



Universidad
Politécnica
de Cartagena



U P C T

FACULTAD DE
CIENCIAS DE LA
E M P R E S A

**GENDER EQUALITY IN EUROPE.
LAWS, STANDARDS AND EVIDENCE
ABOUT MEASUREMENT**

Cristina Ortega López

2022/2023

Supervisor: Emma García Meca

Degree in Business Administration and Management

ABSTRACT

The objective of this work is to conduct a study on gender diversity in the boards of directors in European Union companies, since it is currently a far-reaching social concern. This type of study aims to give visibility to the imbalances of women in positions of responsibility throughout Europe.

An analysis of the composition of the boards and gender balance progress has been carried out thanks to the reading of the current European regulations as well as national legislation and other measures from member states' policies.

Results prove that the evolution on women representation within the boards of directors from European companies is still slow and insufficient. However, the recently approved European Directive expects the member states to get to a minimum of 40% of women on non-executive positions.

In addition, measurement tools for gender diversity are reviewed in order to give proposals on how to compute a more inclusive and complete indicator. Two of the most relevant European gender diversity indexes are further explained in this work. These are the Gender Diversity Index and the Gender Equality Index.

Finally, the need for a more inclusive and complete index that will take into account small and medium-sized firms, but also the innovation field with scaleup and startup companies, is expressed at the end of this study.

Keywords: gender diversity; gender equality; board of directors; women; listed companies; European Union; gender index; innovation.

INDEX

1. Introduction.....	5
2. Regulation in Gender Diversity in Europe.....	7
2.1. European Directives.....	9
2.2. Spanish Law.....	13
2.3. Comparison between European countries.....	22
3. An Overview of the Indexes to measure Gender Diversity.....	28
3.1. Gender Diversity Index.....	28
3.2. Gender Equality Index.....	36
3.3. Other Indicators.....	40
4. Limitations to the Indexes that measure Gender Diversity.....	42
5. Proposals for Future Indexes.....	44
6. Conclusions.....	46
7. References.....	48

INDEX OF GRAPHS

- Graph 1. Evolution of the percentage of women on corporate boards in European largest companies for the period 2003-20238
- Graph 2. Evolution of women presence in the board of directors and key executive positions in Spanish listed companies16
- Graph 3. Share of women on the boards of directors of Listed Companies in Spain, for the period 2003-2023 (1st semester).....20
- Graph 4. Share of women on the boards of directors of Listed Companies in France, for the period 2003-2023 (1st semester)25
- Graph 5. Share of women on the boards of directors of Listed Companies in Germany, for the period 2003-2023 (1st semester)26
- Graph 6. Top 15 European countries by number of women-founded scaleups up to 202335
- Graph 7. Trends in the EU Gender Equality Index scores by domain38

INDEX OF FIGURES

- Figure 1. Steps of the procedure for Directive 2012/0299 from the European Commission on improving the gender balance among non-executive directors of companies listed on stock exchanges11
- Figure 2. Statistical results from the Gender Diversity Index of women on boards and in corporate leadership of 202133

INDEX OF TABLES

- Table 1. Presence of women in boards of directors and senior management positions of Spanish listed companies for period 2017-2022.....17
- Table 2. Summary of Women on Boards regulation policies in the EU Member States.....22
- Table 3. Countries ranking by Gender Diversity Index of 202131

1. Introduction

Gender inequalities have persisted for centuries in our modern society. Despite significant progress towards gender equality in recent decades, these inequalities are still evident in various dimensions of life, including the labour market. Women continue to face challenges in breaking through the glass ceiling, achieving equal pay, and obtaining leadership positions in business. Specifically, the issue of gender inequality in businesses has been receiving increasing attention in Europe.

The lack of women representation in leadership positions and boards of directors in European companies has constituted a widespread issue for many institutions and presidencies around Europe for the past years. It has been proven that diversity in top management positions may lead to more creative, well-versed and innovative decisions (Gallego-Álvarez et al., 2010). That is why this important social concern will be established as the focus of the present study.

In recent years, the European Union and its member states have promoted various directives and recommendations aimed at promoting gender equality in businesses. In October 2022, the European Council adopted its latest Directive on gender diversity (European Union, 2022), which promotes a balance between male and female presence on boards of directors (Council of the EU, 2022). European member states will need to adopt this directive in the years to come. This includes Spain, where the latest regulations are the Equality Law from 2007 and the Royal Decree of 2020, and governments have proposed initiatives and plans focused on achieving this common objective.

Therefore, Spanish regulations and proposals will also be studied in this work to gain a deeper understanding of the national legislation and progress on this matter over the past years, as well as to compare them to the great European powers like Germany or France, among other European member states. Overall, this study seeks to explore the effectiveness of these regulations and the progress made towards gender equality in the business landscape in Europe, supported by the encouraging news of this very recent European Directive.

However, how is it possible to measure this specific progress on gender equality in businesses? Gender equality indices attempt to measure these social issues and reveal the progress made towards gender equality in various domains. Despite recent improvements on their results due to the promotion of new regulations from the European institutions,

there is still a remarkable gender gap in leadership positions in businesses around Europe, among other important social issues (European Institute for Gender Equality, 2020).

This study will also provide some illustrative examples of well-established European and Spanish companies that have a gender imbalance on their board of directors and management committees. These will be listed as well as non-listed, large as well as medium companies established in Europe, so as to have a wider vision on the issue.

Finally, some proposals on how to reliably measure gender diversity in Europe's businesses will be analysed. The indices explained along this work present some limitations for its analysis, such as a limited scope of study, limited data availability, or do not consider some important aspects of women in business and research. All of these can be constraining to better measure gender equality in Europe and really see the progress made until today. Improvements on how to develop more complete indices that better study the reality and current situation of gender imbalances will be proposed at the end of this work.

2. Regulation in Gender Diversity in Europe

The European Union has a long-standing commitment to gender diversity regulations since its formation. In fact, it is considered one of the main leaders in gender equality, with 13 of the top 20 countries in the world on gender equality being member states of the EU, not including the UK, which was also ranked on the top 20 (Equal Measures 2030, 2023).

On the other hand, global progress towards gender equality has been too slow and uneven in the last five years (EM 2030, 2023). The situation is no different for Europe, as no member state in the EU has fully achieved gender equality, and this slow and non-sufficient progress has also been shown in the EU Gender Equality Index (GEI). The European Union provides an average score of 68.6 out of 100 in the GEI for 2022 (European Institute for Gender Equality, 2023). This index will be further studied on following sections of this work along with other related indices.

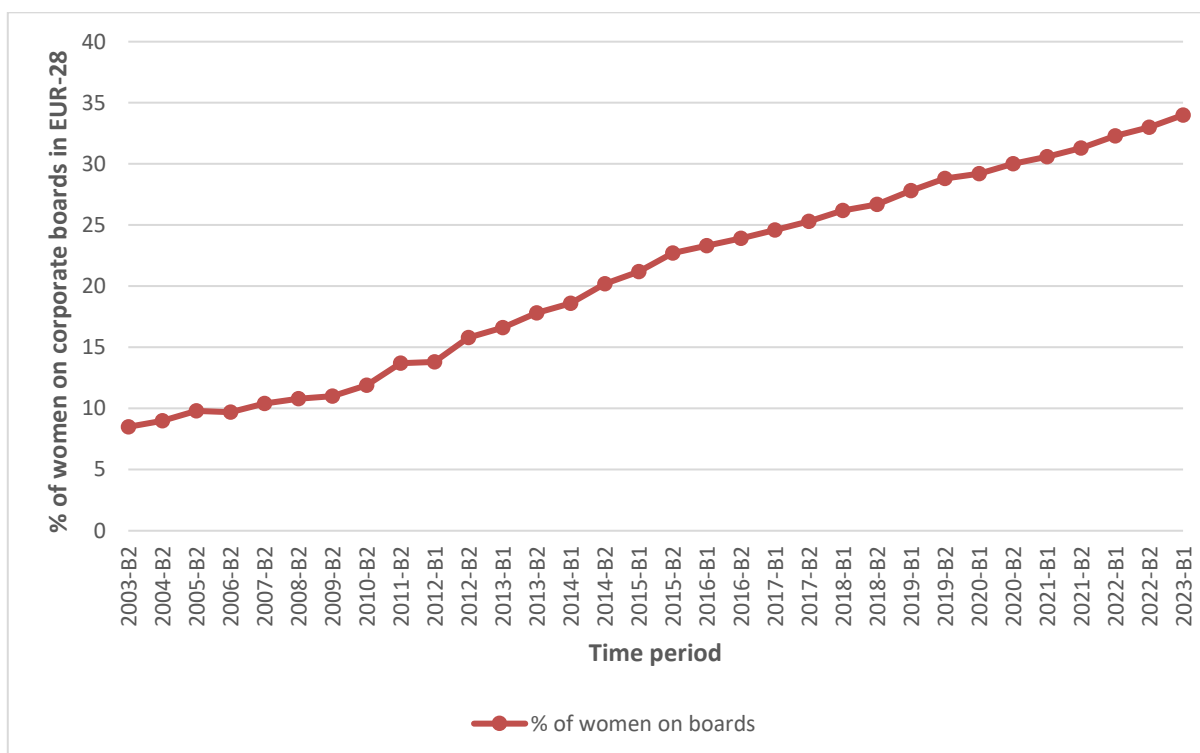
As can be seen from Graph 1, the overall evolution of the proportion of women on corporate boards on the largest publicly listed companies of the European Union's members has been quite slow over the past 20 years, as it was also reflected on the European Gender Equality Index results. This graph takes the results of the 28 European Union members for the period 2003-2020, and after 2020, data was collected for the 27 member states. It is easy to appreciate how the European mean for gender equality, which would be 50% of women on corporate boards, has not been reached yet, and even stays below 35% of total members on European boardrooms.

On the other hand, the good news is that a faster tendency upwards is noticeable for the past 10 years, as a result of the efforts put on to achieve this objective from the part of European organisms and member states. European Union and its members are getting more and more conscious on this diversity issue, as it will be commented on following sections of this work.

It should also be noted that the collected data for this graph is only considering the largest publicly listed companies in the European Union, and not the small and medium companies around Europe. Hence, the data provided is quite restrictive to accurately show the real gender equality situation of European companies.

Graph 1.

Evolution of the percentage of women on corporate boards in European largest listed companies for the period 2003-2023



Note. Data retrieved from EIGE’s Gender Statistics Database, showing the evolution of the percentage of women on corporate boards in Europe for the period 2003-2023. Indicator: Largest listed companies: presidents, board members and employees’ representatives. Source: Institute for Gender Equality. Last upload on: 23.05.2023.

Additionally, regulations and actions on gender equality in Europe have been part of their different Gender Strategies, from the Strategy for equality between women and men for the 2010-2015 period, to the Strategic Engagement for Gender Equality for the 2016-2019 period, and finally with the current Gender Equality Strategy for the 2020-2025 period. As regards to the first previous strategies and plans, these are part of the European Pact for gender equality for the period 2011-2020, which properly highlights one of the European Union’s fundamental values since its formation.

These strategies are directed towards many aspects of modern society and economy, such as employment or even decision-making and politics. The gender equality actions and regulations lying on the past years’ strategies have highly contributed to the economic

growth and sustainable development of the European community.

Furthermore, latest regulations and recommendations on gender equality from the European Union are part of the aforementioned Gender Equality Strategy for the 2020-2025 period. This strategy frames the policy goals and main actions for this period. It has been equally developed by the European Commission and it aims at “achieving a gender-equal Europe where gender-based violence, sex discrimination and structural inequality between women and men are a thing of the past. A Europe where women and men, girls and boys, in all their diversity, are equal.” (European Commission, 2020).

Overall, this plan aims for an equal-gender European community for 2025, by fighting gender gaps in the workplace and achieving gender balance in decision-making positions in the labour market, among other key actions.

Taking a deeper look on the issue of gender imbalance in business, women underrepresentation in boards and leadership positions in organizations around Europe is one of the main problems looked at.

The last milestone on this outstanding issue was achieved recently when, in October 2022, the Directive 2022/2381/EU on improving the gender balance among directors of listed companies, among other related measures, promoted by the European Commission was approved (European Council, 2022).

But the path towards gender balance on boards has not been that steady or fast all along these years, as it will be shown in the following section.

2.1. European Directives

Directives on gender diversity have been developed by the European Union over the past years. The main goal of these is defending and working towards one of the EU’s fundamental values, which is gender equality. Different subjects of gender inequalities have been approached on these various European Directives, such as transparency and equal pay, gender violence, or gender imbalances on boards.

When it comes to interventions and regulations from public institutions on this last issue, there can be found the so-called “hard laws” or gender quotas imposed by law, that come with some penalties or sanctions when they are not met, and the “soft laws” or recommendations coming from the governance code policies. Additionally, gender quota

laws that do not imply any type of sanction in case of non-compliance are et considered as “soft laws”.

It has been found that gender quotas, often recommended on the different European Directives and promoted by the own countries’ mandatory regulations, are a highly effective and useful tool to achieve improvements on gender imbalances in the boards of directors and top management positions, when compared to recommendations or other non-mandatory rules, which are not sufficient for achieving this goal (Fagan, 2013).

However, the European Union has not still achieved a law on gender imbalances in boards and leadership positions until last year, even though it has been an important topic for debate on the part of the European Commission since the beginning of this century (Palá Laguna, 2021).

In November 2012 the European Commission managed to submit a Proposal for the Directive 2012/0299 on gender balance among non-executive directors of the largest listed companies, which was backed and finally adopted a year later by the European Parliament. This Directive aimed to “promote gender equality in economic decision-making and [...] more equal gender representation on company boards” (European Commission, 2012).

A 40% quota was proposed for these companies as the minimum women representation on their non-executive board positions. This objective would have to be achieved by 2020 in the private sector and by 2018 for public listed companies.

Still, the Proposal for Directive 2012/0299 failed in becoming a European law from the part of the European Council at that time (European Parliament, 2015), who kept it in check for ten years as it did not get enough support from the member states.

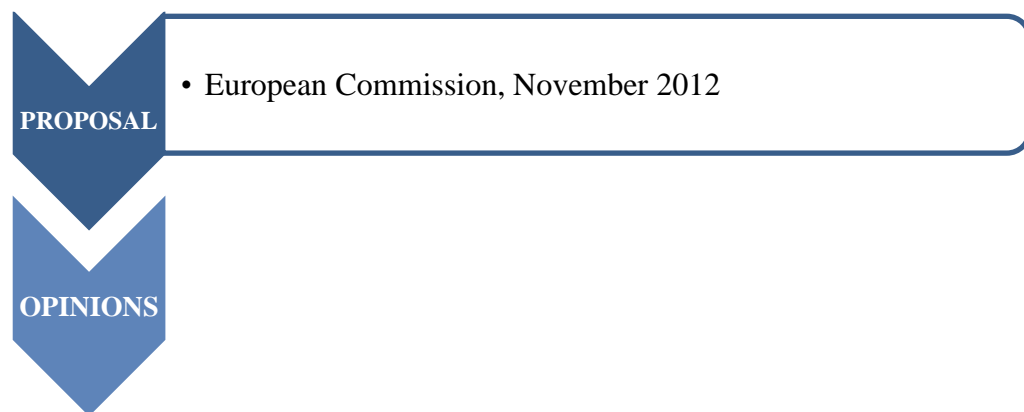
Even though the European Commission has succeeded in proposing other innovative regulations on behalf of women rights and equality in business, as it was shown with the Recommendation 2014/124/EU on strengthening the principal of equal pay between men and women through transparency, aimed to break the glass ceiling, successful proposals and regulations on gender equality on boards of directors and decision-making positions have not been materialised until now.

As shown in Figure 1, getting to approve this former proposal from 2012 by the European Council and Parliament was not an easy task. While the European Parliament

had passed this Directive at first reading in November 2013, the Council still had not transmitted a common opinion on the subject until last year. Numerous attempts from the Council on discussing the subject and agreeing on an opinion had been made during the last 10 years (Prpic, 2015), as highlighted on Figure 1. Nevertheless, they did not pass it at second reading until 2022.

Figure 1.

Steps of the procedure for the Directive 2012/0299 from the European Commission on improving the gender balance among non-executive directors of companies listed on stock exchanges



Note. Adapted from data provided by *Procedure 2012/0299(COD)* from the EUR-Lex of the European Parliament, a web page for European Union’s publications and laws, showing a timeline for the adoption of the Directive 2012/0299 in 2022. Data retrieved from <https://eur-lex.europa.eu/legal-content/EN/HIS/?uri=CELEX:52012PC0614>

After various pushes from the European Parliament and many pressures from some of the member states' presidencies, among other European influential powers, the proposal for the Directive 2012/0299 was finally signed and adopted as a European Directive in November 2022 (Shreeves, 2023). It was entered into force 20 days after it had been published in the European Union's Official Journal, this is, on 7th December 2022. From now on, it will be referenced as Directive (EU) 2022/2381.

Directive 2022/2381/EU establishes that 40% of non-executive board directors from largest listed companies must be women or, if the company decides to include executive directors as well, there must be 33% of both executive and non-executive directors from the underrepresented gender. Small and medium companies composed by less than 250 workers are excluded from this Directive's scope.

Member states will have to adopt it and include it into their national legislation within two years' time from the date of its adoption. This 40% objective has to be achieved by June 2026. Moreover, companies' selection process will have to ensure that all qualifications and merits are objectively taken into account for leadership positions, regardless of the candidate's gender. In the situation where there are two candidates equally qualified for the position, that one from the underrepresented sex will need to be chosen.

What happens for those companies that do not reach this target by 2026? They will need to justify their results and propose additional measures that they will be taking to deal with this gender imbalance within their organizations. In addition, companies will need to annually report information on gender representation in their boards of directors and the actions taken to get to this goal. Member states will also publish the companies that have successfully reached it.

However, European member states have expected penalties for those companies that fail to accomplish fair, accessible, and transparent selection procedures, such as fines or even invalidation of the designated director.

Now it is time for member states to take action in regard to this newly approved Directive that seeks to dissolve gender imbalances on corporate boards and leadership positions around Europe.

However, this is not new for some of the European Union member countries as many of them have already implemented some legislations and actions towards this

common goal. Some have already implemented gender quotas on their national law, some others have proposed recommendations, and others have no legislation on the subject at all. Their path until today will be analysed in the following sections by reviewing their legislative measures and their results in terms of gender equality on boards to have a deeper understanding of Europe's situation and different tendencies.

2.2. Spanish Law

Firstly, and given the context and results in terms of gender balance on boards in Europe, it should be highlighted that Spain was positioned on the top 12 worldwide for the global SDG Gender Index for 2022 (E.M. 2030, 2023). The country constitutes one of the 13 countries on the top 20 for this global index on gender equality. It should be therefore stressed the Spanish legislative trajectory in terms of gender balance in businesses, and more specifically, on boards of directors and top management positions.

Society's need of achieving equal rights and having equal opportunities regardless of the gender has remained high on the agenda for Spanish institutions, legislators and politicians, who have shown great disposition to promoting different measures and regulations on increasing women's presence on boards of directors in Spanish businesses.

The Spanish regulations on gender diversity on boards are composed of several different measures. On the one hand, the so-called "soft" laws, which are made of recommendations compiled in the Spanish Corporate Governance Codes. These codes have been greatly developed since the first one was issued in 1998, and they have included in the last couple of decades some recommendations in terms of composition of boards of directors and gender balance.

First of all, no provisions regarding the gender imbalance issue on boards of directors were included in no Spanish governance code until the new Unified Good Governance Code of 2006 was first formulated, updating the previous governance codes, but only including companies listed on the national stock market.

Several recommendations were included back in 2006 in regard to gender diversity on boards, such as Recommendation 15, which stated how neglecting more of half of the population's business talent may be really unbeneficial for the economy and the biggest corporations, and implies that "when women directors are few or non-existent,

the board should state the reasons for this situation and the measures taken to correct it; in particular, the Nomination Committee should take steps to ensure that: a. The process of filling board vacancies has no implicit bias against women candidates; b. The company makes a conscious effort to include women with the target profile among the candidates for board places.” (Spanish National Stock Market Commission, 2006).

Nevertheless, even if the Code already suggested companies to deliberately look for women candidates when a board position was not being covered, this Recommendation did not include any type of quota or percentage as a reference to better understand what a gender diverse board meant at that time. Later in 2013, the Unified Good Governance Code would be updated, and this Recommendation 15 would pass to be Recommendation 14, with no changes.

However, 2 years after, the Spanish Good Governance Code of Listed Companies of 2015 was developed. it is composed by 64 recommendations, from which 53 are about different aspects of boards of directors from Spanish listed companies.

This new code conveyed on its principle number 10, that “[...] Director selection policy should seek a balance of knowledge, experience and gender in the board’s membership.”, and also suggested a percentage objective of gender balance to be met before 2020, as stated on its Recommendation 14: “The board of directors should approve a director selection policy that: [...] c) Favours a diversity of knowledge, experience and gender.” and that “should pursue the goal of having at least 30% of total board places occupied by women directors before the year 2020.” (Spanish National Stock Market Commission, 2006).

Finally, the corporate governance code was recently revised by the Spanish National Stock Market Commission in 2020. This newly modified Code claimed in Recommendation 14 that “[...] measures that encourage the company to have a significant number of female senior managers are considered to favour gender diversity”.

Moreover, this time it included another quantitative target to be met. In Recommendation 15, the Code declared that board selection policies had to promote the objective of 40% of the total number of board members being composed by the underrepresented gender, this is, female directors, as it was being already discussed by the European Commission. This set goal was recommended to be achieved by 2022 and “...not less than 30% previous to that.” (Spanish National Stock Market Commission,

2020).

As for compliance monitoring of these recommendations, the Spanish Corporate Enterprises Act established that companies had to provide information about the progress made with regard to gender balance on boards that the code promoted on its recommendations or, in any other case, explain why these are not being complied with. It is then the duty of the Spanish National Stock Market Commission to track that these regulations are enforced (Ministry of Labour and Social Economy, 2020).

In terms of outcomes, the Spanish National Stock Market Commission (CNMV) publishes results on the presence of women directors on boards of Spanish listed companies every year. These results come from the annual reports on corporate governance provided by all the involved listed organizations and take into consideration both executive and non-executive directors.

Before the Good Governance Code of Listed Companies of 2015 was revised in 2020, results showed that only 27,5% of board members of Spanish companies listed on the stock market were women in 2019. This result not only did not pass the suggested quota of 30% proposed in the Good Governance Code of 2015, but also implied that progress was being very slowly made. This is the reason why the revision of the Code from 2020 proposed a 40% target before year 2022.

Graph 2 shows the evolution of women representation in boards and executive positions of Spanish companies which are listed on the national stock market. This data published by the CNMV was only available for the period 2017-2022. Nevertheless, a really slow growth on the overall women presence on these positions can be appreciated from 2017 to 2018. From then until year 2022, a great exponential growth is shown, due, to some extent, to the recommendations in the governance code.

Firstly, the effects from the recommended quota of 30% that needed to be met before 2020 may explain the change of growth tendencies. However, other measures and regulations on this issue could probably be another explanation for this progress. Next, the recent modification of the last corporate governance code in 2020, suggesting that listed companies should reach a 40% of women presence in their boards and executive positions before 2022 may have influenced and then described the reason of this steady and huge evolution in the last couple of years.

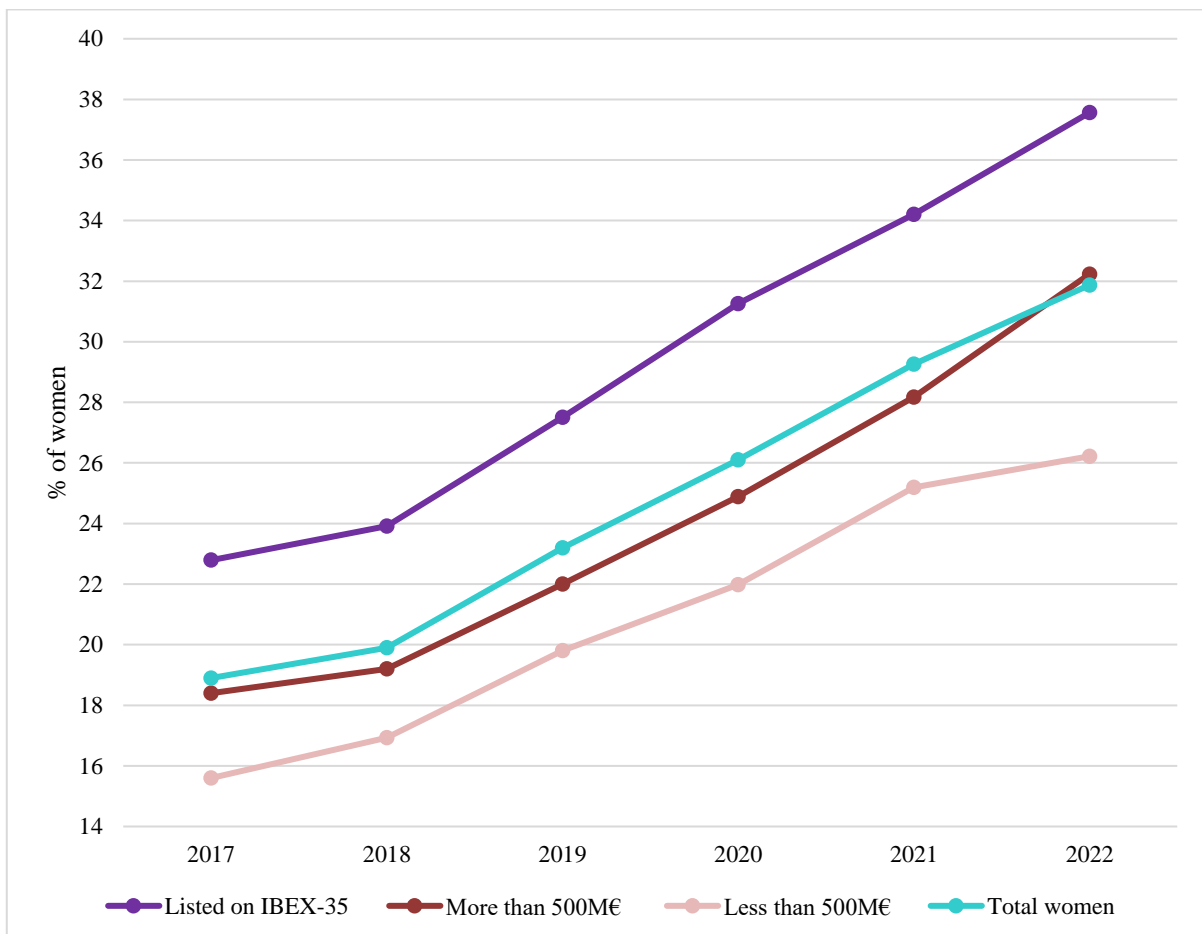
Graph 2 represents, not only the evolution for women presence for the total of

Spanish listed companies, but also this progress distributed into 3 different thresholds: companies from IBEX-35 stock market index (composed by the 35 most important Spanish listed companies), companies that exceed €500 millions of capitalisation, and those entities which capitalisation is under €500 million.

The spreading of this data between these companies is still highly noticeable. IBEX-35 companies got to 37.56% of women on the total boards and executive positions in 2022, while the women presence in the overall listed company sector only reached 31.87%. It is however the first time that women represent over 30% of all board members of listed companies in Spain, not achieving the recommendation quota of 40% before this year.

Graph 2.

Evolution of women presence in the board of directors and key executive positions in Spanish listed companies



Note. Source: Own composition derived from data provided by the Spanish National Stock Market Commission (CNMV).

The CNMV has qualified this evolution of “insufficient” and stated that these results should encourage “the promotion of more women being appointed for posts with greater responsibility, in particular for senior management and executive positions which show a greater disparity” (Spanish National Stock Market Commission, 2023).

Even so, the Spanish code remains not clear enough in terms of to how to improve and stimulate the gender balance ideal in senior management and executive positions. Table 1 presents the situation of gender parity depending on the type of board position and it distinguishes between non-executive and executive board members, and senior management positions. It also reflects the current situation, with data from 2022, when these positions only presented 6.74% of women for executive board members, and 21.73% for senior management positions.

These deficient results come from a highly slow evolution from past years. Women presence in executive positions have only increase by approximately 2% in the last 5 years, while in senior management positions this representation has also slowly grown by around 5%. That is the reason why the CNMV persists on stimulating women representation in these specific decision-making positions in listed companies.

Table 1.

Presence of women in boards of directors and senior management positions of Spanish listed companies for period 2017-2022

	Total Women					
	2017	2018	2019	2020	2021	2022
	%	%	%	%	%	%
Total	18,90%	19,90%	23,20%	26,10%	29,26%	31,87%
Proprietary	15,70%	15,32%	17,58%	21,02%	23,56%	23,90%
Executive	4,50%	4,31%	5,42%	5,50%	6,42%	6,74%
Independent	28,10%	30,68%	35,50%	39,00%	43,68%	47,57%
Other	12,20%	9,82%	12,50%	15,40%	14,61%	18,07%
Key executive women (excluded executive board members)	14,80%	15,82%	16,05%	17,53%	19,66%	21,73%

Note. Source: CNMV.

Analysing back again results and evolution from Graph 2, these may also show the effect on Spanish listed companies of Directive (UE) 2022/2381 on gender balance in boards of directors, as previously shown in the last section of this work, which quota was also being envisioned by European Union's member states on their corporate governance codes. What was recommended in the Spanish corporate governance code is in accordance with the recently accepted Directive.

The European Directive asks for a minimum of 40% of women representation on boards of listed companies only for non-executive positions, and a minimum of 33% for the total of board positions. However, this Directive will make this quota mandatory by law for all European legislations. European Union members may then decide to adopt or maintain regulations that go further and support a more balanced women representation on boards than the minimum established by Directive 2022/2381.

It should also be highlighted that the progress made on gender balance in boards in Spain in the last 10 years has been, not only really beneficial for other women in businesses issues such as the glass ceiling, but also very encouraging to keep working on this challenge that is gender equality. In 2012, the presence of women in boards and executive positions of listed companies Spain was only of 12% of the total of members (Spanish National Stock Market Commission, 2023). Ten years later, this result has evolved to 31.87%, and now more than half of the IBEX-35 companies have reached or even exceeded the target. Therefore, this outcome should be considered as a very positive progress towards gender diversity in the business background, yet not sufficient.

On the other hand, the Spanish Parliament passed on the Gender Equality Act in 2007 with its Constitutional Act 3/2007 of 22 March for effective equality between women and men, in an effort to ameliorate gender balance not only on companies' boards, but also in elected political offices, which also included a quota (Spanish Government, 2007). This is what was previously explained as a "soft law" because of the inexistence of sanctions when there is non-compliance from the involved companies, as it will be further explained later on this section. Even so, it is worth noting that, at this time, Spain was the only European Union's member state that proposed a gender balance quota on boards of directors of listed companies by law (Martínez-García et al., 2020).

The Spanish Constitution of 1978 established equality as one of its fundamental rights and values before the law. Moreover, the Gender Equality Act text starts by

remembering what the Spanish Constitution had stated on its Article 14 about equality regardless of the gender, “Spaniards are equal before the law and may not in any way be discriminated against on account of birth, race, sex, religion, opinion or any other personal or social condition or circumstance.” (Spanish Government, 1978).

Therefore, before the European Commission’s proposal of a 40% quota was approved in 2022, the Spanish Gender Equality Law had already established a 40% quota for gender diversity purposes in the boards of directors of the Spanish big companies that prepared consolidated financial statements in 2007. They are noticeable the great efforts that this member state made when it came to gender diversity policy before others started to prioritize this subject on their political agendas, making Spain a European pioneer on gender equality actions in businesses.

This goal had to be accomplished by 2015. Then again, this recommendation did not attain enough nor satisfactory results. Women were still really far from getting better representation on the boards of directors of Spanish big companies. It is not until the Spanish Corporate Enterprises Act was modified by Law 31/2014 in support of promoting gender diversity in boards that results started to show off in the boards of Spanish listed companies (Menéndez, 2015). These changes included the duty for all listed companies to display information about their structure and composition of their boards of directors, and the measures adopted to promote the inclusion of women in these specific crucial positions in the aim of reaching a balanced presence of both genders.

This article 529 bis on the balance representation of men and women in the boards of directors and senior management positions from the Spanish Corporate Enterprises Act was then again reformed by the Law 11/2018. This law newly modified the Spanish Code of Commerce and established this time that companies had to specify that their selection procedures for board members “made easy the selection for women as board members in a proportion that allows to reach a balanced presence of both women and men” (Palá Laguna, 2021).

Graph 3 shows the evolution of women presence on the total board members of Spanish listed companies. From this last two modifications of the Spanish Corporate Enterprises Act from 2015, a change on the speed of growth on the presence of women in boards of directors is perceivable.

Another reason why these changes have been noted in a very slow pace until around

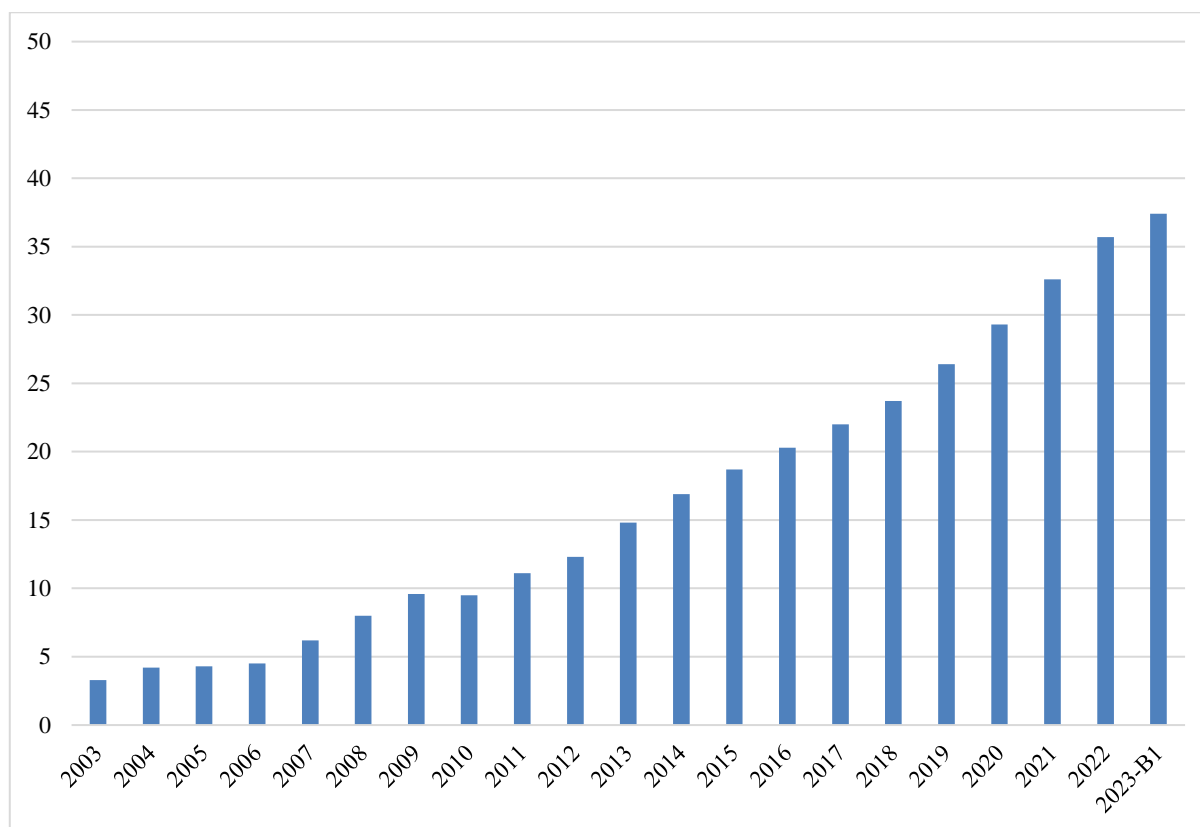
2015 may be the lack of penalties for non-compliant companies. In fact, as it will be demonstrated in the following section, it has been proven that gender quota laws without sanctions are not as effective as “soft laws” or gender quota laws that do not imply penalties (Martínez García, et al., 2020). However, unlike other European legislation systems, the Spanish quota law on gender diversity on boards does not include any penalty for the listed companies that do not comply with the objectives established by law yet.

In addition, the debate around an expected European Directive on gender balance in boards of companies has also pushed Spanish companies to integrate more gender-balanced boards in the past ten years. This may also be a reason for the evolution and the current results on gender diversity in boards of listed companies, illustrated by Graph 3.

In spite of this pressure coming from the European Union, it should be taken into account that the effect from the proposal for a Directive has had a much lower impact or effectiveness than that of the current Spanish gender quota laws and recommendations from the Good Governance Code (Martínez-García et al., 2020).

Graph 3.

Share of women on the boards of directors of Listed Companies in Spain, for the period 2003-2023 (1st semester)



Note. Source: Gender Statistics Database from the European Institute for Gender Equality (EIGE).

Regarding the recently approved European Directive 2022/2381, as European Union members have to pass what was stated onto their own national law, Spain have just approved the draft bill for the adoption of the Directive into Spanish law in March 2023.

This new law belongs to the III Strategic Plan for Effective Equality between Women and Men for 2022-2025, which was also approved by the Spanish government in March 2022. The expected investment for this programme will be of €21,319 million. This amount represents 4.4% of the government's non-financial budget, while last programme for the period 2014-2016 only envisaged a 1.1% of this budget.

But this new Spanish law draft does not only include what the European Directive required, as this one left European Union members the freedom to join further regulations or quotas while the European objective was met. Hence, some differences between the European Directive and the recently approved Spanish draft bill can be easily seen.

First of all, Directive 2022/2381 requests for EU listed companies' boards to be composed of a minimum of 40% of total members to be women, but this goal has only been established for non-executive board members. Or else, the Directive asks for 33% of total board members to be women. On the other hand, the Spanish draft bill for the new expected law is requiring a minimum of 40% of women representation of the total board composition. This will only benefit even more the boost for gender equality in businesses in the country.

Secondly, another outstanding difference will be the deadlines for compelling. these are, for the European Directive, by 30th June 2026, whereas the Spanish draft bill proposes its objective to be achieved by 1st July 2024. This does not leave much time margin for Spanish companies to meet the targets required by law. This is why Spanish large, listed companies will have to keep pushing and adopt measures to promote women as board members on their organizations.

Finally, small and medium companies which are not listed on the stock market will not have to compulsory meet these responsibilities. Therefore, this demonstrates the limited scope that these measures enforce.

2.3. Comparison between European countries

Different legislative measures have been initiated by the different European Union state members. The evolution and progress on gender diversity in boards seems to have a relation to the different measures and actions undertaken by European governments.

Table 2 presents an overview of the different regulations and measures taken by the EU member states, along with the year of their introduction into the national system.

Three different actions can be seen throughout Europe. First of all, hard laws or gender quotas for boards that normally comprise sanctions or fines in the case of non-compliance can be seen in legislative systems such as the French, the Italian or the Austrian law system.

These member states also present some recommendations with regards to gender diversity on boards in their Corporate Governance Codes. Some other member states only present these measures, which are called soft laws, as do not comprise any sanction or compulsory because of their volunteer aspect. The majority of the EU member states have introduced these recommendations at some time in their Codes, some sooner than others, as it can be seen in Table 2. This will be useful to compare their evolution to their regulations' timeline.

Finally, some other member states do not present neither a gender quota for boards nor recommendations for gender diversity in their Codes. This happens with countries like Bulgaria, Croatia, Hungary, Czech Republic, Estonia, Malta, among others (Kirsch, 2021). These will not be shown in Table 2.

Table 2.

Summary of Women on Boards regulation policies in the EU Member States

Country	Gender quota law	Year of first adoption	Corporate governance code	Year of first inclusion of recommendations regarding gender
Sweden	X		Swedish Corporate Governance Code	2004
Spain	✓	2007	Unified Good Governance Code	2006
Netherlands	✓	2013	Dutch Corporate Governance Code	2008

Finland	X		Finnish Corporate Governance Code	2008
Denmark	X		Recommendations on Corporate Governance	2008
Austria	✓	2018	Austrian Corporate Governance Code	2009
Belgium	✓	2011	Belgian Code on Corporate Governance	2009
Luxembourg	X		The X Principles of Corporate Governance of the Luxembourg Stock Exchange	2009
France	✓	2011	Corporate Governance Code of Listed Corporations	2010
Germany	✓	2015	German Corporate Governance Code	2010
Ireland	X		The UK Corporate Governance Code and Irish Corporate Governance Annex	2010
Italy	✓	2011	Corporate Governance Code	2011
Greece	✓	2020	Hellenic Corporate Governance Code For Listed Companies	2013
Romania	X		Bucharest Stock Exchange Corporate Governance Code	2015
Portugal	✓	2017	Corporate Governance Code	2016
Slovenia	X		Slovene Corporate Governance Code	2016
Poland	X		Code of Best Practice for WSE Listed Companies	2016
Latvia	X		Corporate Governance Code	2020

Note. Source: Based on Kirsch (2021), up-to-date own additions.

In order to provide a more developed comparison between countries, apart from the already analysed Spanish journey on gender in boards, the regulations and measures from some of the greatest European powers will be displayed.

First of all, France stands out for its results in terms of gender equality on companies boards. In fact, it is the first European country to reach the 40% European target for women representation in boards of listed companies.

France is one of the powers that presents a gender quota for boards with sanctions involved. This was introduced in 2011 with its Law number 2011-103 in relation to the balance representation of women and men in boards, and it involves both listed and non-listed companies that comply certain characteristics or specifications. The quota supported a 40%, with a period of six years, this is until 2017. When non-compliance, the appointed directors will be considered null and void, among other measures for punishment.

Furthermore, more recently a new gender quota law was voted in 2021. This one will impose a minimum target of, firstly a 30% of women by 2027, and then 40% of women in executive and top management positions in large companies to be achieved by 2030 (Le Monde, 2021).

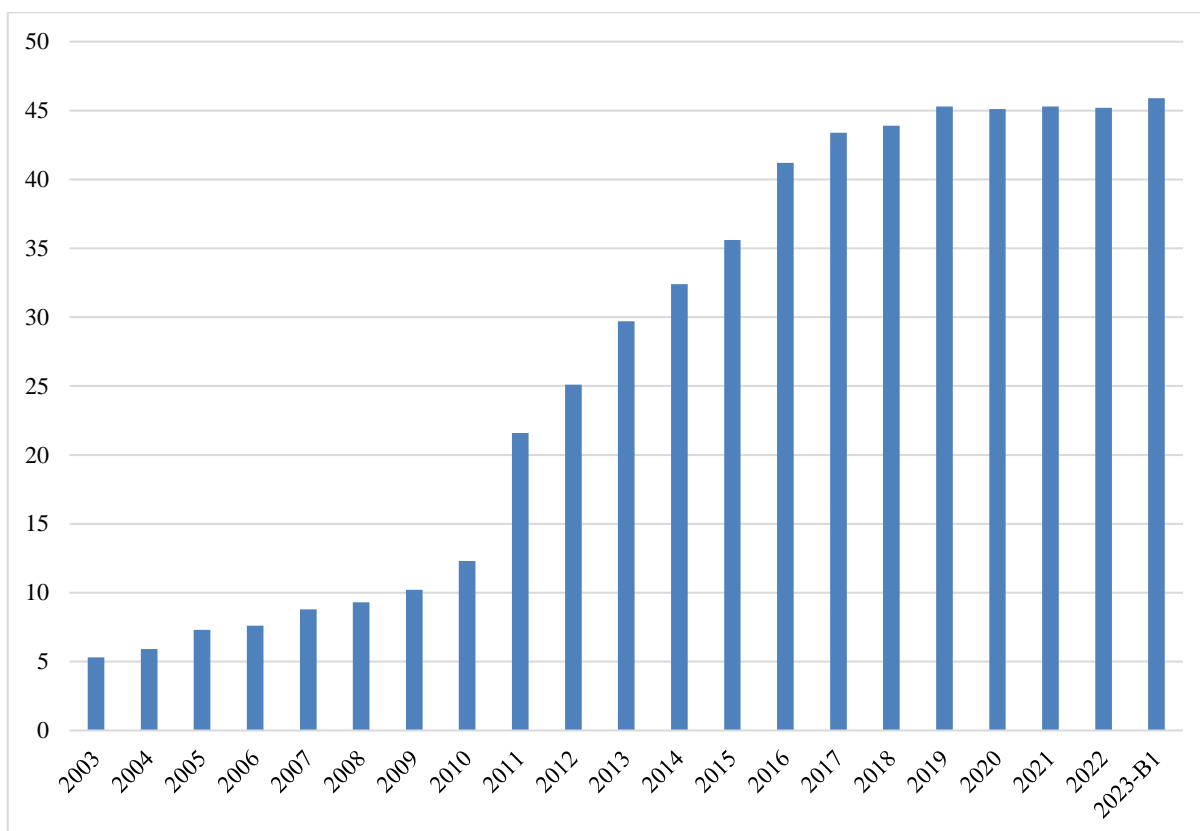
Moreover, the country introduced for the first time a recommendation on gender balance on boards in its Corporate Governance Code of Listed Corporations in 2010, where targets were also included. However, in the current version of the French Code, these targets are no longer specified, but it is recommended to publicly review the diversity policy that companies are carrying out to achieve a more inclusive and balanced board of directors.

Graph 4 shows the encouraging results from all the French measures developed with the aim of achieving gender equality in boards of large listed companies. It is worth noting that France first reached the 40% European target in 2016, being the first power to achieve so.

Moreover, French evolution on the share of women on boards completely changed its growth pace from 2011, thanks to the introduction of recommendations on gender in the French Code but mostly thanks to the imposition of a gender quota by law, that also included sanctions.

Graph 4.

Share of women on the boards of directors of Listed Companies in France, for the period 2003-2023 (1st semester)



Note. Source: Gender Statistics Database from the European Institute for Gender Equality (EIGE).

Nevertheless, the share of women on executive positions remains at about 21% in 2020, which shows the great gender imbalance these decision-making positions present still nowadays, with the hope that the new law on executive and top management positions will make the gap a bit narrower.

The situation of Germany is quite different from that of France. Germany first introduced a gender quota for supervisory boards in their legislative system in 2015. The target was only listed private companies and asked for a 30% of women share. This quota was effective from 2016.

Moreover, this law also asked to freely select what the concerned companies considered a proper quota on their management boards. However, this measure did not work as expected and the law was finally revised in 2021, when it included a minimum

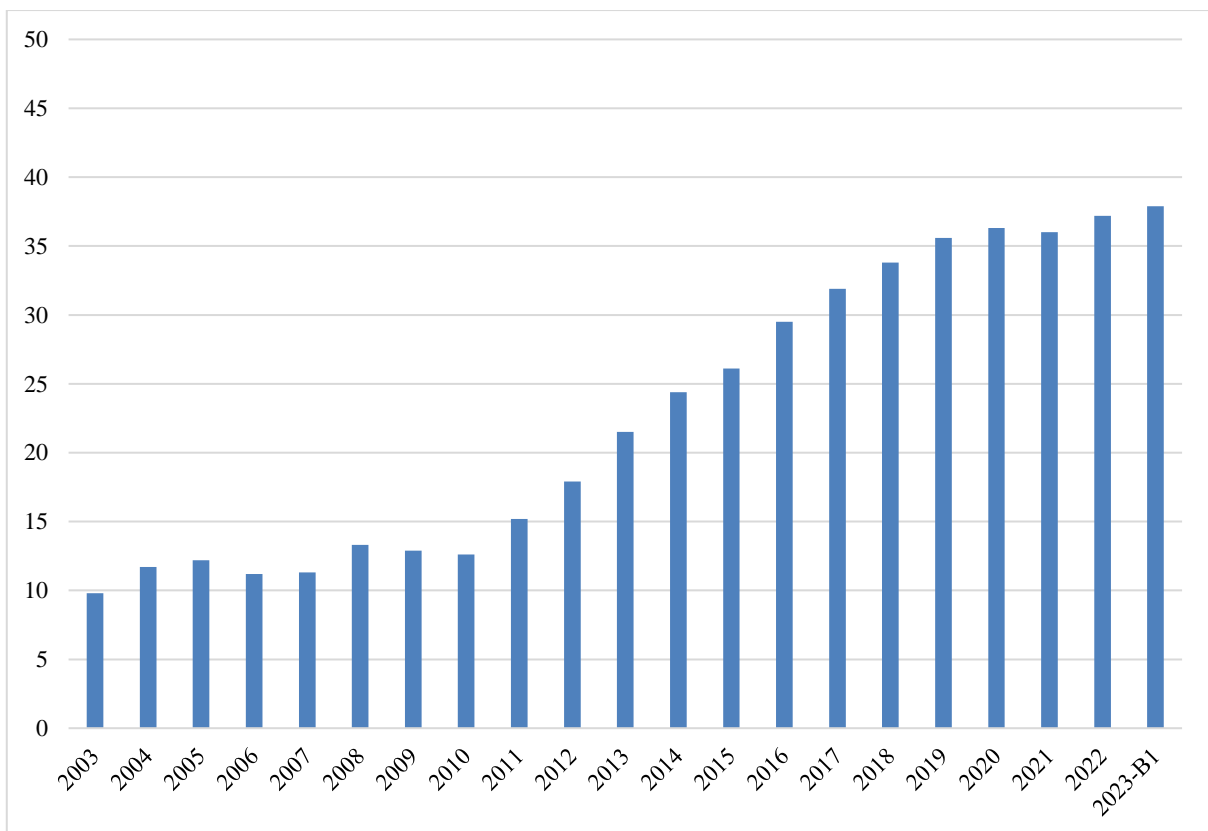
condition to be complied with. Nevertheless, it did not specify a minimum share.

The German Corporate Governance Code first included some recommendation on supervisory boards in 2010, being quite vague. This not specific journey on regulations and measures on gender balance on supervisory boards from the part of Germany is probably why their evolution on the share of women in these positions has been quite slow and steady. It was only in 2011 when the share started to really grow up and the pace was somehow speeding up.

Graph 5 shows how Germany remains still one of the countries that are close to achieve the 40% European gender target. Nonetheless, it has presented a stagnant growth since 2019 and does not seem to get to the 40% target any sooner, if its trends are taken a look at. The country will definitely need to improve their measures or even just specify more on the targets they expect listed companies to achieve for their supervisory boards when it comes to women representation.

Graph 5.

Share of women on the boards of directors of Listed Companies in Germany, for the period 2003-2023 (1st semester)



Note. Source: Gender Statistics Database from the European Institute for Gender Equality (EIGE).

However, women accounted for less than 15% of the executive positions in German largest listed companies. This imbalance is present in other EU member states.

Overall, as an analysis of the different evolutions, illustrated by the examples of Spain, France and Germany, it is accurate to state that there are great imbalances between the woman share on executive and non-executive director positions, certainly due to the lack of legislative measures on its part.

Also, recommendations in the different national Codes remain vague and unspecific, which leaves room for non-compliance if a quantitative target is not specified. This could also explain the low impact or the unsatisfactory and insufficient motivation that these measures provide for achieving gender balance on boards.

3. An Overview of the Indexes to measure Gender Diversity

Gender diversity has been measured in several different methods and considering very specific information. As to gender diversity in business, and more concretely in boards of directors, various European indexes have been proposed as to effectively measure progress in these terms in European Union members.

However, not all of them measure the same data, in the same way and do not take into consideration the same factors when computing their results. In fact, the following indexes that will be further explained all along this section of the work present some limitations as from scope of study or data limitations.

Firstly, this section aims to explain two of the most well-known gender diversity indexes in Europe, these are the Gender Diversity Index and the Gender Equality Index. Both examine data from European companies in order to study their evolution in terms of gender diversity in many aspects of society, such as work, business or even gender violence. Even so, this work will only take a look at the business aspect measured by these indexes, more concretely, to women representation on boards and on leadership and decision-making positions in companies.

However, these are not the only tools that study gender diversity in Europe, as this continent provides others that take into account many other aspects of business, as entrepreneurship or even innovation and research. the aforementioned indexes as well as some of these other tools will be further explained during this section in accordance to the gender imbalance issue in the European business landscape.

3.1. Gender Diversity Index

Gender Diversity Index (GDI) constitutes the reference index to measure gender equality on boards in corporate leadership in Europe. It has been developed by the European Women On Boards (EWoB) association, whose aim is working with national and European associations while analysing gender diversity at decision-making level in businesses in order to reach gender balance at this level throughout Europe. This objective is certainly presented in consonance with the last European Directive on gender equality on boards, which requires a minimum of 40% of women representation by year 2026.

In fact, the association is presented as a non-profit organisation based in Brussels

that work hand in hand with other associations whose aim is in accordance with theirs. Hence, it is cofounded under the Rights, Equality and Citizenship Programme of the European Union and, for example, it counts with the collaboration and support from the Spanish association EJE&CON as a member.

One of the actions developed by the EWoB is the proposition of various programs such as mentoring programs for newly appointed female managers or other senior level positions so as to make efforts to accompany women that are getting into the decision-making levels in businesses to face all the challenges that they will probably have to confront in those positions and therefore, stimulate their incorporation and thus their representation on boards. Overall, the association's aim is to reach this common European goal.

As a tool for monitoring and analysing progress on gender diversity in corporations, the association has developed the Gender Diversity Index (GDI), which is computed by gathering and reviewing information from over 600 European listed companies. This index is granted as unique due to the large amount of data analysed, but also because of its definition onto the European continent and onto the decision-making level and board level positions in many different European businesses.

Moreover, this index aims to study data from not only businesses in the state members of the European Union, but from the whole continent, as it takes into consideration data from listed companies based in Norway or even in the UK. The data gathered by the EWoB comes from official public data from the European stock indexes coming from 19 different countries, such as Spain, Germany, Sweden, France, Belgium, the Netherlands, Czechia, Switzerland or Austria, among other European countries.

The GDI includes data from over 600 small to large, listed companies. In fact, the total firms considered in the last computed index from 2021 were a total of 668, from which the majority come from the publicly quoted and listed entities of the STOXX Europe 600 index. The remaining firms were selected from European national stock listings, as for countries like Ireland, Poland or Portugal. Moreover, data is collected from these companies' annual reports and websites during the summer period of 2021.

It is an aggregate index; therefore, data is composed from the share of various different decision-making levels in businesses. The percentages included in the index come from the following analysed indicators: the share of women in all leadership

positions as a total, the share of women on boards, the representation of women in executive positions and finally, the participation of women in board committees.

Regarding the analysis of the values provided by this index, it should be noted that the smaller the distance to value 1 in the GDI ranking, the better positioned the company will be in, being below 1, the leadership positions are skewed towards men, and over 1, they are skewed towards women. Table 3 shows the GDI country ranking for latest computed year, 2021. The goal is to have as balanced the composition of leadership positions in a company as possible.

GDI from 2021 found that 337 companies on the dataset had the average or were above the average GDI, whereas the rest of the companies in the dataset, this is 311 of them, were below the average GDI.

As it can be seen in Table 3, the highest ranked countries are Norway, France and the UK, followed by other Scandinavian countries, Finland and Sweden. On the other hand, among countries with a significant number of companies included in the dataset, Austria, Switzerland and Poland are situated the lowest in the ranking. It is relevant to highlight that, even if Greece appears takes part in the index computation, the country has not been taken into consideration as its data was retrieved by another entity and they did not follow the same procedures as for data validation.

It should be appreciated that not all countries that present gender balance quotas for boards' composition are necessarily on the top of the ranking. Comparing these results to those from Table 3, it is notable that some Scandinavian countries as Sweden and Finland do not have quota laws in their national legislation and they are still high on the ranking. Nevertheless, it should be taken into consideration that at this time, the European Directive was not approved yet, and member states still had not made incorporations or modifications of their regulations.

Some other countries as Norway and France, ranked the highest in the GDI ranking, did present gender quotas in their legislative systems back in 2021, with both a 40% gender quota from 2005 and from 2011 respectively. This is also the case of Italy (33%) and Belgium (33%), ranked among the top 10 countries (European Women on Boards, 2022).

Overall, there is not a direct relationship between gender quotas imposed by national law and the relative results from the analysis of these companies' leadership

levels in the Gender Diversity Index. However, it has been proven that these types of pressures may stimulate gender diversity in leadership positions among European listed companies. And this can be stated with even more certainty when there are sanctions in the case of non-compliance, not leaving any other option for these companies but to introduce gender diversity into their boards and other high-level decision-making positions.

Table 3.

Countries ranking by Gender Diversity Index of 2021

Rank	Country	# companies in the dataset	GDI	Change in GDI since 2019
1	Norway	19	0,72	-0,02
2	France	76	0,71	0,04
3	UK	133	0,67	0,01
4	Finland	16	0,63	0,02
5	Sweden	62	0,63	0,02
6	Italy	33	0,62	0,02
7	Denmark	21	0,61	0,1
8	Belgium	16	0,58	0,01
9	Netherlands	27	0,58	0,01
10	Ireland	20	0,56	0,04
11	Spain	23	0,54	0,05
12	Germany	72	0,52	0,04
13	Portugal	16	0,5	0,06
14	Czechia	11	0,46	0,04
15	Austria	20	0,45	0,02
16	Switzerland	53	0,43	0,04
17	Poland	20	0,41	0,04
18	Luxembourg	9	0,3	-0,11
19	Greece	25	0,24	N/A

Notes. Source: Table and data retrieved from GDI report from 2021.

Among the many findings from the GDI report of 2021, it is interesting to analyse the results for the different leadership levels, such as boards or executive positions, as well as the evolution from past years. It is worth mentioning that the EWoB started to develop this index and issue their reports only in 2019.

Firstly, progress on gender diversity in leadership level positions in these European countries is very slow. The overall GDI score only grew by 5%, this is, from 0.56 in 2020

to 0.59 in 2021. As it is shown in Figure 2, an average company from the overall dataset presents a 30% of women representation in all leadership level roles. Moreover, they would have 35% of board members, 19% of executive positions and 36% of committee members as women. These results in 2020 were 28% for women representation in the overall leadership roles, 34% for women representation on boards, and only 17% for women in decision-making and executive positions. The progress from past years is still slow as it can also be seen from other data analysed before on this work.

However, there are more companies from the dataset that came closer to gender equality in 2021, as 13% of them present a GDI score of 0.8 or more. In 2020, this percentage was only of around 9% of the companies from the sample. In both years, the companies that reached these high scores were mostly French, British and Swedish companies. But the companies at the end of the ranking still present a very slow tendency for progress. In fact, 8% of the 2021 sample companies presented a GDI score of 0.3 or less, from the 9% that were presented in 2020.

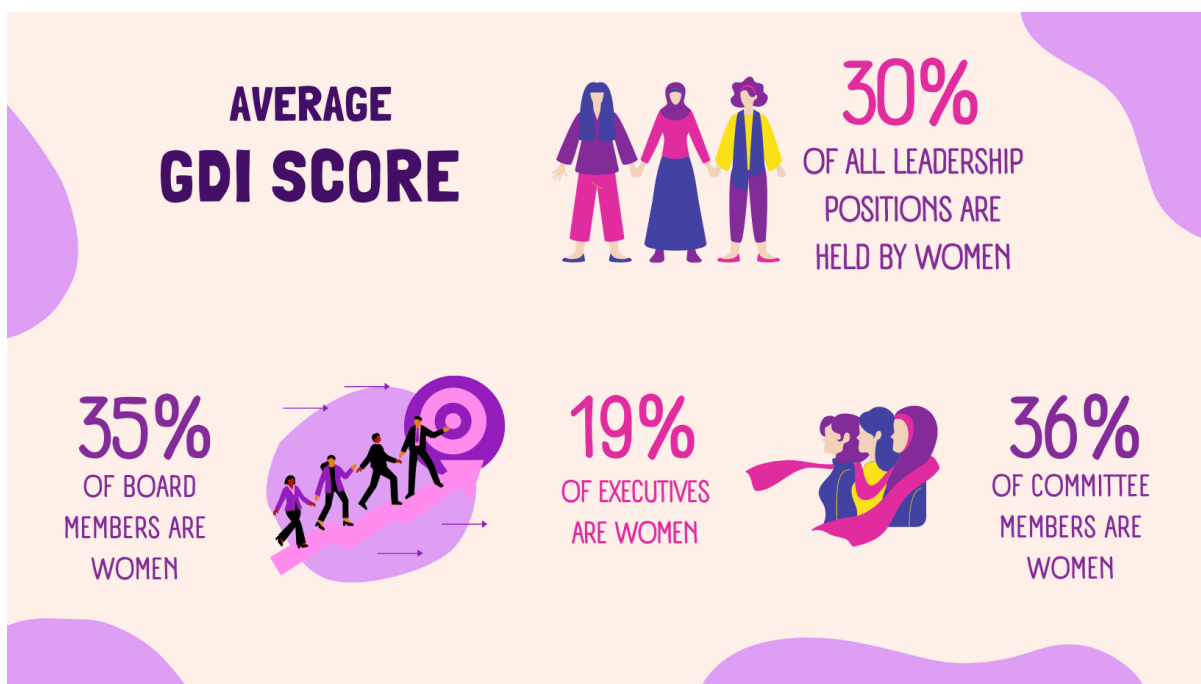
What is more, even if boardrooms present the highest women representation of all leadership levels, there is still a long way towards gender equality in the overall leadership positions. It is alarming the low representation of women at the executive roles. According to the GDI score results, also displayed in Figure 2, in 2021 the average company would only present a 19% of women on its executive members. This means that there would be companies that would present a bit more women representation, and others which would show a lower women representation than 19%.

Overall, the share of women in all analysed leadership positions is of 30% in 2021, which is still a quite low and discouraging share. The European Women on Boards association does not expect to reach the 40% goal proposed by the European Union on their Gender Equality Strategy for 2020-2025 in time, this is, by 2025. The association explained on their 2021 report that it would take more than 10 years to reach this ambitious objective, regarding the GDI growth tendency until 2021. If we took into account the growth speed and tendencies until now, it would be expected to reach a perfect GDI score of 1 in 2035.

It is relevant to note that the progress studied, and this prevision was stated right before the EU approved the Directive that compelled a 40% gender quota on boards, so the tendency could and should change exponentially after this milestone.

Figure 2.

Statistical results from the Gender Diversity Index of women on boards and in corporate leadership of 2021



Note. Source: own composition, data retrieved from infographics of the 2021 Gender Diversity Index of women on boards and in corporate leadership report (EWOB).

Moreover, other findings from the EWOB's report declared that women representation in the C-suite (CEOs, CFOs, and COO, when available) is even lower than at the executive layer. The share of women at this level were only 15% in 2021 and 14% in 2020 of the overall C-suite positions. It is also important to highlight that women are more likely to be appointed CFO than CEO, as it is proven that only 7% of CEOs in the dataset were women in 2021, whereas 16% of CFOs from the sample were women.

Another interesting finding came from top positions from another level of leadership, these are, the chairs of boards and committees. Women are hardly ever appointed as chairs at this leadership levels. In 2021, women represented only the about 9% of the overall chairs of boards and committees.

Furthermore, this index classifies and analyses the companies involved by sector of activity. Some of the studied sectors were consumption goods and retail, construction and real estate, industrial goods and services, and financial and insurance services, among

others. This is important to see how present women are in any of these sectors. It is also useful to compare sectors by women presence and see how their presence should be improved or encouraged in some of them.

In relation to the technology and media sector, this concerns to all European start-ups and scale-ups in the dataset for the Gender Diversity Index computation. In the 2021 results, it is worth pointing out that there is a great variation between subsectors. The average 2021 GDI for firms in the media subsector was of 0.69, while the telecommunications and technology subsectors presented GDI averages of 0.60 and 0.55 respectively.

However, there is not a huge difference between sectors' GDI average. In fact, out of all the eight analysed sectors, the technology and media one is classified in the fifth position, with 78 studied firms. Its GDI score in 2021 was of 0.59, in contrast to its previous year's score of 0.56. It can be concluded that the technological sector is far from achieving a balanced presence on boards and leadership positions, and that its progress is quite slow, just like the construction and real estate sector.

Indeed, a study issued in 2023 by the European Institute of Innovation and Technology (EIT) programme Supernovas, which is part of the European Union's bodies, concluded that, out of over 7,500 European scaleups, over 600 of them have minimum one female founder today. This represents only about 8% of women as founders in this European sample.

This same study reported that, out of over 300 unicorn startups (private companies – former startups – with a value over US\$1 billion) in the EU27, only 2% present at least one woman in their founding team. Therefore, this kind of companies in Europe are hardly ever women-led, except for the case of Finland, where 25% of unicorn companies are founded or at least cofounded by women (San José et al., 2023).

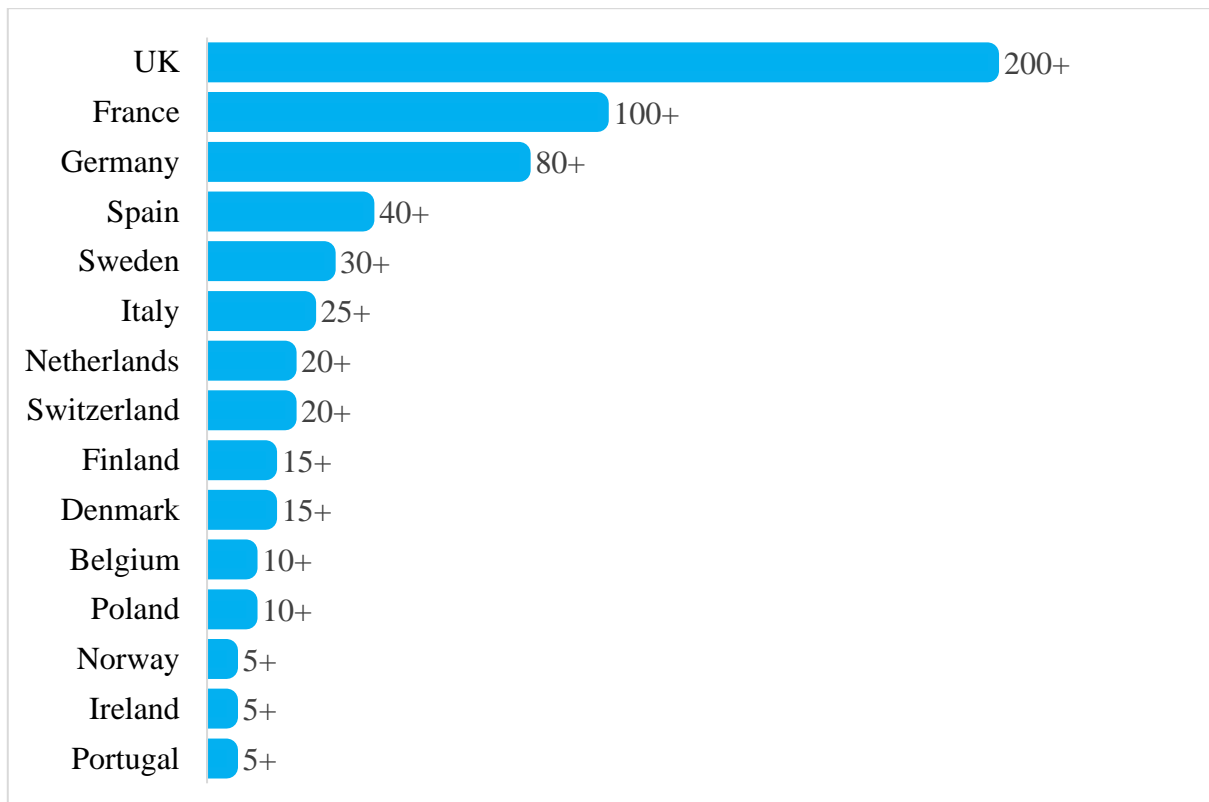
From all the 600+ European women-led scaleups of this study, these are distributed by European countries. In some, it is perceived a wider representation of this scaleups than in others. Graph 6 presents the ranking of the top 15 European countries, classified by number of women-founded scaleup companies. The data is taken from current information of 2023.

It is worth noting that the countries from the EU which possess a higher amount of scaleup firms that were founded by women are France, Germany, and Spain. However,

the UK goes a longer way in this subject and presents the double of women-founded scaleups than France. Therefore, it should be considered not only the facilities for technological innovation that each European country presents, but also the easiness, encouragement and regulations towards the promotion of women in these industries that these countries provide to the female gender.

Graph 6.

Top 15 European countries by number of women-founded scaleups up to 2023



Note. Source: Data retrieved from report of the EIT Supernovas program, [The landscape of women founded scaleups and investors in Europe \(eitmanufacturing.eu\)](https://eitmanufacturing.eu/landscapes/women-founded-scaleups-and-investors-in-europe).

This position is directly related to innovation and technological research where, as it has been shown with real results, women presence in the positions of responsibility is still far from being significant, and men presence takes the majority of the share.

On the other hand, the good news is that innovation and technology founded and represented by women are growing faster in Europe, especially in value, in comparison to the overall European average for scaleups since 2017 (San José et al., 2023).

Furthermore, going back to the 2021 GDI findings, and comparing it to the technology and media sector, the better positioned sectors in terms of women presence on boards and leadership positions are the “Other” sector, which involves utilities, travel and leisure, with a GDI of 0.62, followed by the financial and insurance services sector. In contrast, the worst positioned sectors would be the basic resources and chemicals as well as the industrial goods and services, positioned last of the ranking with a GDI of 0.53.

Finally, it is accurate to conclude that members on the decision-making level of companies are still quite far from a gender balanced situation. This gender imbalance becomes even more critical when the top executive positions and top boards and committees’ roles, such as CEOs or chairs of boards, are analysed. In addition, the growth tendency in the overall leadership levels is too slow as to achieve the European Union’s objective in time.

Moreover, when it comes to technological sector and innovation, women presence remains less than 10% of the founders and representatives in European scaleups and startups in 2023. Nevertheless, an exponential growth is starting to be noticed in these past years, due to national regulations and other actions from European institutions like those the European Institute of Innovation and Technology.

3.2. Gender Equality Index

Gender Equality Index (GEI) sets up a completer and more diverse indicator than the GDI, as it does not only look at women presence and gender balance in terms of business and responsibility positions in companies, but also other aspects of society, such as work, time, or money. Hence, it does not focus only on boards and companies’ highest positions, being considered as a tool for a wider analysis of the gender balance position throughout the European Union.

Additionally, the GEI was created by the European Institute for Gender Equality and works hand in hand with decision-making bodies by highlighting the areas for improvement, with the purpose of developing better policies and regulations to reach the common goal that is gender equality in every aspect of society.

A total of 6 main areas are studied by this index, these are, work, money,

knowledge, time, power, and health. Two more domains were recently added as well, which are gender violence and intersecting imbalances. This last area tries to give an answer to how components like age, education or even country of origin may converge with gender.

The countries compared are the 27 European Union member states. Also, many indicators are taken into account to compute the index. In fact, there are a total of 31 analysed indicators. And data is retrieved from the European statistical database Eurostat, as well as the Gender Statistics Database. This makes the GEI a complete, complex and accomplished tool for studying gender imbalances.

What is more, the index has been developed and issued for seven years since 2013, and annually since 2019. That is why it is considered as a very reliable tool for measuring gender equality in the EU, but also, and more importantly, due to the fact that it passed the filter of an audit effectuated by the European Commission's Joint Research Centre (EIGE, 2022). Latest index scores from 2022 will be analysed in this section as well as the evolution from first years' issue.

Moreover, every GEI score report for the last years has been issued with a thematic focus, as for example, in 2022 the GEI was focused on the effects of the COVID-19 pandemic and care onto the evolution of the index results and analysed areas. This thematic report was achieved thanks to an online survey on "Gender equality and the socio-economic consequences of the COVID-19 crisis", which the EIGE took part during the summer of 2021. This one dives deeper onto childcare, long-term care, housework and flexible working arrangement. In 2021 the theme was health, in 2020 the digitalisation in the work world, and finally, in 2019 the GEI was themed in work-life balance aspects.

The different sub-domains where the 31 indicators lie into, that are analysed and taken into account every year when computing the index, classified by their different areas, are the following:

- **Work area:** participation at work, gender segregation and quality of work.
- **Money area:** financial resources, economic situation.
- **Knowledge area:** attainment and participation, gender segregation.
- **Time area:** care activities, social activities.
- **Power area:** political, economic, and social decision-making.

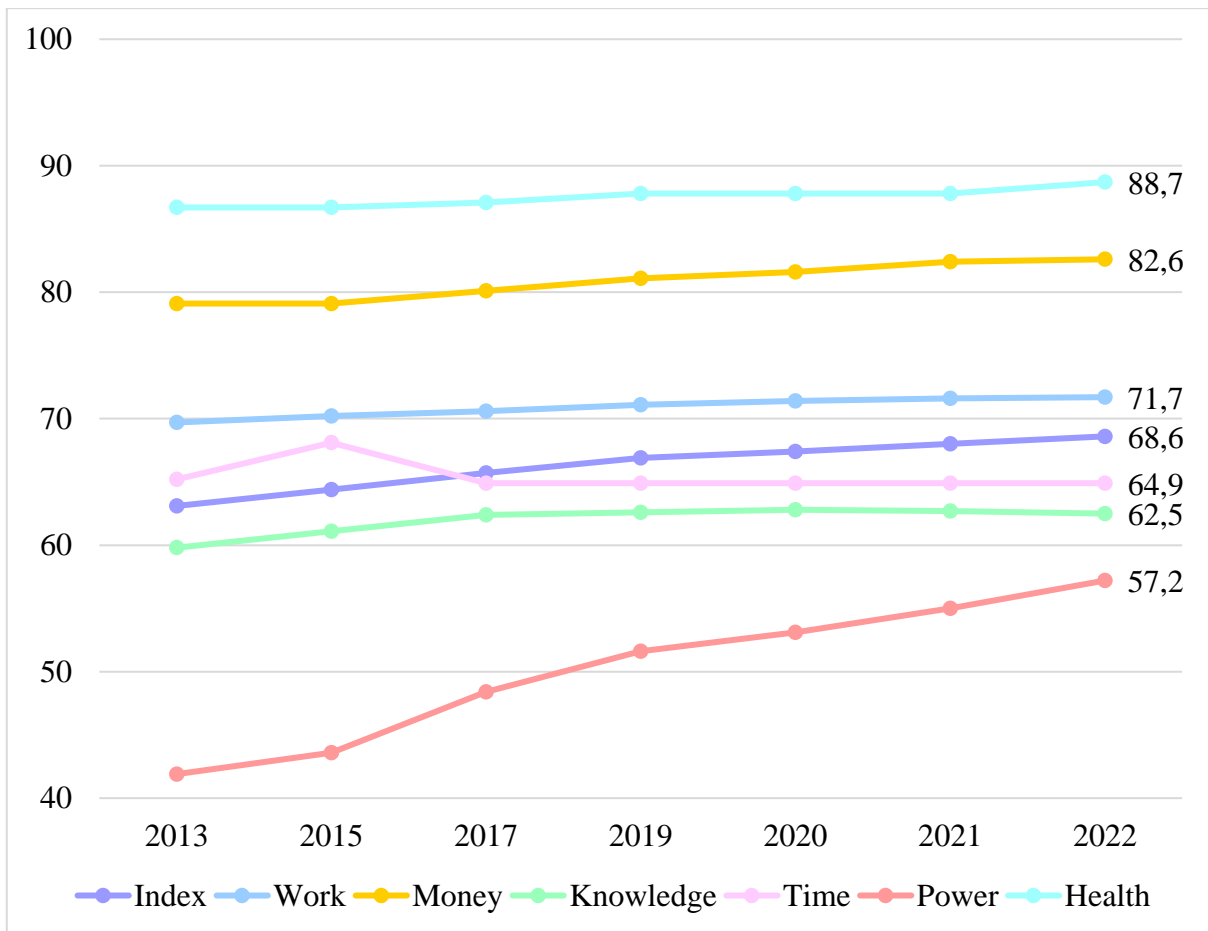
- **Health area:** health status, health behaviour, access to health services.

It is important to highlight that the most part of the data analysed for the 2022 Gender Equality Index is from 2020. The European Union 2022 GEI average stood at 68.6 out of 100 points, with an increase of 5.5 points since 2010 and 0.6 points since 2019, which shows again a slow and pretty steady growth throughout the years. A perfect score of 100 points will mean that gender equality has been effectively achieved.

From the 2022 GEI, it is perceived that the growth on the EU average is greatly pushed by the power area on the index. Graph 7 shows the progress on the GEI index since its first issue in 2013 by domains, and this statement is easily perceived graphically. Paradoxically, while the best performing area is the health domain with an overall score of 88.7, the worst performing area remains the power area with a score of 57.2, which presents large gender imbalances. This is due to the negative effects of the COVID-19 pandemic on the gender equality progress.

Graph 7.

Trends in the European Union Gender Equality Index scores by domain



Note. Source: Data retrieved from EIGE's 2022 GEI report.

The power area is the domain where gender equality is far from being achieved in the European Union. This situation is especially worse when it comes to the sub-domain of the economic decision-making aspect, which scored 52.1 out of 100 points in the last GEI. But this same sub-domain is the one which has presented the greatest progress, with an increase of over 23 points since year 2010, and an increase of over 3 points from 2019.

According to the EIGE's report on the power domain of the GEI, it highlights an overall stagnant development, and it only highlights the imperative and urgent need of incorporating more women on company boardrooms, as European institutions are transmitting through their gender plans, proposals and regulations. However, even if the progress on the power area of the index has had a great progress in the past years, presenting an improvement of over 15 points since 2010 as it can be seen in Graph 7, its score remains the lowest of all analysed areas.

With regard to country ranking, for overall power, Hungary remains at the bottom since 2015, while Sweden has been at the top since 2010. However, when the scope is narrowed down, the sub-domain of economic decision-making, which includes gender share in firms' boards, presents France as the top country and Romania as the lowest performing country in this sub-area.

It is also stated that development with respect to gender balance in economic decision-making has greatly been pushed thanks to regulations and legislation from European Union member states. The states that presented gender quotas accounted 37% of board members in the biggest listed companies being women in 2022, while those which presented soft laws or recommendations achieved 31%, and the countries with no legislation at all only got to 18% of board members being women (EIGE, 2023), as it has been explained in previous sections of this work.

Finally, the index does not include any specific indicator or section for the innovation and technology dimension. However, as it was stated previously, the 2020 GEI edition had a special focus on the digitalization of work.

As a conclusion, it is accurate to state that the Gender Equality Index is a reliable and wide composite tool for measuring the complex concept of gender equality, as it takes

into account over 30 indicators and is based on the European Union policy framework. It also studies the gender imbalances of economic power, this is, to the extent that it concerns this work, the share of members of boards in the largest quoted companies.

Therefore, it is presented as a more complete and wider index than the Gender Diversity Index. It does not only present a complex composition with the aim of measuring such a complex social concern as gender imbalances, but it also has a higher longevity, as it has been developed for the last 10 years. This gives a better understanding and a longer view of the European progress made in terms of gender equality until now.

3.3. Other Indicators

Apart from the Gender Diversity Index and the Gender Equality Index, other indicators and measurement tools have tried to shed a light on gender in various aspects of business, such as entrepreneurship or innovation. Some of these are the Missing Entrepreneurs indicators and the Global Entrepreneurship Monitor. However, among these two, the Missing Entrepreneurs indicators would be the ones that focus on the European Union.

The Missing Entrepreneurs reports are prepared by the Organisation for Economic Cooperation and Development, jointly with the European Commission, in which they include analysis and indicators on the national policies developed for stimulating the creation of job positions, economic development as well as social inclusion. A great part of the report focuses on entrepreneurship activities, which are measured by country and population groups.

Moreover, this report presents indicators for inclusive entrepreneurship, and analyses which are the obstacles that the key targets encounter along their entrepreneurship journey, as well as the imposed barriers to get there and achieving an entrepreneurship status. The population groups that are being analysed throughout the reports of the Missing Entrepreneurs program which constitute the main target for European inclusive entrepreneurship policies are the minority population groups, such as women, immigrants, young people or even unemployed people, among others taken into consideration for this study.

When it comes to women, the report dedicates a whole section to inclusive policies

targeted to this minority population group. It reviews the policies for women self-employment and entrepreneurship activities, the current trends, the activities developed during the entrepreneurship life cycle, and barriers to creating a business or developing a start-up company by women, among other important aspects.

Conclusions undertaken by the last Missing Entrepreneurs report in 2021 stated that there is still a great gender imbalance with regards to self-employment and entrepreneurship, “both in terms of activity rates and also in the types of activities undertaken” (OECD, 2021). This has great interest for the innovation and start-ups field, as it proves the gap that still exists between genders in this domain, suggesting that European and national policies must pursue these gender concerns in order to obtain satisfactory results and achieving an effective, inclusive conditions for every gender.

4. Limitations to the Indexes that measure Gender Diversity

Gender diversity is known to be quite a complex subject to be measured with some easiness or in a simple way. The limitations that encounter the computation and development of the different indexes that study gender diversity, explained in the previous section of this work, make that the provided results are not that accurate or complete.

Gender Diversity Index (GDI) is a more specific and recent measurement tool, while Gender Equality Index (GEI) is considered as a completer and more complex index, provided of more than 30 indicators on different social subjects that concern anyone's life, and it has also issued data for a longer period of time.

The GDI focuses mostly on giving visibility in order to achieve the 40% goal of women representation at the decision-making level of listed companies. On the other hand, the GEI presents a wider focus or scope of data, taken into consideration not only the gender imbalances in the economic decision-making aspect, but also in many different aspects of life and society, such as knowledge, money, or even health.

Moreover, the GDI develops a section to scaleups and startups, and the European innovation and technological framework, which takes an important part of their analysis and reported results, while the GEI does not provide much information about this aspect of businesses.

Given all of the differences above and considering that it is not possible develop a perfect tool for perfectly measure the compound social concern that constitutes gender diversity is, a proposal for better measuring this relevant subject will be developed in the current section.

With the purpose of having a better understanding of what limits the analysis of the different variables or indicators that form the studied indexes, and hence giving a better response on how to more accurately measure gender diversity, the limitations of the previously explained indexes will be further described.

Firstly, as it will be very recognizable, there is the limitation on data availability. Gathering such a large amount of data from many different countries seems like a challenge nowadays. Reliable and accurate data are very hard to get, and this will be one of the most important aspects to take into account when computing or developing an index or measurement tool.

Data collection is often carried out via a survey, which takes a lot of time, effort and funds to be accomplished, or by the gathering of the currently available information in official statistical databases. This obviously limits the quantity of information that will be taken into consideration when analysing a multidimensional social issue.

Secondly, gender diversity indexes come with a limited scope of study, this are, limitations to the variety and width of the data available. For example, when the GDI and the GEI are looked at, it is easy to see that the key target for their analysis are the European largest listed companies, leaving out the small and medium companies, and sometimes even the big companies that are not listed on the stock market.

This obstacle leads to a limited view and understanding of the social problem, as only a little part of the European business landscape is being represented by them. In this way, making generalized statements is not possible, as small and medium companies present another reality of the problem.

Thirdly, these indexes do not consider some important aspects of women representation in business and even innovation. This translates into a gap in terms of analysed indicators to compute the index. It is worth highlighting that, to this extent, scaleups and startups are not being considering, even if many times this type of firms present a huge value in the European market.

Moreover, other aspects like research are not really reviewed throughout some of these gender diversity indexes and their reports, which is somehow related to innovation and technology at the present time.

However, it is certain that these tools need to transmit in a simple way a concept with multiple facets, which does not make it easy to develop an accurate or even perfect measurement tool, but the aim is to develop tools that may help to analyse aspects that must be improved in terms of gender diversity.

Overall, these three main limitations lead to not very diverse, complete, or accurate indicators to measure gender diversity. That is why some proposals on how to improve the current indexes, but also on how to develop specific indexes for those topics of business and innovation that are not being treated in relation to gender diversity yet.

5. Proposals for Future Indexes

Once reviewed the possible limitations that could interfere with the proper development of an index that can effectively measure gender diversity in the most complete way possible, some proposals on how to achieve this should be considered.

First of all, and since the previously examined indexes focus mostly on the large listed companies in the European Union, some indicator to measure gender diversity on small and medium-sized companies (SMEs) must be considered. This would not only be for those firms that are listed on the stock market, but also for the SMEs that are not quoted. They could also be classified by sector could improve our understanding of the situation on gender diversity from a wider view.

This will not only help with provide us with the overall results of every member state, but also to make visible and give the importance that gender balance has in every decision-making position of any company. This might also help to motivate governments or organizations to go a bit further and promote gender balance in these companies.

What is more, this indicator could be a single index or measurement tool, specific to the European firms from these sizes, or even an additional indicator to the already computed GDI or GEI. This indicator could be computed by gathering information of a sample of these companies, that could conform an equitable sample for each of every analysed sector, as it was done in the GDI.

Finally, these companies will be given the importance that they have. They will maybe not be the ones which provide more value to their markets, but they overcome large listed companies in number. In fact, the majority of companies in Spain, and in many other countries, are composed by SMEs which are not listed on the stock market.

However, it is certain that gathering this information may result somehow tedious, as there are not many official databases that provide with this information. These are more focused on the largest companies or the publicly listed ones. Also, the organization of the decision-making positions of all SMEs are not the same, or even similar, which may be an impediment to produce reliable and smooth results.

On the other hand, another proposal could be the development of a specific index that measures gender diversity in the innovation field. It would take into account both scaleups and startups, the sectors involved in the innovation aspect of business such as

technology, and it would analyse how balanced the conditions are on the top decision-making positions of this other type of organizations.

Even if some other gender indexes have included some section or indicator on this subject, it remains not widely studied and it lacks analysis on Europeans scaleups and startups. In fact, startups are not really being considered in these sections of some of the indexes or indicators above mentioned.

This proposed indicator is already being examined in order to put out a pilot index. In fact, this pilot index that studies specifically innovation, gender and diversity, proposed by the European Innovation Council (EIC) and the European Commission, comes from the need of providing a useful and effective tool to measure these specific issues.

But it is also needed to provide scaleups, startups as well as investors and funds with all the talent available, and specifically with female talent in order to lower the current imbalances on this sector. This pilot index would involve startups and SMEs, which would make it a very original, inclusive and useful index in this current moment.

Nevertheless, this is still a pending project from the EIC portfolio.

6. Conclusions

Gender diversity has been given more and more importance during the last decades, becoming one of the most discussed issues in the European Union institutions and organizations.

What is more, gender diversity in the European business landscape has reached its latest milestone when the proposal for a Directive on gender diversity on boards of directors of listed companies in 2022, proposing a gender quota by law that will have to be trespassed to all member states' national legislation. This is one of the most important achievements in terms of gender balance and decision-making power, and it comes from all the discussions around the topic for all of the past years in the European sphere.

Therefore, it is considered the consequence of the need of giving visibility to all the female talent that is available but not considered in a systematic way. These measures and actions aim to stimulate the inclusivity of women on boards and other decision-making positions in European companies which, as proven in the current work, remained until now in a superiority position towards men.

At the same time, a great number of member states had already considered this issue on their political agendas, and hence, policymakers had developed national measures such as hard laws or gender quotas, and soft laws or recommendations. When these state members that have developed regulations to improve this gender imbalances are compared to those member states that has not taken part in this common goal yet, it could be concluded that legislative measures, such as gender quotas by law, lead to a faster progress.

Also, it is worth considering that there is still a significant difference in women participation between non-executive and executive positions in European listed companies, being these last positions the less represented by women. This could be due to the lack of legislative measures from the part of the European Union.

Moreover, the European Union is provided with several tools for measuring not only gender equality in general but also gender diversity inside the boardrooms of European firms. These tools are greatly helpful to analyse where the gender imbalances come mostly from, or even they make institutions and organizations think about how the causes of these imbalances may be solved. The most consolidated, reliable and complete

indexes to do this are the Gender Diversity Index and the Gender Equality Index.

Through these indexes it is perceived that the importance on innovation, entrepreneurship, scaleups and startups is still quite insignificant in comparison to other aspects of business also analysed throughout these indicators. That is why this is also a subject that is being discussed lately throughout Europe, as gender diverse talent, innovation, development and ideas were being at risk.

Gender diversity is a complex multidimensional concept which makes it difficult to measure effectively. However, there is always room for improvement and proposals, like it is seen in the project on a European pilot index specifically on innovation, gender and diversity from the European Innovation Council.

As a conclusion, the European Union as a whole has still a long way to go in order to achieve gender balance in economic decision-making positions, but also in general aspects of any life. The good news is that many measures and tools are being developed and implemented in the past years with the purpose of helping to reach this common goal, which finally translates into a more inclusive and diverse composition on European boardrooms.

7. References

- Barbieri, D., Fiore, A., Linkevičiūtė, J., Mollard, B., Nahrgang, M., Peciukonis, V., ... Dr Salanauskaitė, L. (2022, October 24). *Gender Equality Index 2022: The COVID-19 pandemic and care*. Report for the European Institute for Gender Equality (EIGE). Retrieved from [Gender Equality Index 2022: The COVID-19 pandemic and care | European Institute for Gender Equality \(europa.eu\)](#)
- Council of the European Union. (2022, October 17). *Council approved EU law to improve gender balance on company boards*. Press release from the Council of the EU. [Council approves EU law to improve gender balance on company boards - Consilium \(europa.eu\)](#)
- Equal Measures 2030. (2022, March 4). *2022 SDG Gender Index report*. Retrieved from Equal Measures 2030's webpage. [SDG-index report FINAL EN.pdf \(equalmeasures2030.org\)](#)
- European Commission. (2013, November 20). *Cracking Europe's Glass Ceiling: European Parliament backs Commission's Women on Boards proposal*. Press release retrieved from the European Commission's webpage. https://ec.europa.eu/commission/presscorner/detail/en/IP_13_1118
- European Commission. (2022, March 5). *A Union of Equality: Gender Equality Strategy 2020-2025*. Communication from the European Commission. [EUR-Lex - 52020DC0152 - EN - EUR-Lex \(europa.eu\)](#)
- European Commission. (2022, November 22). *Gender Equality: The EU is breaking the glass ceiling thanks to new gender balance targets on company boards*. Statement retrieved from the European Commission's website. [New gender balance targets on company boards \(europa.eu\)](#)
- European Commission. (2023). *EU action to promote gender balance in decision-making*. Retrieved from [EU action to promote gender balance in decision-making \(europa.eu\)](#)
- European Institute for Gender Equality. (EIGE, 2020, July 14). *Statistical brief: gender balance in largest listed companies*. Retrieved from EIGE's webpage. [Statistical brief: gender balance in largest listed companies | European Institute for Gender Equality \(europa.eu\)](#)
- European Institute for Gender Equality. (EIGE, 2022, December). *Gender mainstreaming:*

- Country Specific Information section*. Information and data retrieved from [Country Specific Information | European Institute for Gender Equality \(europa.eu\)](#)
- European Union. (2022). *Procedure 2012/0299/COD*. Retrieved from [EUR-Lex - 52012PC0614 - EN - EUR-Lex \(europa.eu\)](#)
- European Union. (2022, November 23). *Directive (UE) 2022/2381 on improving the gender balance among directors of listed companies and related measures*. Publications from the Official Journal of the European Union. Retrieved from [Publications Office \(europa.eu\)](#)
- European Women on Boards. (2022). *Gender Diversity Index of Women on Boards and in Corporate Leadership 2021*. Report. [2021-Gender-Diversity-Index.pdf \(europeanwomenonboards.eu\)](#)
- Fagan, C. (2013). *Women on Corporate Boards in Europe*. (POLICY DEPARTMENT C: CITIZENS' RIGHTS AND CONSTITUTIONAL AFFAIRS: Gender Equality). European Parliament. [Women on Corporate Boards in Europe \(europa.eu\)](#)
- Gallego-Álvarez, I., García-Sánchez, I., & Rodríguez-Dominguez, L. (2010). *The influence of gender diversity on corporate performance*. *Revista de Contabilidad*, vol. 13, issue 1, pages 53-88. Retrieved from [https://doi.org/10.1016/S1138-4891\(10\)70012-1](https://doi.org/10.1016/S1138-4891(10)70012-1)
- Kirsch, A. (2021, December 7). *Women on Board Policies in Member States and the Effects on Corporate Governance*. Study from the Policy Department for Citizens' Rights and Constitutional Affairs. European Parliament. Retrieved from [Women on Board Policies in Member States and the Effects on Corporate Governance | Think Tank | European Parliament \(europa.eu\)](#)
- Legislative Observatory from European Parliament. (2022). *2012/0299(COD)*. Retrieved from [Procedure File: 2012/0299\(COD\) | Legislative Observatory | European Parliament \(europa.eu\)](#)
- Le Monde. (2021, October 28). *Parité femmes-hommes: le Sénat vote pour l'établissement de quotas aux postes de direction des grandes entreprises*. Press release. [Parité femmes-hommes : le Sénat vote pour l'établissement de quotas aux postes de direction des grandes entreprises \(lemonde.fr\)](#)
- Lombardo, E. (2016). *Gender equality policies in Spain*. (POLICY DEPARTMENT C:

- CITIZENS' RIGHTS AND CONSTITUTIONAL AFFAIRS: Gender Equality).
European Parliament. [Gender equality policies in Spain - update \(europa.eu\)](#)
- Martínez García, I., & Gómez Ansón, S. (2020, November). *Regulación de género en los consejos de administración: el papel moderador del entorno institucional*. Spanish National Stock Market Commission (CNMV). [Work document n. 72. Regulacion de genero ES web.pdf \(cnmv.es\)](#)
- Organisation for Economic Cooperation and Development. (2021, November 29). *The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment*. Report retrieved from [The Missing Entrepreneurs 2021: Policies for Inclusive Entrepreneurship and Self-Employment | en | OECD](#)
- Palá Laguna, R. (2021). *La Diversidad de Género en los Consejos de Administración y en la Alta Dirección de las Sociedades Cotizadas*. Revista Aragonesa de Administración Pública, n. 56, pages 41-62. Retrieved from [La diversidad de género en el consejo de administración y en la alta dirección de las sociedades cotizadas - Dialnet \(unirioja.es\)](#)
- Palá Laguna, R. (2022, December). *The gender balance directive on the boards of directors of listed companies*. Academic publication, Analysis on Corporate governance. Academic Counsel, Gómez-Acebo & Pombo. Retrieved from [Directiva equilibrio genero eng.pdf \(ga-p.com\)](#)
- Prpic, M. (2015, December). *Gender balance on company boards*. At a glance. plenary, December 2015 European Parliamentary Research Service. European Union. [Briefing European Parliamentary Research Service \(europa.eu\)](#)
- San José, A., Napoleão, C., Geoffroy-Terryn, L., & Frank, G. (2023, May). *Supernovas: The landscape of women founded scaleups and investors in Europe*. Report by the European Institute of Innovation and Technology. [The landscape of women founded scaleups and investors in Europe \(eitmanufacturing.eu\)](#)
- Shreeves, R. (2023, April 20). *Gender balance on boards*. In “A New Push for European Democracy. Legislative Train Schedule. European Parliament. [Carriages preview | Legislative Train Schedule \(europa.eu\)](#)
- Spanish Ministry of Labour and Social Economy. (2020, July 29). *Código de Buen Gobierno de la CNMV*. El Portal de la Responsabilidad Social. [Código de Buen](#)

[Gobierno de la CNMV. El portal de la Responsabilidad Social \(mites.gob.es\)](https://www.mites.gob.es)

Spanish National Stock Market Commission. (May 2006, February 2015, June 2020). *Codes of Corporate Governance*. Publications from CNMV. Retrieved from [CNMV - Codes of Corporate Governance](#)

Spanish National Stock Market Commission. (2023). *The presence of women in the board of directors and key executive positions in listed entities*. Publications and statistics. Periodical publications. [CNMV - The presence of women in the board of directors and key executive positions in listed entities](#)

Spanish National Stock Market Commission. (2023, May 23). *The presence of women on the boards of directors of listed companies continued to increase in 2022, up to 32% of the total and close to 40% in IBEX companies*. Press release. [Press release 2023 \(cnmv.es\)](#)