper [26947], National Bureau of Economic Research, Cambridge, MA, available at: www.nber.org/papers/w26947
- Amorelli, M. F., & García-Sánchez, I. M. (2020). Critical mass of female directors, human capital, and stakeholder engagement by corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 27(1), 204–221.
- Amorelli, M. F., & García-Sánchez, I. M. (2021). Trends in the dynamic evolution of board gender diversity and corporate social responsibility. *Corporate Social Responsibility and Environmental Management*, 28(2), 537–554.

- Amorelli, M. F., & García-Sánchez, I. M. (2023). Leadership in heels: Women on boards and sustainability in times of COVID-19. *Corporate Social Responsibility and Environmental Management*.
- Amor-Esteban, V., Galindo-Vicente, P., & García-Sánchez, I. M. (2020). Bias in composite indexes of CSR practice: An analysis of CUR matrix decomposition. *Corporate Social Responsibility and Environmental Management*, 27(4), 1914–1936. <https://doi.org/10.1002/csr.1936>
- Amor-Esteban, V., García-Sánchez, I. M., & Galindo-Vicente, P. (2019). A multivariate proposal for a national corporate social responsibility practices index (NCSRPI) for international settings. *Social Indicators Research*, 140, 435–452. <https://doi.org/10.1007/s11205-017-1782-2>
- Amran, A., Lee, S. P., & Devi, S. S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, 23(4), 217–235. <https://doi.org/10.1002/bse.1767>.
- Andrew, A., Cattan, S., Dias, M. C., Farquharson, C., Kraftman, L., Krutikova, S., Phimister, A., & Sevilla, A. (2020). How are mothers and fathers balancing work and family under lockdown? Institute for Fiscal Studies <https://ifs.org.uk/publications/14860>
- Anggadwita, G., Permatasari, A., Alamanda, D., & Profityo, W. (2022). Exploring Women's Initiatives for Family Business Resilience during the COVID-19 Pandemic. *Journal of Family Business Management*. <https://doi.org/10.1108/JFBM-02-2022-0014>
- Apesteagua, J., Azmat, G., & Iriberry, N. (2012). The impact of gender composition on team performance and decision making: Evidence from the field. *Management Science*, 58(1), 78–93.
- Arayakarnkul, P., Chatjuthamard, P., & Treepongkaruna, S. (2022). Board gender diversity, corporate social commitment and sustainability. *Corporate Social Responsibility and Environmental Management*, 29(5), 1706–1721.
- Arayssi, M., Dah, M., & Jizi, M. (2016). Women on boards, sustainability reporting and firm performance. *Sustainability Accounting, Management and Policy Journal*, 7(3), 376–401. <https://doi.org/10.1108/SAMPJ-07-2015-0055>
- Ardito, L., Dangelico, R. M., & Messeni Petruzzelli, A. (2021). The link between female representation in the boards of directors and corporate social responsibility: Evidence from B corps. *Corporate Social Responsibility and Environmental Management*, 28, 704–720. <https://doi.org/10.1002/csr.2082>
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2), 277–297. <https://doi.org/10.2307/2297968>
- Arfken, D. E., Bellar, S. L., & Helms, M. M. (2004). The ultimate glass ceiling the presence of revisited: Women boards. *Journal of Business Ethics*, 50(2), 177–186. <https://doi.org/10.1023/B:BUSI.0000022125.95758.98>
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Journal of Business Ethics*, 14(1), 20–39. <https://doi.org/10.1097/EDE.ObO13e31812e5535>
- Atena, F. W., & Tiron-Tudor, A. (2020). Gender as a dimension of inequality in accounting organizations and developmental HR strategies. *Administrative Sciences*, 10(1), 1. <https://doi.org/10.3390/admsci10010001>

- Athanasopoulou, A., Moss-Cowan, A., Smets, M., & Morris, T. (2018). Claiming the corner office: Female CEO careers and implications for leadership development. *Human Resource Management*, 57(2), 617–639. <https://doi.org/10.1002/hrm.21887>
- Athenstaedt, U., Heinzle, C., Lerchbaumer, G. (2008). Gender subgroup selfcategorization and gender role self-concept. *Sex Roles*, 58(3-4): 266-278.
- Atif, M., Alam, M. S., & Hossain, M. (2020). Firm sustainable investment: Are female directors greener? *Business Strategy and the Environment*, (June), 1–21. <https://doi.org/10.1002/bse.2588>
- Azmat, F., & Rentschler, R. (2017). Gender and Ethnic Diversity on Boards and Corporate Responsibility: The Case of the Arts Sector. *Journal of Business Ethics*, 141(2), 317–336.
- Babío Arcay, M. R., & Muñio Vázquez, M. F. (2005). Corporate characteristics, governance rules and the extent of voluntary disclosure in Spain. *Advances in Accounting*, 21(05), 299–331. [https://doi.org/10.1016/S0882-6110\(05\)21013-1](https://doi.org/10.1016/S0882-6110(05)21013-1)
- Bae, K. H., El Ghouli, S., Gong, Z., & Guedhami, O. (2021). Does CSR matter in times of crisis? Evidence from the COVID-19 pandemic. *Journal of Corporate Finance*, 67, 101876.
- Bannò, M., Filippi, E., & Trento, S. (2021). Women in top echelon positions and their effects on sustainability: a review, synthesis and future research agenda. *Journal of Management and Governance*. <https://doi.org/10.1007/s10997-021-09604-7>
- Bansal, P., Grewatsch, S., & Sharma, G. (2021). How COVID-19 Informs Business Sustainability Research: It's Time for a Systems Perspective. *Journal of Management Studies*, 58, 602–606. <https://doi.org/10.1111/joms.12669>
- Barako, D. G., & Brown, A. M. (2008). Corporate social reporting and board representation: Evidence from the Kenyan banking sector. *Journal of Management and Governance*, 12(4), 309–324. <https://doi.org/10.1007/s10997-008-9053-x>
- BBC Mundo (2017). Marilyn Loden, la mujer que inventó la expresión techo de cristal (2017, 13 de diciembre). Available at: <https://www.bbc.com/mundo/noticias-42338736>
- Bear, S., Rahman, N., & Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics*, 97(2), 207–221.
- Bebchuk, L. A., & Tallarita, R. (2020). The illusory promise of stakeholder governance. *Cornell Law Review*, 106, 91–178.
- Becker, J., Ayman, R., & Korabik, K. (2002). Discrepancies in self/subordinates' perceptions of leadership behavior: Leader's gender, organizational context, and leader's self-monitoring. *Group and Organization Management*, 27(2), 226–244.
- Beji, R., Yousfi, O., Loukil, N., & Omri, A. (2021). Board Diversity and Corporate Social Responsibility: Empirical Evidence from France. *Journal of Business Ethics*, (0123456789). <https://doi.org/10.1007/s10551-020-04522-4>
- Bektur, C., & Arzova, S. B. (2022). The effect of women managers in the board of directors of companies on the integrated reporting: Example of Istanbul Stock Exchange (ISE) Sustainability Index. *Journal of Sustainable Finance & Investment*, 12(2), 638–654. <https://doi.org/10.1080/20430795.2020.1796417>

- Ben-Amar, W., Chang, M., & McIlkenny, P. (2017). Board gender diversity and corporate response to sustainability initiatives: Evidence from the carbon disclosure project. *Journal of business ethics*, 142(2), 369-383.
- Bénabou, R., & Tirole, J. (2010). Individual and corporate social responsibility. *Economica*, 77, 1–19.
- Bennouri, M., Chtioui, T., Nagati, H., & Nekhili, M. (2018). Female board directorship and firm performance: What really matters? *Journal of Banking and Finance*, 88, 267–291.
- Benschop, Y., Mills, J. H., Mills, A., & Tienari, J. (2012). Editorial: Gendering change: The next step. *Gender, Work and Organization*, 19(1), 1–9. <https://doi.org/10.1111/j.1468-0432.2011.00580.x>
- Bernardi, R. A., & Threadgill, V. H. (2010). Women directors and corporate social responsibility. *Electronic Journal of Business Ethics and Organization Studies*, 15(2), 15–21. <https://doi.org/10.1111/j.1468-0335.2009.00843.x>
- Bezemer, P.-J., Nicholson, G., & Pugliese, A. (2018). The influence of board chairs on director engagement: A case based exploration of boardroom decision-making. *Corporate Governance: An International Review*, 26 (October 2016), 1–16. <https://doi.org/10.1111/corg.12234>
- Bezemer, P.-J., Pugliese, A., Nicholson, G., & Zattoni, A. (2023). Toward a synthesis of the board-strategy relationship: A literature review and future research agenda. *Corporate Governance: An International Review*, 31(1), 178–197.
- Bhuiyan, M. B. U., Huang, H. J., & de Villiers, C. (2021). Determinants of environmental investment: Evidence from Europe. *Journal of Cleaner Production*, 292, 125990.
- Birindelli, G., Dell’Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. *Sustainability (Switzerland)*, 10(12), 1–20.
- Birindelli, G., Iannuzzi, A. P., & Savioli, M. (2019). The impact of women leaders on environmental performance: Evidence on gender diversity in banks. *Corporate Social Responsibility and Environmental Management*, 26(6), 1485–1499. <https://doi.org/10.1002/csr.1762>
- Boiral, O., & Henri, J. F. (2017). Is sustainability performance comparable? A study of GRI reports of mining organizations. *Business & Society*, 56(2), 283–317. <https://doi.org/10.1177/0007650315576134>
- Borghesi, R., Houston, J. F., & Naranjo, A. (2014). Corporate socially responsible investments: CEO altruism, reputation, and shareholder interests. *Journal of Corporate Finance*, 26, 164–181.
- Boukattaya, S., & Omri, A. (2021). Impact of board gender diversity on corporate social responsibility and irresponsibility: Empirical evidence from France. *Sustainability*, 13(9), 4712.
- Bose, S., Shams, S., Ali, M. J., & Mihret, D. (2022). COVID-19 impact, sustainability performance and firm value: international evidence. *Accounting and Finance*, 62, 597–643.
- Botero, J. C., Djankov, S., Porta, R. L., Lopez-de-Silanes, F., & Shleifer, A. (2004). The regulation of labor. *The Quarterly Journal of Economics*, 119(4), 1339–1382.

<https://doi.org/10.1162/0033553042476215>

- Boubaker, S., Cellier, A., Manita, R., & Saeed, A. (2020). Does corporate social responsibility reduce financial distress risk? *Economy Model*, 91, 835–851
- Boulouta, I. (2013). Hidden Connections: The Link Between Board Gender Diversity and Corporate Social Performance. *Journal of Business Ethics*, 113(2), 185–197.
- Bradshaw, P., & Wicks, D. (2000). The experiences of white women on corporate boards in Canada. In *Women on corporate boards of directors* (pp. 197–212). Dordrecht: Springer.
- Bristy, H. J., How, J., Verhoeven, P. (2020). Gender diversity: The corporate social responsibility and financial performance nexus. *International Journal of Managerial Finance*. <https://doi.org/10.1108/IJMF-04-2020-0176>
- Bruna, M. G., Đăng, R., Ammari, A., & Houanti, L. H. (2021). The effect of board gender diversity on corporate social performance: An instrumental variable quantile regression approach. *Finance Research Letters*, 40, 101734.
- Buallay, A., Hamdan, R., Barone, E., & Hamdan, A. (2022). Increasing female participation on boards: Effects on sustainability reporting. *International Journal of Finance & Economics*, 27(1), 111-124.
- Buertey, S. (2021). Board gender diversity and corporate social responsibility assurance: The moderating effect of ownership concentration. *Corporate Social Responsibility and Environmental Management*, 28(6), 1579-1590.
- Buil-Fabrega, M., del Alonso-Almeida, M., & Bagur-Femenias, L. (2017). Individual dynamic managerial capabilities: Influence over environmental and social commitment under a gender perspective. *Journal of Cleaner Production*, 151, 371–379.
- Byron, K., & Post, C. (2016). Women on Boards of Directors and Corporate Social Performance: A Meta-Analysis. *Corporate Governance: An International Review*, 24(4), 428–442.
- Cabeza-García, L., Fernández-Gago, R., & Nieto, M. (2018). Do board gender diversity and director typology impact CSR reporting?. *European Management Review*, 15(4), 559-575.
- Cabral, C., & Sasidharan, A. (2021). Do regulatory mechanisms affect corporate social performance? Evidence from emerging economies. *Journal of Cleaner Production*, 326, 129383.
- Cambrea, D. R., Paolone, F., & Cucari, N. (2023). Advisory or monitoring role in ESG scenario: Which women directors are more influential in the Italian context?. *Business Strategy and the Environment*.
- Campopiano, G., Gabaldon, P., & Gimenez-Jimenez, D. (2022). Women Directors and Corporate Social Performance: An Integrative Review of the Literature and a Future Research Agenda. *Journal of Business Ethics*, 182, 717–746. <https://doi.org/10.1007/s10551-021-04999-7>
- Campopiano, G., Rinaldi, F. R., Sciascia, S., & De Massis, A. (2019). Family and non-family women on the board of directors: Effects on corporate citizenship behavior in family-controlled fashion firms. *Journal of Cleaner Production*, 214(2019), 41–51. <https://doi.org/10.1016/j.jclepro.2018.12.319>

- Cao, J., Liang, H., & Zhan, X. T. (2019). Peer effects of corporate social responsibility. *Management Science*, 65, 5487–5503.
- Carli, L. L. (2020). Women, Gender equality and COVID-19. *Gender in Management: An International Journal*, 35(7/8), 647–655.
- Carlson, D. L., Petts, R., & Pepin, J. R. (2020). US couples' Divisions of Housework and Childcare during COVID-19 Pandemic. University of UT.
- Carroll, A.B. (2021). Corporate social responsibility (CSR) and the COVID-19 pandemic: organizational and managerial implications. *Journal of Strategy and Management*, 14 (3): pp. 315-330.
- Cha, W., & Abebe, M. A. (2016). Board of directors and industry determinants of corporate philanthropy. *Leadership and Organization Development Journal*. Emerald Group Publishing Limited, 37(5), 672–688. <https://doi.org/10.1108/LODJ-09-2014-0189>
- Chang, Y. K., Oh, W. Y., Park, J. H., & Jang, M. G. (2017). Exploring the relationship between board characteristics and CSR: Empirical evidence from Korea. *Journal of Business Ethics*, 140(2), 225–242. <https://doi.org/10.1007/s10551-015-2651-z>
- Cheng, B. T., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35, 1–23.
- Christensen, L. J., Mackey, A., Whetten, D. (2014). Taking responsibility for corporate social responsibility: The role of leaders in creating, implementing, sustaining, or avoiding socially responsible firm behaviors. *Academy of Management Perspectives*, 28(2): 164–178.
- Cicchello, A. F., Fellegara, A. M., Kazemikhasragh, A., & Monferrà, S. (2021). Gender diversity on corporate boards: How Asian and African women contribute on sustainability reporting activity. *Gender in Management: An International Journal*, 36(7), 801-820.
- Clark, M. S., & Isen, A. M. (1982). Towards understanding the relationship between feeling states and social behavior. In E. A. H. Hastorf y & A. M. Isen (Eds.), *Cognitive Social Psychology* (pp. 73–108). Elsevier-North Holland.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4–5), 303–327. <https://doi.org/10.1016/j.aos.2007.05.003>
- Collins, C. Landivar, L.C. Ruppner, L., Scarborough, W.J. (2021). COVID-19 and the gender gap in work hours. *Gender, Work, and Organization*, 28(1): 101-112.
- Cook, A., & Glass, C. (2017). Women on corporate boards: Do they advance corporate social responsibility? *Human Relations*, 71(7), 897–924.
- Cordeiro, J. J., Profumo, G., & Tutore, I. (2020). Board gender diversity and corporate environmental performance: The moderating role of family and dual-class majority ownership structures. *Business Strategy and the Environment*, 29(3), 1127–1144. <https://doi.org/10.1002/bse.2421>
- Cosma, S., Schwizer, P., Nobile, L., & Leopizzi, R. (2021). Environmental attitude in the board. Who are the “green directors”? Evidences from Italy. *Business Strategy and the Environment*, 30(7), 3360-3375.

- Crane, A., & Matten, D. (2021). COVID-19 and the future of CSR research. *Journal of Management Studies*, 58(1), 280–284.
- Cruz, C., Justo, R., Larraza-Kintana, M., & Garcés-Galdeano, L. (2019). When do women make a better table? Examining the influence of women directors on family firm's corporate social performance. *Entrepreneurship: Theory and Practice*, 43(2 Special Issue), 282–301. <https://doi.org/10.1177/1042258718796080>
- Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017). Board Structure to Enhance Social Responsibility Development: A Qualitative Comparative Analysis of US Companies. *Corporate Social Responsibility and Environmental Management*, 24(6), 524–542.
- Cubilla-Montilla, M., Nieto-Librero, A. B., Galindo-Villardón, M. P., Vicente Galindo, M. P., & García-Sánchez, I. M. (2019). Are cultural values sufficient to improve stakeholder engagement human and labour rights issues? *Corporate Social Responsibility and Environmental Management*, 1–18. <https://doi.org/10.1002/csr.1733>
- Cullinan, C. P., Mahoney, L., & Roush, P. B. (2019). Directors & Corporate Social Responsibility: Joint Consideration of Director Gender and the Director's Role. *Social and Environmental Accountability Journal*, 0(0), 1–24.
- Czymara, C. S., Langenkamp, A., & Cano, T. (2021). Cause for concerns: gender inequality in experiencing the COVID-19 lockdown in Germany. *European Societies*, 23(Supp 1), S68–S81.
- Dahlin, K. B., Weingart, L. R., & Hinds, P. J. (2005). Team diversity and information use. *Academy of Management Journal*, 48(6), 1107–1123. <https://doi.org/10.5465/amj.2005.19573112>
- Dai, R., Liang, H., & Ng, L. (2021). Socially responsible corporate customers. *Journal of Financial Economics*, 142(2), 598–626.
- De Abreu, M. C. S., Soares, R. A., Daniel-Vasconcelos, V., & Crisóstomo, V. L. (2022). Does board diversity encourage an environmental policy focused on resource use, emission reduction and innovation? The case of companies in Latin America. *Corporate Social Responsibility and Environmental Management*.
- De Masi, S., Słomka-Golebiowska, A., & Paci, A. (2022). Women on boards and corporate environmental performance in Italian companies: The importance of nomination background. *Business Ethics, the Environment & Responsibility*, 31, 981–998.
- Demers, E., Hendrikse, J., Joos, P., & Lev, B. (2020). ESG Didn't Immunize Stocks Against the COVID-19 Market Crash (Available at SSRN 3675920).
- Deng, X., Kang, J. K., & Low, B. S. (2013). Corporate social responsibility and stakeholder value maximization: evidence from mergers. *Journal of Finance and Economics*, 110, 87–109.
- Dhaliwal, D., Li, O. Z., Tsang, A., & Yang, Y. G. (2014). Corporate social responsibility disclosure and the cost of equity capital: The roles of stakeholder orientation and financial transparency. *Journal of Accounting and Public Policy*, 33(4), 328–355. <https://doi.org/10.1016/j.jaccpubpol.2014.04.006>
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. G. (2012). Nonfinancial disclosure and analyst forecast accuracy: International evidence on corporate social responsibility

- disclosure. *The Accounting Review*, 87(3), 723–759. <https://doi.org/10.2308/accr-10218>
- Di Giuli, A., & Kostovetsky, L. (2014). Are red or blue companies more likely to go green? Politics and corporate social responsibility. *Journal of Finance and Economics*, 111, 158–180.
- Ding, W. Z., Levine, R., Lin, C., & Xie, W. S. (2021). Corporate immunity to the COVID-19 pandemic. *Journal of Financial Economics*, 141, 802–830.
- Disli, M., Yilmaz, M. K., & Mohamed, F. F. M. (2022). Board characteristics and sustainability performance: empirical evidence from emerging markets. *Sustainability Accounting, Management and Policy Journal*, 13(4), 929-952.
- Doldor, E., Sealy, R., & Vinnicombe, S. (2016). Accidental activists: Headhunters as marginal diversity actors in institutional change towards more women on boards. *Human Resource Management Journal*, 26(3), 285–303.
- Dovidio, J.F., Gaertner, S., Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes & Intergroup Relations*, 6(1): 5-21
- Eagly, A. H., Eaton, A., Rose, S. M., Riger, S., & McHugh, M. C. (2012). Feminism and psychology: Analysis of a half-century of research on women and gender. *American Psychologist*, 67(3), 211–230.
- Easton, P. D. (2004). PE ratios, PEG ratios, and estimating the implied expected rate of return on equity capital. *The Accounting Review*, 79(1), 73–95. <https://doi.org/10.2308/accr.2004.79.1.73>
- Elmagrhi, M. H., Ntim, C. G., Elamer, A. A., & Zhang, Q. (2018). A study of environmental policies and regulations, governance structures, and environmental performance: The role of female directors. *Business Strategy and the Environment*, 28(1), 206–220. <https://doi.org/10.1002/bse.2250>
- Elstad, B., & Ladegard, G. (2012). Women on corporate boards: key influencers or tokens? *Journal of Management & Governance*, 16, 595–615.
- Endrikat, J., de Villiers, C., Guenther, T. W., & Guenther, E. M. (2020). Board characteristics and corporate social responsibility: A metanalytic investigation. *Business & Society*, 60(8), 2099–2135. <https://doi.org/10.1177/0007650320930638>
- Erhardt, N., Werbel, J., & Shrader, C. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review*, 11(2), 102–110.
- Erin, O., Adegboye, A., & Bamigboye, O. A. (2021). Corporate governance and sustainability reporting quality: evidence from Nigeria. *Sustainability Accounting, Management and Policy Journal*, 13(3), 680-707.
- Fakir, A. N. M. A., Jusoh, R. (2020). Board gender diversity and corporate sustainability performance: Mediating role of enterprise risk management. *The Journal of Asian Finance, Economics and Business*, 7(6): 351–363.
- Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, XXVI(June), 301–325.
- Fan, P., Qian, X., & Wang, J. (2023). Does gender diversity matter? Female directors and firm carbon emissions in Japan. *Pacific-Basin Finance Journal*, 77, 101931.

- Fernandez, W. D., Burnett, M. F., & Gomez, C. B. (2019). Women in the boardroom and corporate social performance: negotiating the double bind. *Management Decision*, 57(9), 2201–2222. <https://doi.org/10.1108/MD-08-2017-0738>
- Fernandez-Feijoo, B., Romero, S., & Ruiz-Blanco, S. (2014). Women on boards: Do they affect sustainability reporting? *Corporate Social Responsibility and Environmental Management*, 21(6), 351–364.
- Fernández-Gago, R., Cabeza-García, L., & Nieto, M. (2016). Corporate social responsibility, board of directors, and firm performance: an analysis of their relationships. *Review of Managerial Science*, 10(1), 85–104.
- Fernández-Torres, Y., Gutiérrez-Fernández, M., & Gallego-Sosa, C. (2021). Environmental performance of the tourism sector from a gender diversity perspective. *International Journal of Environmental Research and Public Health*, 18(16), 8834.
- Ferramosca, S., Verona, R. (2020). Framing the evolution of corporate social responsibility as a discipline (1973–2018): A large-scale scientometric analysis. *Corporate Social Responsibility and Environmental Management*, 27(1): 178–203.
- Ferrell, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122, 585–606.
- Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61, 2549–2568.
- Flammer, C. (2021). Corporate green bonds. *Journal of Financial Economics*, 142, 499–516.
- Fondevila, M., Moneva, J. M., & Scarpellini, S. (2019). Divulgación ambiental y la interrelación de la ecoinnovación. El caso de las empresas españolas. *Revista De Contabilidad—Spanish Accounting Review*, 22(1), 73–87. <https://doi.org/10.6018/rcsar.22.1.354321>
- Forgas, J. P. (1995). Mood and judgment: the affect infusion model (AIM). *Psychological Bulletin*, 117, 1–28.
- Francoeur, C., Labelle, R., Balti, S., & EL Bouzaidi, S. (2019). To What Extent Do Gender Diverse Boards Enhance Corporate Social Performance? *Journal of Business Ethics*, 155(2), 343–357.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Marshfield, MA: Pittman Publishing.
- Frías-Aceituno, J. V., Rodríguez-Ariza, L., & García-Sánchez, I. M. (2013). The role of the board in the dissemination of integrated corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 20(4), 219–233. <https://doi.org/10.1002/csr.1294>
- Fuente, J. A., García-Sánchez, I. M., & Lozano, M. B. (2017). The role of the board of directors in the adoption of GRI guidelines for the disclosure of CSR information. *Journal of Cleaner Production*, 141, 737–750. <https://doi.org/10.1016/j.jclepro.2016.09.155>
- Gabaldon, P., De Anca, C., Mateos de Cabo, R., & Gimeno, R. (2016). Searching for women on boards: An analysis from the supply and demand perspective. *Corporate Governance: An International Review*, 24(3), 371–385.

- Galia, F., Lentz, F., Max, S., Sutan, A., & Zenou, E. (2017). Selecting board members: The impact of common knowledge on gender diversity—an experimental investigation. *Managerial and Decision Economics*, 38(6), 806–821.
- Gallego-Sosa, C., Gutiérrez-Fernández, M., Fernández-Torres, Y., & Nevado-Gil, M. T. (2021). Corporate social responsibility in the European banking sector: commitment to the 2030 agenda and its relationship with gender diversity. *Sustainability*, 13(4), 1731.
- Galletta, S., Mazzù, S., Naciti, V., & Vermiglio, C. (2022). Gender diversity and sustainability performance in the banking industry. *Corporate Social Responsibility and Environmental Management*, 29(1), 161–174.
- Gangi, F., Daniele, L. M., D'Angelo, E., Varrone, N., & Coscia, M. (2022). The impact of board gender diversity on banks' environmental policy: The moderating role of gender inequality in national culture. *Corporate Social Responsibility and Environmental Management*.
- Gao, H., Li, K., & Ma, Y. (2021). Stakeholder orientation and the cost of debt: Evidence from state-level adoption of constituency statutes. *Journal of Financial and Quantitative Analysis*, 56(6), 1908–1944.
- García Martín, C. J., & Herrero, B. (2020). Do board characteristics affect environmental performance? A study of EU firms. *Corporate Social Responsibility and Environmental Management*, 27, 74–94.
- García-Sánchez, I. M. (2021). Corporate social reporting and assurance: The state of the art. *Revista De Contabilidad - Spanish Accounting Review*.
- García-Sánchez, I. M., Aibar-Guzmán, C., Núñez-Torrado, M., & Aibar-Guzmán, B. (2023). Women leaders and female same-sex groups: The same 2030 Agenda objectives along different roads. *Journal of Business Research*, 157, 113582.
- García-Sánchez, I.-M., Amor-Esteban, V., & García-Sánchez, A. (2021). Different Leaders in a COVID-19 Scenario: CEO Altruism and Generous Discourse. *Sustainability*, 13(7), 3841.
- García-Sánchez, I. M., Cuadrado-Ballesteros, B., & Frias-Aceituno, J. V. (2016). Impact of the institutional macro context on the voluntary disclosure of CSR information. *Long Range Planning*, 49(1), 15–35. <https://doi.org/10.1016/j.lrp.2015.02.004>
- García-Sánchez, I., Gallego-Alvarez, I., & Zafra-Gomez, J. (2021). Do independent, female and specialist directors promote eco-innovation and eco-design in agri-food firms? *Business Strategy and the Environment*, 30, 1136–1152. <https://doi.org/10.1002/bse.2676>
- García-Sánchez, I. M., & García-Sánchez, A. (2020). Corporate social responsibility during COVID-19 pandemic. *Journal of Open Innovation: Technology, Market Complexity*, 6, 126.
- García-Sánchez, I. M., Gómez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019a). Analyst coverage and forecast accuracy when CSR reports improve stakeholder engagement: The GRI-IFC disclosure strategy. *Corporate Social Responsibility & Environmental Management*. <https://doi.org/10.1002/csr.1755>
- García-Sánchez, I. M., Gómez-Miranda, M. E., David, F., & Rodríguez-Ariza, L. (2019b). Board independence and GRI-IFC performance standards: The mediating effect of the

- CSR committee. *Journal of Cleaner Production*, 225, 554–562. <https://doi.org/10.1016/j.jclepro.2019.03.337>
- García-Sánchez, I. M., Hussain, N., Martínez-Ferrero, J., & Ruiz-Barbadillo, E. (2018). Impact of disclosure and assurance quality of corporate sustainability reports on access to finance. *Corporate Social Responsibility & Environmental Management*. <https://doi.org/10.1002/csr.1724>
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2017). Independent directors and CSR disclosures: The moderating effects of proprietary costs. *Corporate Social Responsibility and Environmental Management*, 24(1), 28–43. <https://doi.org/10.1002/csr.1389>
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2018a). How do independent directors behave with respect to sustainability disclosure? *Corporate Social Responsibility and Environmental Management*, 25, 609–627. <https://doi.org/10.1002/csr.1481>
- García-Sánchez, I. M., & Martínez-Ferrero, J. (2018b). Chief executive officer ability, corporate social responsibility and financial performance: The moderating role of the environment. *business strategy and the environment*, 28(4), 542–555. <https://doi.org/10.1002/bse.2263>
- García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2018). Board of directors and CSR in banking: The moderating role of bank regulation and investor protection strength. *Australian Accounting*
- García-Sánchez, I. M., Minutiello, V., & Tettamanzi, P. (2022). Gender disclosure: The impact of peer behaviour and the firm's equality policies. *Corporate Social Responsibility and Environmental Management*, 29(2), 385–405.
- García-Sánchez, I. M., Oliveira, M. C., & Martínez-Ferrero, J. (2020). Female directors and gender issues reporting: The impact of stakeholder engagement at country level. *Corporate Social Responsibility and Environmental Management*, 27(1), 369–382. <https://doi.org/10.1002/csr.1811>
- García-Sánchez, I. M., Rodríguez-Domínguez, L., & Frías-Aceituno, J. V. (2015). Board of directors and ethics codes in different corporate governance systems. *Journal of Business Ethics*, 131(3), 681–698. <https://doi.org/10.1007/s10551-014-2300-y>
- García-Sánchez, I. M., Suárez-Fernández, O., & Martínez-Ferrero, J. (2019). Female directors and impression management in sustainability reporting. *International Business Review*, 28(2), 359–374. <https://doi.org/10.1016/j.ibusrev.2018.10.007>
- Garel, A., & Petit-Romec, A. (2021). Investor rewards to environmental responsibility: Evidence from the COVID-19 crisis. *Journal of Corporate Finance*, 68, 1–20.
- Garrido-Miralles, P., Zorio-Grima, A., & García-Benau, M. A. (2016). Sustainable development, stakeholder engagement and analyst forecasts' accuracy: Positive evidence from the Spanish setting. *Sustainable Development*, 24(2), 77–88. <https://doi.org/10.1002/sd.1607>
- Gavana, G., Gottardo, P., & Moisello, A. M. (2023). Board diversity and corporate social performance in family firms. The moderating effect of the institutional and business environment. *Corporate Social Responsibility and Environmental Management*.

- Giannarakis, G. (2014). Corporate governance and financial characteristic effects on the extent of corporate social responsibility disclosure. *Social Responsibility Journal*, 10(4), 569–590. <https://doi.org/10.1108/SRJ-02-2013-0008>
- Giannarakis, G., Konteos, G., & Sariannidis, N. (2014). Financial, governance and environmental determinants of corporate social responsible disclosure. *Management Decision*, 52(10), 1928–1951. <https://doi.org/10.1108/MD-05-2014-0296>
- Giannarakis, G., Mallidis, I., Sariannidis, N., & Konteos, G. (2022). The impact of corporate governance attributes on environmental and social performance: The case of European region excluding companies from the Eurozone. *Business Strategy and the Environment*.
- Gonenc, H., & Krasnikova, A. V. (2022). Board Gender Diversity and Voluntary Carbon Emission Disclosure. *Sustainability*, 14(21), 14418.
- Govindan, K., Kilic, M., Uyar, A., Karaman, A. S. (2021). Drivers and value-relevance of CSR performance in the logistics sector: A cross-country firm-level investigation. *International Journal of Production Economics*, 231: 107835.
- Gregorić, A., Randøy, T., & Oxelheim, L. (2018). Resistance to change in the corporate elite: Female directors' appointments onto nordic boards. *Journal of Business Ethics*, 141(2), 267–287.
- Gürlek, M., & Kılıç, I. (2021). A true friend becomes apparent on a rainy day: corporate social responsibility practices of top hotels during the COVID-19 pandemic. *Current Issues Tourism*, 24, 905–918.
- Gulzar, M. A., Cherian, J., Hwang, J., Jiang, Y., & Sial, M. S. (2019). The impact of board gender diversity and foreign institutional investors on the corporate social responsibility (CSR) engagement of Chinese listed companies. *Sustainability (Switzerland)*, 11(2), 1–19.
- Guping, C., Safdar Sial, M., Wan, P., Badulescu, A., Badulescu, D., & Vianna Brugni, T. (2020). Do board gender diversity and non-executive directors affect CSR Reporting? Insight from agency theory perspective. *Sustainability*, 12(20), 8597.
- Gutiérrez-Fernández, M., Gallego-Sosa, C., & Fernández-Torres, Y. (2023). Commitment to sustainability in large European banks and its relationship with board gender diversity: a 2030 Agenda perspective. *Journal of Management & Organization*, 1-27.
- Hafsi, T., & Turgut, G. (2013). Boardroom Diversity and its Effect on Social Performance: Conceptualization and Empirical Evidence. *Journal of Business Ethics*, 112(3), 463–479.
- Haniffa, R. M., & Cooke, T. E. (2005). The impact of culture and governance on corporate social reporting. *Journal of Accounting and Public Policy*, 24(5), 391–430. <https://doi.org/10.1016/j.jaccpubpol.2005.06.001>
- Haque, F. (2017). The effects of board characteristics and sustainable compensation policy on carbon performance of UK firms. *British Accounting Review*, 49(3), 347–364. <https://doi.org/10.1016/j.bar.2017.01.001>
- Haque, F., & Jones, M. J. (2020). European firms' corporate biodiversity disclosures and board gender diversity from 2002 to 2016. *The British Accounting Review*, 52(2), 100893.

- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board Diversity and Corporate Social Responsibility. *Journal of Business Ethics*, 132(4), 641–660.
- Harjoto, M. A., & Rossi, F. (2019). Religiosity, female directors, and corporate social responsibility for Italian listed companies. *Journal of Business Research*, 95, 338–346.
- He, H., & Harris, L. (2020). The impact of Covid–19 pandemic on corporate social responsibility and marketing philosophy. *Journal of Business Research*, 116, 176–182.
- Helfaya, A., & Moussa, T. (2017). Do board's corporate social responsibility strategy and orientation influence environmental sustainability disclosure? UK evidence. *Business Strategy and the Environment*, 26(8), 1061–1077. <https://doi.org/10.1002/bse.1960>
- Hernandez Bark, A. S., Escartín, J., Schuh, S. C., & van Dick, R. (2016). Who leads more and why? A mediation model from gender to leadership role occupancy. *Journal of Business Ethics*, 139(3), 473–483.
- Herremans, I. M., Nazari, J. A., & Mahmoudian, F. (2016). Stakeholder relationships, engagement, and sustainability reporting. *Journal of Business Ethics*, 138(3), 417–435. <https://doi.org/10.1007/s10551-015-2634-0>
- Hillman, A. J. (2014). Board diversity: Beginning to unpeel the onion. *Corporate Governance (Oxford)*, 23(2), 104–107. <https://doi.org/10.1111/corg.12090>
- Hillman, A. J., Cannella Jr., A. A., & Harris, I. C. (2002). Women and racial minorities in the boardroom: how do they differ? *Journal of Management*, 28(6), 747–763.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), 383–396. <https://doi.org/10.5465/amr.2003.10196729>
- Hillman, A. J., Nicholson, G., & Shropshire, C. (2008). Directors' multiple identities, identification, and board monitoring and resource provision. *Organization Science*, 19(3), 441–456. <https://doi.org/10.1287/orsc.1080.0355>
- Hipp, L., & Bünning, M. (2021). Parenthood as a driver of increased gender inequality during COVID-19? Exploratory evidence from Germany. *European Societies*, 23, S658–S673.
- Hollindale, J., Kent, P., Routledge, J., & Chapple, L. (2019). Women on boards and greenhouse gas emission disclosures. *Accounting and Finance*, 59(1), 277–308. <https://doi.org/10.1111/acfi.12258>
- Hyun, E., Yang, D., Jung, H., & Hong, K. (2016). Women on boards and corporate social responsibility. *Sustainability (Switzerland)*, 8(4), 1–26. <https://doi.org/10.3390/su8040300>
- Issa, A., Zaid, M. A. A., & Hanaysha, J. R. (2022). Exploring the relationship between female director's profile and sustainability performance: Evidence from the Middle East. *Managerial and Decision Economics*, 43(6), 1980–2002.
- Islam, R., French, E., & Ali, M. (2022). Evaluating board diversity and its importance in the environmental and social performance of organizations. *Corporate Social Responsibility and Environmental Management*, 29(5), 1134–1145.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, 81(12), 1096–1112. <https://doi.org/10.1037/h0037511>
- Javidan, M., Bullough, A., & Dibble, R. (2016). Mind the gap: Gender differences in global

- leadership self-efficacies. *Academy of Management Perspectives*, 30(1), 59–73.
- Jehn, K. A., & Bezrukova, K. (2004). A field study of group diversity, workgroup context, and performance. *Journal of Organizational Behavior*, 25(6), 703–729. <https://doi.org/10.1002/job.257>
- Jia, M., & Zhang, Z. (2013). Critical Mass of Women on BODs, Multiple Identities, and Corporate Philanthropic Disaster Response: Evidence from Privately Owned Chinese Firms. *Journal of Business Ethics*, 118(2), 303–317.
- Jiang, X., & Akbar, A. (2018). Does increased representation of female executives improve corporate environmental investment? Evidence from China. *Sustainability (Switzerland)*, 10(12).
- Jin, R., Jiang, X., & Hu, H. W. (2021). Internal and external CSR in China: How do women independent directors matter?. *Asia Pacific Journal of Management*, 1-36.
- Jizi, M. (2017). The influence of board composition on sustainable development disclosure. *Business Strategy and the Environment*, 26(5), 640–655. <https://doi.org/10.1002/bse.1943>
- Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics*, 103 (3), 351–383.
- Joecks, J., Pull, K., & Scharfenkamp, K. (2019). Perceived roles of women directors on supervisory boards: First insights from a qualitative study. *German Journal of Human Resource Management*, 33(1), 5–31.
- Johnsen, T. E., Miemczyk, J., Howard, M. (2017). A systematic literature review of sustainable purchasing and supply research: Theoretical perspectives and opportunities for IMP-based research. *Industrial Marketing Management*, 61: 130–143.
- Johns, G. (2001). In praise of context. *Journal of Organizational Behavior*, 22(1), 31–42. <https://doi.org/10.1002/job.80>
- Kabeer, N., Razavi, S., & van der Meulen Rodgers, Y. (2021). Feminist Economic Perspectives on the COVID-19 Pandemic. *Feminist Economics*, 27(1–2), 1–29.
- Kanter, R. M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82(5), 965–990. <https://doi.org/10.1086/226425>
- Kaplan, S. N., & Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints? *The Quarterly Journal of Economics*, 112(1), 169–215. <https://doi.org/10.1162/003355397555163>
- Kassinis, G., Panayiotou, A., Dimou, A., & Katsifaraki, G. (2016). Gender and Environmental Sustainability: A Longitudinal Analysis. *Corporate Social Responsibility and Environmental Management*, 23(6), 399–412.
- Kassinis, G., & Vafeas, N. (2002). Corporate boards and outside stakeholders as determinants of environmental litigation. *Strategic Management Journal*, 23(5), 399–415. <https://doi.org/10.1002/smj.230>
- Khan, H. (2010). The effect of corporate governance elements on corporate social responsibility (CSR) reporting. *International Journal of Law and Management*, 52(2), 82–109. <https://doi.org/10.1108/17542431011029406>

- Khan, I., Khan, I., & bin Saeed, B. (2019). Does board diversity affect quality of corporate social responsibility disclosure? Evidence from Pakistan. *Corporate Social Responsibility and Environmental Management*. <https://doi.org/10.1002/csr.1753>
- Khan, H. U. R., Khidmat, W. B., Awan, S., Al Hares, O., & Saleem, K. (2022). How do Independent Directors View Carbon Information Disclosure? Evidence From China. *Frontiers in Environmental Science*, 257.
- Kılıç, M., & Kuzey, C. (2019). The effect of corporate governance on carbon emission disclosures. *International Journal of Climate Change Strategies and Management*, 11(1), 35–53. <https://doi.org/10.1108/IJCCSM-07-2017-0144>
- Kim, H. D., Kim, T., Kim, Y., & Park, K. (2019). Do long-term institutional investors promote corporate social responsibility activities? *Journal of Banking and Finance*, 101, 256–269.
- Kirsch, A. (2018). The gender composition of corporate boards: A review and research agenda. *The Leadership Quarterly*, 29(2), 346–364. <https://doi.org/10.1016/j.leaqua.2017.06.001>
- Klettner, A., Clarke, T., & Boersma, M. (2016). Strategic and regulatory approaches to increasing women in leadership: Multilevel targets and mandatory quotas as levers for cultural change. *Journal of Business Ethics*, 133(3), 395–419.
- Konrad, A. M., Kramer, V., & Erkut, S. (2008). Critical Mass: The Impact of Three or More Women on Corporate Boards. *Organizational Dynamics*, 37(2), 145–164.
- Krüger, P. (2009). Corporate social responsibility and the board of directors. Job Market Paper. Toulouse School of Economics, France.
- La Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113–1155.
- La Porta, R., Lopez-de-Silanes, F., Pop-Eleches, C., & Shleifer, A. (2004). Judicial checks and balances. *Journal of Political Economy*, 112(2), 445–470. <https://doi.org/10.1086/381480>
- Landry, E. E., Bernardi, R. A., & Bosco, S. M. (2016). Recognition for sustained corporate social responsibility: Female directors make a difference. *Corporate Social Responsibility and Environmental Management*, 23(1), 27–36.
- Lawton, T. C., Dorobantu, S., Rajwani, T. S., & Sun, P. (2020). The implications of COVID-19 for nonmarket strategy research. *Journal of Management Studies*, 57, 1732–1736.
- Lee-Gosselin, H., Briere, S., & Hawo, A. (2013). Resistances to gender mainstreaming in organizations: Toward a new approach. *Gender in Management: An International Journal*, 28(8), 468–485. <https://doi.org/10.1108/GM-10-2012-0081>
- Li, J., Zhao, F., Chen, S., Jiang, W., Liu, T., & Shi, S. (2017). Gender Diversity on Boards and Firms' Environmental Policy. *Business Strategy and the Environment*, 26(3), 306–315.
- Liao, L., Lin, T., & Zhang, Y. (2018). Corporate board and corporate social responsibility assurance: Evidence from China. *Journal of Business Ethics*, 150(1), 211–225.
- Liao, L., Luo, L., & Tang, Q. (2015). Gender diversity, board independence, environmental committee and greenhouse gas disclosure. *British Accounting Review*, 47(4), 409–424. <https://doi.org/10.1016/j.bar.2014.01.002>

- Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: the value of corporate social responsibility during the financial crisis. *Journal of Finance*, 72, 1785–1823.
- Liu, C. (2018). Are women greener? Corporate gender diversity and environmental violations. *Journal of Corporate Finance*, 52(July), 118–142.
- Liu, Z., Cai, L., & Zhang, Y. (2022). Gender Diversity and Environmental Performance: New Evidence from China. *Sustainability*, 14(21), 13775.
- Lu, J., & Herremans, I. M. (2019). Board gender diversity and environmental performance: An industries perspective. *Business Strategy and the Environment*, 28(7), 1449–1464. <https://doi.org/10.1002/bse.2326>
- Lorenzo, J. M. P., Sánchez, I. M. G., & Gallego-Álvarez, I. (2009). Características del consejo de administración e información en materia de responsabilidad social corporativa. *Revista Española de Financiación y Contabilidad*, 38(141), 107–135. <https://doi.org/10.1080/02102412.2009.10779664>
- Loukil, N., Yousfi, O., & Yerbanga, R. (2019). Does gender diversity on boards influence stock market liquidity? Empirical evidence from the French market. *Corporate Governance: The International Journal of Business in Society*, 19(4), 669–703.
- Lyttelton, T., Zang, E. Musick, K. (2020). *Gender Differences in Telecommuting and Implications for Inequality at Home and Work*, Yale University, New Haven, CT.
- Macaulay, C. D., Richard, O. C., Peng, M. W., & Hasenhuttl, M. (2018). Alliance Network Centrality, Board Composition, and Corporate Social Performance. *Journal of Business Ethics*, 151(4), 997–1008.
- Mahmood, Z., Kouser, R., Ali, W., Ahmad, Z., & Salman, T. (2018). Does corporate governance affect sustainability disclosure? A mixed methods study. *Sustainability (Switzerland)*, 10(1), 1–20. <https://doi.org/10.3390/su10010207>
- Majumder, M. T. H., Akter, A., & Li, X. (2017). Corporate governance and corporate social disclosures: A meta-analytical review. *International Journal of Accounting & Information Management*, 25(4), 434–458.
- Mallin, C., Michelon, G., & Raggi, D. (2013). Monitoring intensity and stakeholders' orientation: How does governance affect social and environmental disclosure? *Journal of Business Ethics*, 114(1), 29–43. <https://doi.org/10.1007/s10551-012-1324-4>
- Mallin, C. A., & Michelon, G. (2011). Board reputation attributes and corporate social performance: An empirical investigation of the US Best Corporate Citizens. *Accounting and Business Research*, 41(2), 119–144.
- Marano, V., Sauerwald, S., & Van Essen, M. (2022). The influence of culture on the relationship between women directors and corporate social performance. *Journal of International Business Studies*, 53, 1315–1342. <https://doi.org/10.1057/s41267-022-00503-z>
- Marchini, P. L., Tibiletti, V., Mazza, T., & Gabrielli, G. (2022). Gender quotas and the environment: Environmental performance and enforcement. *Corporate Social Responsibility and Environmental Management*, 29(1), 256–272.
- Martínez, M. D. C. V., Martín-Cervantes, P. A., & del Mar Miralles-Quirós, M. (2022). Sustainable development and the limits of gender policies on corporate boards in

- Europe. A comparative analysis between developed and emerging markets. *European Research on Management and Business Economics*, 28(1), 100168.
- Martínez-Córdoba, P. J., Benito, B., & García-Sánchez, I. M. (2021). Efficiency in the governance of the COVID-19 pandemic: political and territorial factors. *Globalization and Health*, 17, 113.
- Martínez-Ferrero, J., Ruiz-Cano, D., & García-Sánchez, I. M. (2016). The causal link between sustainable disclosure and information asymmetry: The moderating role of the stakeholder protection context. *Corporate Social Responsibility and Environmental Management*, 23(5), 319–332. <https://doi.org/10.1002/csr.1379>
- Martínez-Ferrero, J., Suárez-Fernández, O., & García-Sánchez, I. M. (2019). Obfuscation versus enhancement as corporate social responsibility disclosure strategy. *Corporate Social Responsibility and Environmental Management*, 26(2), 468–480. <https://doi.org/10.1002/csr.1697>
- Masulis, R. W., & Reza, S. W. (2015). Agency problems of corporate philanthropy. *Review of Financial Studies*, 28, 592–636.
- Mathisen, G. E., Ogaard, T., & Marnburg, E. (2013). Women in the boardroom: How do female directors of corporate boards perceive boardroom dynamics? *Journal of Business Ethics*, 116(1), 87–97. <https://doi.org/10.1007/s10551-012-1461-9>
- Mavin, S., & Grandy, G. (2016). A theory of Abject Appearance: Women elite leaders' intra-gender 'management' of bodies and appearance. *Human Relations*, 69(5), 1095–1120.
- Mayer, C. (2020). Shareholderism versus stakeholderism—A misconceived contradiction. A comment on 'the illusory promise of stakeholder governance' by Lucian Bebchuk and Roberto Tallarita. ECGI-Law Working Paper No. 522.
- McGuinness, P. B., Vieito, J. P., & Wang, M. (2017). The role of board gender and foreign ownership in the CSR performance of Chinese listed firms. *Journal of Corporate Finance*, 42, 75–99.
- McGuinness, P. B., Vieito, J. P., & Wang, M. (2020). Proactive government intervention, board gender balance, and stakeholder engagement in China and Europe. *Asia Pacific Journal of Management*, 37, 719-762.
- Menicucci, E., & Paolucci, G. (2022). Board Diversity and ESG Performance: Evidence from the Italian Banking Sector. *Sustainability*, 14(20), 13447.
- Milliken, F. J., & Martins, L. L. (1996). Searching for common threads: Understanding the multiple effects of diversity in organizational groups. *Academy of Management Review*, 21(2), 402–433. <https://doi.org/10.5465/amr.1996.9605060217>
- Mohan, G., Seijts, G., & Miller, R. (2022). Does leader character have a gender? *Journal of Business Ethics*, 1–18. <https://doi.org/10.1007/s10551-022-05313-9>
- Molinero-Díez, P., Blanco-Mazagatos, V., Garcia-Rodríguez, I., & Romero-Merino, M. E. (2022). Women directors, educational background and firm value of Spanish listed companies. *Gender in Management: An International Journal*, (ahead-of-print).
- Monteiro, A.P., García-Sánchez, IM., Aibar-Guzmán, B. (2021). Labour Practice, Decent Work and Human Rights Performance and Reporting: The Impact of Women Managers. *Journal of Business Ethics*, <https://doi.org/10.1007/s10551-021-04913-1>

- Monzani, L., Hernandez Bark, A. S., van Dick, R., & Peiró, J. M. (2015). The synergistic effect of prototypicality and authenticity in the relation between leaders' biological gender and their organizational identification. *Journal of Business Ethics*, 132(4), 737–752.
- Moratis, L., & Brandt, S. (2017). Corporate stakeholder responsiveness? Exploring the state and quality of GRI-based stakeholder engagement disclosures of European firms. *Corporate Social Responsibility and Environmental Management*, 24(4), 312–325.
- Moreno-Ureba, E., Bravo-Urquiza, F., & Reguera-Alvarado, N. (2022). An analysis of the influence of female directors on environmental innovation: When are women greener? *Journal of Cleaner Production*, 374, 133871.
- Muhammad, H., & Migliori, S. (2022). Effects of board gender diversity and sustainability committees on environmental performance: a quantile regression approach. *Journal of Management & Organization*, 1–26.
- Naciti, V., Cesaroni, F., & Pulejo, L. (2022). Corporate governance and sustainability: A review of the existing literature. *Journal of Management and Governance*, 26, 55–74. <https://doi.org/10.1007/s10997-020-09554-6>
- Nadeem, M., Bahadar, S., Gull, A. A., Iqbal, U. (2020). Are women eco-friendly? Board gender diversity and environmental innovation. *Business Strategy and the Environment*, 29(8): 3146–3161.
- Nadeem, M., Zaman, R., & Saleem, I. (2017). Boardroom gender diversity and corporate sustainability practices: Evidence from Australian Securities Exchange listed firms. *Journal of Cleaner Production*, 149, 874–885.
- Naveed, K., Voinea, C. L., Ali, Z., Rauf, F., & Fratostiteanu, C. (2021). Board gender diversity and corporate social performance in different industry groups: Evidence from China. *Sustainability*, 13(6), 3142.
- Nekhili, M., Chakroun, H., & Chtioui, T. (2018). Women's leadership and firm performance: Family versus nonfamily firms. *Journal of Business Ethics*, 15, 291–316.
- Nekhili, M., Nagati, H., Chtioui, T., & Nekhili, A. (2017). Gender-diverse board and the relevance of voluntary CSR reporting. *International Review of Financial Analysis*, 50, 81–100. <https://doi.org/10.1016/j.irfa.2017.02.003>
- Nerantzidis, M., Tzeremes, P., Koutoupis, A., & Pourgias, A. (2022). Exploring the black box: Board gender diversity and corporate social performance. *Finance Research Letters*, 48, 102987.
- Nguyen, T. H. H., Elmagrhi, M. H., Ntim, C. G., Wu, Y. (2021). Environmental performance, sustainability, governance and financial performance: Evidence from heavily polluting industries in China. *Business Strategy and the Environment*, <https://doi.org/10.1002/bse.2748>
- Nguyen, T. T. P., & Thai, H. M. (2022). Effects of female directors on gender diversity at lower organization levels and CSR performance: Evidence in Japan. *Global Finance Journal*, 53, 100749.
- 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. *International Review of Financial Analysis*, 71, 101554.

- Nielsen, S., & Huse, M. (2010a). The contribution of women on boards of directors: Going beyond the surface. *Corporate Governance: An International Review*, 18(2), 136–148. <https://doi.org/10.1111/j.1467-8683.2010.00784.x>
- Nielsen, S., & Huse, M. (2010b). Women directors' contribution to board decision-making and strategic involvement: The role of equality perception. *European Management Review*, 7(1), 16–29. <https://doi.org/10.1057/emr.2009.27>
- OECD. (2019). SIGI 2019 global report: Transforming challenges into opportunities, social institutions and gender index. OECD Publishing. <https://doi.org/10.1787/bc56d212-en>
- OECD. (2020). OECD policy responses to coronavirus (COVID-19). Women at the core of the fight against COVID-19 crisis. OECD Publishing <https://www.oecd.org/coronavirus/policy-responses/women-at-the-core-of-the-fight-against-covid-19-crisis-553a8269/>
- Odrizola, M. D., & Baraibar-Diez, E. (2017). Is corporate reputation associated with quality of CSR reporting? Evidence from Spain. *Corporate Social Responsibility and Environmental Management*, 24(2), 121–132. <https://doi.org/10.1002/csr.1399>
- Orazalin, N., & Baydauletov, M. (2020). Corporate social responsibility strategy and corporate environmental and social performance: The moderating role of board gender diversity. *Corporate Social Responsibility and Environmental Management*, 27(4), 1664–1676. <https://doi.org/10.1002/csr.1915>
- Orazalin, N., & Mahmood, M. (2021). Toward sustainable development: Board characteristics, country governance quality, and environmental performance. *Business Strategy and the Environment*, 30(8), 3569–3588.
- Overberg, P., Kamp, J. Michaels, D. (2021). COVID-19 death toll is even worse than it looks. *Wall Street Journal*, January 15: A1.
- Pan, C., Guo, H., Jiang, Y., Wang, H., & Qi, W. (2020). The double effects of female executives' participation on corporate sustainable competitive advantage through unethical environmental behavior and proactive environmental strategy. *Business Strategy and the Environment*, 29, 2324–2337. <https://doi.org/10.1002/bse.2505>
- Phang, S., Adrian, C., Garg, M., Pham, A., & Truong, C. (2023). COVID-19 pandemic resilience: An analysis of firm valuation and disclosure of sustainability practices of listed firms. *Managerial Auditing Journal*, 38(1), 85–128.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence approach*. NY: Harper and Row Publishers.
- Pitofsky, M. (2020). Infectious Disease Research Warns Coronavirus Pandemic Could Last Two Years. *The Hill*, Washington, USA. <https://thehill.com/policy/healthcare/495623-infectious-disease-research-warns-coronavirus-pandemic-could-last-two-years>.
- Post, C., Rahman, N., & Rubow, E. (2011). Green governance: Boards of directors' composition and environmental corporate social responsibility. In *Business and Society* (Vol. 50).
- Prado-Lorenzo, J.-M., & Garcia-Sanchez, I.-M. (2010). The Role of the Board of Directors in Disseminating Relevant Information on Greenhouse Gases. *Journal of Business Ethics*, 97(3), 391–424. <https://doi.org/10.1007/s10551-010-0515-0>

- Provasi, R., & Harasheh, M. (2020). Gender diversity and corporate performance: Emphasis on sustainability performance. *Corporate Social Responsibility and Environmental Management*, 28, 127–137. <https://doi.org/10.1002/csr.2037>
- Pucheta-Martínez, M. C., Bel-Oms, I. & Olcina-Sempere, G. (2018). Female institutional directors on boards and firm value. *J Bus Ethics* 152, 343–363. <https://doi.org/10.1007/s10551-016-3265-9>
- Pucheta-Martínez, M. C., Bel-Oms, I., & Nekhili, M. (2019). The contribution of financial entities to the sustainable development through the reporting of corporate social responsibility information. *Sustainable Development*, 27(3), 388–400. <https://doi.org/10.1002/sd.1911>
- Pucheta-Martínez, M. C., Bel-Oms, I., & Olcina-Sempere, G. (2019). Commitment of independent and institutional women directors to corporate social responsibility reporting. *Business Ethics: A European Review*, 28(3), 290–304. <https://doi.org/10.1111/beer.12218>
- Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2019). An international approach of the relationship between board attributes and the disclosure of corporate social responsibility issues. *Corporate Social Responsibility and Environmental Management*, 26(3), 612–627. <https://doi.org/10.1002/csr.1707>
- Pucheta-Martínez, M. C., Olcina-Sempere, G., & López-Zamora, B. (2020). Female directorship on boards and corporate sustainability policies: Their effect on sustainable development. *Sustainable Development*, 28 (1), 56–72. <https://doi.org/10.1002/sd.1965>
- Qiu, S., Jiang, J., Liu, X., Chen, M. H., & Yuan, X. (2021). Can corporate social responsibility protect firm value during the COVID-19 pandemic? *International Journal of Hospitality Management*, 93, 102759.
- Qureshi, M. A., Kirkerud, S., Theresa, K., & Ahsan, T. (2020). The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity. *Business Strategy and the Environment*, 29(3), 1199–1214.
- Ramon-Llorens, M. C., Garcia-Meca, E., & Pucheta-Martínez, M. C. (2020). Female directors on boards. The impact of faultlines on CSR reporting. *Sustainability Accounting, Management and Policy Journal*. <https://doi.org/10.1108/SAMPJ-07-2019-0273>
- Rao, K., & Tilt, C. (2016). Board Composition and Corporate Social Responsibility: The Role of Diversity, Gender, Strategy and Decision Making. *Journal of Business Ethics*, 138(2), 327–347.
- Raucci, D., & Tarquinio, L. (2020). Sustainability performance indicators and non-financial information reporting. Evidence from the Italian Case. *Administrative Sciences*, 10(1), 13. <https://doi.org/10.3390/admsci10010013>
- Rehman, S., Orij, R., Khan, H. (2020). The search for alignment of board gender diversity, the adoption of environmental management systems, and the association with firm performance in Asian firms. *Corporate Social Responsibility and Environmental Management*, 27(5): 2161–2175.
- Rodríguez-Ariza, L., Cuadrado-Ballesteros, B., Martínez-Ferrero, J., & García-Sánchez, I. M. (2017). The role of female directors in promoting CSR practices: An international

- comparison between family and non-family businesses. *Business Ethics*, 26(2), 162–174.
- Rodríguez-Ariza, L., Frías Aceituno, J. V., & García Rubio, R. (2014). El consejo de administración y las memorias de sostenibilidad. *Revista de Contabilidad*, 17(1), 5–16. <https://doi.org/10.1016/j.rcsar.2013.02.002>
- Rodríguez-Domínguez, L., Gallego-Alvarez, I., & García-Sánchez, I. M. (2009). Corporate Governance and Codes of Ethics. *Journal of Business Ethics*, 90(2), 187–202. <https://doi.org/10.1007/s10551-009-0035-y>
- Rodríguez-Gómez, S., Arco-Castro, M. L., López-Pérez, M. V., & Rodríguez-Ariza, L. (2020). Where does CSR come from and where does it go? A review of the state of the art. *Administrative Sciences*, 10(3), 60. <https://doi.org/10.3390/admsci10030060>
- Romano, M., Cirillo, A., Favino, C., Netti, A. (2020). ESG (Environmental, Social and Governance) performance and board gender diversity: The moderating role of CEO duality. *Sustainability*, 12(21): 9298.
- Saheed Olanrewaju, I., Kayode Ishola, A., Olawale Nurudeen, S., Abubakar, Ayuba. (2020). Impact of board diversity on corporate social responsibility of listed oil and gas firms in Nigeria. *International Journal of Management and Sustainability*, 9(4): 194–206.
- Sanan, N. K. (2016). Board gender diversity, financial and social performance of Indian firms. *Vision: The Journal of Business Perspective*, 20(4), 361–367.
- Schwartz-Ziv, M. (2017). Gender and Board Activeness: The Role of a Critical Mass. *Journal of Financial and Quantitative Analysis*, 52(2), 751–780.
- Sekarlangit, L. D., & Wardhani, R. (2021). The effect of the characteristics and activities of the board of directors on sustainable development goal (SDG) disclosures: Empirical evidence from Southeast Asia. *Sustainability*, 13(14), 8007.
- Setó-Pamies, D. (2015). The Relationship between Women Directors and Corporate Social Responsibility. *Corporate Social Responsibility and Environmental Management*, 22(6), 334–345.
- Sharif, A., Aloui, C., Yarovaya, L. (2020). COVID–19 pandemic, oil prices, stock market, geopolitical risk and policy uncertainty nexus in the U.S. economy: fresh evidence from the wavelet-based approach. *International Rev. Financial Analysis* 70: 101496.
- Shaukat, A., Qiu, Y., & Trojanowski, G. (2016). Board Attributes, Corporate Social Responsibility Strategy, and Corporate Environmental and Social Performance. *Journal of Business Ethics*, 569–585.
- Shoham, A., Almor, T., Lee, S. M., & Ahammad, M. F. (2017). Encouraging environmental sustainability through gender: A micro-foundational approach using linguistic gender marking. *Journal of Organizational Behavior*, 38(9), 1356–1379.
- Siueia, T., & Wang, J. (2019). La asociación entre las Actividades de Responsabilidad Social Corporativa y la calidad de los ingresos: Evidencia de la industria extractiva. *Revista de Contabilidad—Spanish Accounting Review*, 22(1), 112–121. <https://doi.org/10.6018/rcsar.22.1.354361>
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Erwin, K. S., Jackson, L. A., McNatt, P. S., & Renfro, C. L. (2002). The role of threats in the racial attitudes of blacks and whites. *Personality and Social Psychological Bulletin*, 28, 1242–1254.

- Tajfel, H. (1981). *Human groups and social categories*. Cambridge University Press.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33(1), 1–39. <https://doi.org/https://doi.org/10.1146/annurev.ps.33.020182.000245>
- Tajfel, H., Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin, & W. S (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Talbot, D., & Ordóñez-Ponce, E. (2022). Canadian banks' responses to COVID-19: A strategic positioning analysis. *Journal of Sustainable Finance Investment*, 12(2), 423–430. <https://doi.org/10.1080/20430795.2020.1771982>
- Tamimi, N., & Sebastianelli, R. (2017). Transparency among S&P 500 companies: An analysis of ESG disclosure scores. *Management Decision*, 55 (8), 1660–1680. <https://doi.org/10.1108/MD-01-2017-0018>
- Tejedo-Romero, F., Rodrigues, L. L., & Craig, R. (2017). Women directors and disclosure of intellectual capital information. *European Research on Management and Business Economics*, 23(3), 123–131. <https://doi.org/10.1016/j.iiedeen.2017.06.003>
- Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance*, 17(3), 320–337.
- Tettamanzi, P., Venturini, G., & Murgolo, M. (2022). Sustainability and Financial Accounting: a Critical Review on the ESG Dynamics. *Environmental Science and Pollution Research*, 29, 16758–16761.
- Thatcher, S. M., & Jehn, K. A. (1998). A model of group diversity profiles and categorization processes in bicultural organizational teams. *Research on Managing Groups and Teams*, 1, 1–20.
- Tilly, C. (1978). *From mobilization to revolution*. Addison-Wesley. Tomkins, L., & Simpson, P. (2015). Caring leadership: A heideggerian perspective. *Organization Studies*, 36(8), 1013–1031.
- Tingbani, I., Chithambo, L., Tauringana, V., & Papanikolaou, N. (2020). Board gender diversity, environmental committee and greenhouse gas voluntary disclosures. *Business Strategy and the Environment*, 29(6), 2194–2210. <https://doi.org/10.1002/bse.2495>
- Torchia, M., Calabrò, A., & Huse, M. (2011). Women Directors on Corporate Boards: From Tokenism to Critical Mass. *Journal of Business Ethics*, 102(2), 299–317.
- Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D., Wetherell, M.S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.
- Tsui, A. S., Egan, T. D., & O'Reilly, C. A. III (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37, 549–579. <https://doi.org/10.2307/2393472>
- Tsui, A. S., Porter, L. W., & Egan, T. D. (2002). When both similarities and dissimilarities matter: Extending the concept of relational demography. *Human Relations*, 55(8), 899–929. <https://doi.org/10.1177/0018726702055008176>
- UN Women. (2021). *Covid-19 and women's leadership. From an effective response to building back better*. <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections>

/Library/Publications/2020/Policy-brief-COVID-19-and-womens-leadership-en.pdf

- UN Women. (2020a). Surveys show that COVID-19 has gendered effects in Asia and the Pacific, Bangkok. <https://data.unwomen.org/resources/surveys-show-covid-19-has-genderedeffects-asia-andpacific>
- UN Women. (2020b). The impact of COVID-19 on women's and men's lives and livelihoods in Europe and Central Asia: Preliminary results from a rapid gender assessment, Istanbul. <https://data.unwomen.org/publications/impact-covid-19-womens-and-mens-lives-andlivelihoodseurope-and-central-asia>
- Upadhyay, A., & Zeng, H. (2014). Gender and ethnic diversity on boards and corporate information environment. *Journal of Business Research*, 67(11), 2456–2463. <https://doi.org/10.1016/j.jbusres.2014.03.005>
- Uyar, A., Kilic, M., Koseoglu, M. A., Kuzey, C., & Karaman, A. S. (2020). The link among board characteristics, corporate social responsibility performance, and financial performance: Evidence from the hospitality and tourism industry. *Tourism Management Perspectives*, 35(June), 100714.
- Uyar, A., Kuzey, C., Kilic, M., & Karaman, A. S. (2021). Board structure, financial performance, corporate social responsibility performance, CSR committee, and CEO duality: Disentangling the connection in healthcare. *Corporate Social Responsibility and Environmental Management*, 28, 1730–1748. <https://doi.org/10.1002/csr.2141>
- Valls Martínez, M. D. C., Martin Cervantes, P. A., & Cruz Rambaud, S. (2020). Women on corporate boards and sustainable development in the American and European markets: Is there a limit to gender policies?. *Corporate Social Responsibility and Environmental Management*, 27(6), 2642-2656.
- Van Knippenberg, D., De Dreu, C. K., & Homan, A. C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, 89(6), 1008–1022. <https://doi.org/10.1037/0021-9010.89.6.1008>
- Vaz Ogando, N., Ruiz Blanco, S., & Fernández-Feijoo Souto, B. (2018). The assurance market of sustainability reports in Spain: An analysis from the demand perspective. *Revista de Contabilidad—Spanish Accounting Review*, 21(1), 48–62. <https://doi.org/10.1016/j.rcsar.2017.07.003>
- Velte, P. (2017). Does board composition have an impact on CSR reporting? *Problems and Perspectives in Management*, 15(2), 19–35.
- Walls, J. L., Berrone, P., & Phan, P. H. (2012). Corporate governance and environmental performance: Is there really a link? *Strategic Management Journal*, 33, 885–913.
- Walt, N., & Ingley, C. (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate Governance: An International Review*, 11(3), 218–234. <https://doi.org/10.1111/1467-8683.00320>
- Wang, Y., Chang, X., Wang, T., & Wang, S. (2022). Female directors and environmental innovation: is stakeholder orientation a missing link? *Gender in Management*, 37(5), 587–602.
- Wang, C., Deng, X., Álvarez-Otero, S., Sial, M. S., Comite, U., Cherian, J., & Oláh, J. (2021). Impact of women and independent directors on corporate social responsibility and financial performance: empirical evidence from an emerging

- economy. *Sustainability*, 13(11), 6053.
- Wang, Y., Luo, X., Wang, T., & Hu, D. (2021). Go beyond tokens: Number and type both matter. *Business Ethics, the Environment & Responsibility*, 30(4), 639-656.
- Wang, Y., Ma, J., & Wang, T. (2021). Do all female directors have the same impact on corporate social responsibility? The role of their political connection. *Asia Pacific Journal of Management*, 1-28.
- Wang, Z., & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance. *Journal of Cleaner Production*.
- Wei, F., Ding, B., & Kong, Y. (2017). Female directors and corporate social responsibility: Evidence from the environmental investment of Chinese listed companies. *Sustainability (Switzerland)*, 9(12).
- Wieczorek-Szymańska, A. (2020). Gender diversity in academic sector-Case study. *Administrative Sciences*, 10(3), 41. <https://doi.org/10.3390/admsci10030041>
- Wilder, D. A., & Simon, A. F. (2001). Affect as a cause of intergroup bias. In R. Brown & S. Gaertner (Eds.), *Blackwell handbook of social psychology. Intergroup processes*. Blackwell Publishing.
- Williams, R. J. (2003). Women on corporate boards of directors and their influence on corporate philanthropy. *Journal of Business Ethics*, 42(1), 1–10.
- Williams, K. Y., & O'Reilly, C. A. III (1998). Demography and. *Research in Organizational Behavior*, 20, 77–140.
- Wonsuk, C., & Abebe, M. A. (2016). Board of directors and industry determinants of corporate philanthropy. *Leadership & Organization Development Journal*, 7(1), 1–55.
- Yang, W., Yang, J., & Gao, Z. (2019). Do Female Board Directors Promote Corporate Social Responsibility? An Empirical Study Based on the Critical Mass Theory. *Emerging Markets Finance and Trade*, 55(15), 3452–3471. <https://doi.org/10.1080/1540496X.2019.1657402>
- Yarram, S. R., & Adapa, S. (2021). Board gender diversity and corporate social responsibility: Is there a case for critical mass?. *Journal of Cleaner Production*, 278, 123319.
- Yaseen, H., Iskandrani, M., Ajina, A., & Hamad, A. (2019). Investigating the relationship between board diversity & corporate social responsibility (CSR) performance: Evidence from France. *Academy of Accounting and Financial Studies Journal*, 23(4), 1–11.
- Yasser, Q. R., Al Mamun, A., & Ahmed, I. (2017). Corporate social responsibility and gender diversity: Insights from Asia Pacific. *Corporate Social Responsibility and Environmental Management*, 24(3), 210–221.
- Zahid, M., Rahman, H. U., Ali, W., Khan, M., Alharthi, M., Imran Qureshi, M., & Jan, A. (2020). Boardroom gender diversity: Implications for corporate sustainability disclosures in Malaysia. *Journal of Cleaner Production*, 244, 118683. <https://doi.org/10.1016/j.jclepro.2019.118683>
- Zaid, M. A. A., Wang, M., Adib, M., Sahyouni, A., & Abuhijleh, T. F. (2020). Boardroom nationality and gender diversity: Implications for corporate sustainability performance. *Journal of Cleaner Production*, 251, 119652.
- Zhang, J., Han, J., & Yin, M. (2018). A female style in corporate social responsibility?

- Evidence from charitable donations. *International Journal of Disclosure and Governance*, 15(3), 185–196.
- Zhang, J. Q., Zhu, H., & Ding, H. B. (2013). Board composition and corporate social responsibility: An empirical investigation in the post Sarbanes-Oxley Era. *Journal of Business Ethics*, 114(3), 381–392.
- Zhang, L. (2012). Board demographic diversity, independence, and corporate social performance. *Corporate Governance The International Journal of Business in Society*, 12(5), 686–700.
- Zhang, X.-A., Li, N., Ullrich, J., & van Dick, R. (2015). Getting everyone on board: The effect of differentiated transformational leadership by CEOs on top management team effectiveness and leader-rated firm performance. *Journal of Management*, 41(7), 1898–1933.
- Zhuang, Y., Chang, X., & Lee, Y. (2018). Board composition and corporate social responsibility performance: Evidence from Chinese public firms. *Sustainability (Switzerland)*, 10(8). <https://doi.org/10.3390/su10082752>
- Zhang, J. Q., Zhu, H., & Ding, H. B. (2013). Board composition and corporate social responsibility: An empirical investigation in the post Sarbanes-Oxley era. *Journal of Business Ethics*, 114(3), 381–392. <https://doi.org/10.1007/s10551-012-1352-0>
- Zhao, L., Yang, M. M., Wang, Z., & Michelson, G. (2022). Trends in the dynamic evolution of corporate social responsibility and leadership: A literature review and bibliometric analysis. *Journal of Business Ethics*, 182, 135–157. <https://doi.org/10.1007/s10551-022-05035-y>
- Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, 101528.
- Zimmer, L. (1988). Tokenism and women in the workplace: The limits of gender-neutral theory. *Social Problems*, 35(1), 64–77. <https://doi.org/10.1525/sp.1988.35.1.03a00050>