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Gender Wage Gap: Evidence for Italy

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INTRODUCTION

Throughout various historical periods, working women were often subjected to unfair stereotypes, perceived as immoral or lacking in femininity. They were unjustly accused of neglecting their roles as mothers. Many times, employers, colleagues, and society at large failed to take women who aspired to professional roles seriously.

In the early to mid-20th century, even in Europe, the prevailing notion was that women's primary duty was to fulfill domestic and family responsibilities, prioritizing their roles as wives and mothers. Only later were they encouraged to explore professional pursuits.

The Second World War marked a turning point, as it witnessed an unprecedented influx of women into the workforce. This transformative period permanently altered societal perceptions of women's roles in the workplace. After 1945, a growing number of women began to participate in the labor force. However, their career aspirations were heavily influenced by factors such as gender, socioeconomic status, race, education, and parental expectations.

Historically, women had limited career options due to pervasive sexism, discrimination, and restricted access to education. Frequently, parents fostered the professional aspirations of their sons while stifling those of their daughters. The prevailing belief was that women's entry into the workforce would compromise their inherent femininity, characterized by gentleness and submission.

In the post-World War II era, the ¹"Becker equilibrium" emerged as a prevailing model, emphasizing a nuclear family structure where men assumed the role of primary breadwinners, while women were responsible for managing household and childcare duties. Marrying and having children at a young age, maintaining stable relationships, and experiencing low divorce rates or celibacy were the norms.

¹The Becker equilibrium" refers to a theoretical concept proposed by Gary Becker, an American economist and Nobel Prize winner in Economics in 1992. This equilibrium, also known as the "marriage market theory" or "economic model of marriage," provides an economic perspective on decisions related to marriage, family, and work. (Becker, G., A Treatise on the Family, Cambridge, Mass., Harvard University Press (1981))

These values were deeply ingrained in European societies at the time, reflecting the prevalent mindset. In the early 1950s, despite a significant increase in the number of working women, they predominantly occupied low-level positions, faced unequal pay, and were confined to conventional career paths such as service industry jobs, nursing, teaching, and secretarial roles—reflecting societal stereotypes. Women were rarely considered for scientific or engineering positions due to the prevailing perception that these fields were reserved for men, resulting in female workers earning approximately 20% less than their male counterparts.

This apparent equilibrium was a facade, with the balance increasingly tipping in favor of men who held influential positions and brought home higher salaries. In contrast, women often settled for underpaid jobs and endured persistent gender discrimination to secure a foothold in the workforce.

In the latter part of the 20th century, a significant shift occurred, ushering in a new balance characterized by contradictory and antithetical principles. This equilibrium saw the rise of women who were determined to harness their human potential, seeking economic independence through gainful employment, and thereby improving their family lives. Importantly, this shift did not entail relinquishing motherhood, as the preference for having two children, deeply rooted in the societal fabric for most of the 20th century, remained unchanged for women and their families.

While this shift can be seen as an initial step toward gender equality, it remains a precarious balance. Common standards are lacking, and the tension between individual desires and societal expectations often results in an unsatisfactory resolution regarding gender discrimination. Many characterize this as an "unfinished revolution" in contemporary discussions.

So, the business environment has evolved significantly. The very notion of leadership has adapted with the changing times. By the late 1990s, esteemed researchers like Johnson and Packer (1987) began to discern noteworthy shifts in workforce dynamics. They highlighted, "...almost two-thirds of fresh workforce entrants between the current year and the year 2000 will be women. Non-white individuals will constitute 29% of these new entrants, a twofold increase from the current workforce ratio. Immigrants will represent the largest portion of population and workforce growth since World War I. Collectively, these demographic shifts signify that the emerging workforce between today and the year 2000 will differ markedly from today's employees." This clearly demonstrates the emergence of women, introducing a new dynamic to the workforce.

According to Catalyst (2010), a prominent non-profit organization dedicated to advancing women's representation in global workplaces, the realms of work and management have historically been male dominated. Women have been less associated with entrepreneurial roles, primarily due to the prevailing perception of men as the default corporate leaders, reinforcing the prevalent "think manager, think male" mindset, as asserted by Cuadrado, Garcia-Ael, and Molero (2015). This perspective is further substantiated by research conducted by the global network of independent insurance and consulting firms, Grant Thornton (2018), which revealed that women held fewer than a quarter (24%) of senior roles globally, marking a 25% decrease from the previous year. Additionally, 25% of global companies had no women in executive positions.

However, in more recent times, changes have become evident. According to a study by Adams, Hermalin, and Weisbach (2010), women in the corporate world have demonstrated the capability to bring a completely different perspective to leadership, grounded in their unique life experiences and sensibilities. They regard power as an opportunity and management as a responsibility to the company and all its stakeholders. It has also been observed that their perspectives and competencies have led to the development of innovative ideas and concepts fundamentally distinct from long-established norms.

In this context, Grant Thornton also reports a changing landscape. In 2018, the percentage of companies worldwide with at least one woman in senior leadership roles significantly increased in just one year, rising from 66% in 2017 to 75% in 2018. Given these findings, the organization seeks a deeper understanding of the role of policy in driving positive change and counteracting cultural attitudes and biases that hinder progress.

In response to the growing demand for diversity in the workforce, many companies today aim to address this issue within their corporate leadership, setting specific objectives such as rectifying employment and compensation disparities and promoting diversity as an asset. Companies focus on managing a diverse workforce to gain a competitive edge. Initiating measures to promote diversity forms the basis from which companies can develop Diversity Management programs. In line with these statements, researcher Taylor Cox Jr. (2001) observed that policies and programs aimed at improving the recruitment, inclusion, promotion, and retention of diverse employees create conditions that maximize a company's potential while minimizing barriers to diversity management. Additionally, a group of researchers led by Esty et al. (1995), which aimed to outline a guide for leveraging diversity as a competitive advantage, underscores the imperative of maximizing gender diversity in the workplace for effective organizational management in today's market. This enhanced collaboration and communication among individuals allow companies to be more innovative and responsive to change.

But, before anything else, a fundamental question arises: why is it important for companies to implement diversity management strategies? To answer this question, it is useful to identify three key elements found in the literature. First, it is essential to highlight that "diversity is here to stay." The Workforce 2000 report by the Hudson Institute in 1987 revealed future workforce trends, indicating that the percentages of women and members of minority groups in companies are expected to continually rise over time. This underscores the increasing prevalence of diversity in businesses and the importance of acknowledging it.

Another statement reinforcing the significance of gender diversity is: "Diversity management is the right thing to do." According to the Workforce 2000 report, the concept of equal opportunity can be applied across all business contexts, regardless of individual characteristics such as gender, race, and sexual orientation. The reasons for implementing diversity management include equal access to job positions and fair compensation for work, without gender discrimination.

Lastly, "Diversity makes good business sense." In this regard, Taylor Cox Jr. (2001) argues that diversity management represents a competitive advantage in terms of reducing costs associated with turnover or absenteeism, enhancing a company's image, and fostering greater collaboration among diverse employees.

The goal is to underscore the two most significant factors that place women at a disadvantage compared to men in terms of opportunity and wage disparities, with the aim of better understanding the most suitable corrective actions to reduce this unequal treatment.

1. Gender Inequality

The evolution of management over the years has allowed us to reevaluate things from a different perspective, step by step, from a women's point of view. The turning point is the decision to put women in leadership roles, as Ikujiro Nonaka (1995) suggests: "Management is not a matter of techniques or methods; it is a matter of values... Innovators have always started with their beliefs, with a way of representing the world. Then they tried to transform this subjective belief into a defined, objective concept. They motivated it within their organization and, in the end, realized it concretely." Hence, it appears plausible that people, if they can keep their ideas and beliefs alive, can develop ideas and visions into well-defined, achievable, and functional concepts. Based on these premises, it is not superfluous to emphasize that the female value system (certainly influenced by imposed social roles but

characterized by unique sensitivity and partly undiscovered or even novel intuitive intelligence) has been suppressed for years by the dominant male culture. Today, change seems to allow women to express unusual and unexpected ideas and concepts, which can translate into success and profit.

This new openness toward women in the corporate world, however, is not yet fully widespread. Above all, motherhood is perceived as a problem, primarily in terms of cost. However, in a reversed perspective, to better understand how important female presence is for all companies, one should ask: what is the cost to the company of not choosing a woman?

In this context, the reflections of writer Priscilla Dike (2013) on the theme of motherhood experienced in the workplace are quite significant. Dike asserts that the key element every business must understand and absorb is this: making investments to assist women during maternity costs less than not addressing the issue at all. The exclusion of women, therefore, is not the right solution. On the contrary, according to the author, gender diversity within companies can strengthen communication with the external public, enhancing the image, responsiveness, and productivity of the entire team. This assertion arises from the consideration that efficient management of the potential and peculiarities of each worker allows the company to derive multiple strengths, resulting in a significant impact on the workforce and excellent relationships among various stakeholders.

The most critical aspect that all companies must consider, according to the author, concerns the willingness to demonstrate how it is possible to shift from an organization based on control to an organization based on trust and work autonomy. These foundations allow women to secure an active presence, despite the prejudices and problems they must face daily, even regarding motherhood.

The underlying idea the author would like to see developed in modern companies is that the business should be seen as a place where different individuals with diverse needs and interests converge, an environment where everyone must be taken into account because everyone contributes to creating value. At this point, it is essential to observe the female figure and her contribution to the company. The orientation aims for the company's growth, economic objectives, development of potentials, and increased involvement of all parties in the corporate structure.

However, theoretical intentions struggle to become practice. In this regard, it is pertinent to cite some data that help paint the current situation and understand the female presence in Italian companies.

To further understand the situation, it is worth noting that, according to the McKinsey and LeanIn. Org Women in the Workplace Report (2019), based on a sample of 64,000 employees and 279 North American companies, 20% of the surveyed women claimed to be the only female representative within the company. The figure becomes even higher in sectors such as technology and engineering. Furthermore, it was discovered that while men increasingly secure permanent positions without significant hurdles, female representation decreases as one ascends to an executive role; in the C-suite, only one in five members is a woman. Additionally, it was found that women working in environments characterized by a significant gender imbalance are most often subjected to their judgment being questioned, thereby risking the attribution of unpleasant and untrue adjectives, or even worse, suffering humiliating and discriminatory comments about themselves.

The solution to these problems, according to Dike, involves the possibility of introducing a higher number of female figures into different teams to create a balance between men and women for better performance by all. In parallel, it involves processes that ensure a greater female presence, thus attempting to rebalance the presence of both genders and eliminate the disparity issue that characterizes most companies.

Gender equality is a central issue in today's world. Despite the broad spectrum of topics, its relevance is evident, especially in a company's economy. As the focus of this work is precisely this area, it is appropriate to consider objectives related to gender equality, which are reflected in the governance and accountability systems of all companies. The awareness that diversity management can become an advantageous element for organizational efficiency and corporate performance has prompted companies to rethink their organization and implement interventions aimed at developing inclusion and diversity management.

In support of this thesis, it is important to highlight how numerous business cases, examined over the years, have aimed to better understand, and grasp the relationship between gender diversity and corporate performance. Exemplary studies include ³Post and Byron (2015), ⁴Solakoglu and Demir (2015). Their research aims to investigate the effects that a board consisting of both men and women can have on the entire company. In any case, many of these studies have made it possible to identify positive relationships, which have generated beneficial consequences for both the company and the individuals involved.

²Post C., Byron K., Women on boards and firm financial performance: A meta-analysis, Journal 58, 2015

³Solakoglu, M.N., Demir, N., The role of firm characteristics on the relationship between gender diversity and firm performance, Management Decision, 2015

In particular, based on the studies conducted by the cited scholars, it has emerged that female executives who are actively involved in company management can enhance overall meeting participation and increase stock performance sensitivity. The results highlight that a female presence in various top management bodies not only brings advantages in terms of company performance but also allows male figures to improve their performance.

These results allow women to be classified as a "governance mechanism" that facilitates internal business practices.

1.1 Cultural Aspects and Gender Diversity

Despite the increasing and steadily growing presence of women in companies, the predominance of male entrepreneurship affords men multiple advantages. Furthermore,⁶Alicia Rubio-Bañón and Nuria Esteban-Lloret conducted an analysis in 2016 that shed light on the discrepancies in entrepreneurship rates between men and women across different countries. Their study revealed that these variations weren't solely attributed to stereotypes and societal roles but were also deeply entrenched in diverse cultural values.

The research highlighted the notable differences in entrepreneurial rates between men and women across varying countries. This discrepancy was illuminated through an understanding of the social, cultural, and economic factors that favored or hindered entrepreneurial development, thereby addressing the fundamental question: "Why do more men tend to become entrepreneurs compared to women?"

The study discussed various theories explaining this gender gap, with particular emphasis on the social role theory formulated by Eagly in 1987. This theory posits that women exhibit lower entrepreneurial tendencies due to societal attributions of gender-related stereotypes and roles. These roles often steer women away from domains associated with achievement or leadership and position them more toward household responsibilities, caregiving, and eldercare. As a result, the prevalence of limiting and negative stereotypes primarily targeted at females contributes significantly to their lower inclination toward entrepreneurship. These stereotypes and cultural biases perpetuate the idea of a dominant culture favoring men in leadership positions, thereby shaping societal norms and expectations.

⁴Bañón Alicia Rubio, Lloret Nuria Esteban, Cultural Factors and Gender Role in Female Entrepreneurship Suma de Negocios, 2016

The researchers highlighted the stark contrast in the likelihood of men versus women initiating entrepreneurial endeavors, emphasizing that the probability of women starting a business is significantly lower across various geographical locations. They emphasized how the cultural context, societal values, and beliefs within each country greatly influence perceptions and attitudes toward entrepreneurship. This acknowledgment underscores the multifaceted nature of the gender disparity in entrepreneurial ventures, indicating the importance of cultural influences in shaping these trends.

Secondly, it is important to mention a model developed by ⁵Hofstede, published in three editions (1980, 1991, and 2003). Geert Hofstede is a Dutch social psychologist famous for his work on analyzing cultural differences between countries. His model of cultural dimensions has been published in various editions (1980, 1991, and 2003) and significantly influenced the understanding of cultural variations in global societies.

Hofstede's six cultural dimensions help understand cultural differences among countries:

1. **Power Distance:** Measures the acceptance of power and status inequalities in society. In countries with a high power distance, authority and hierarchy are more readily accepted, while those with low power distance tend to favor equality and challenge authority.
2. **Individualism and Collectivism:** Represents the degree of interdependence among individuals in society. Individualistic countries value personal independence and individual initiative, while collectivist ones place more importance on the group, family, and social cohesion.
3. **Masculinity and Femininity:** Reflects the distribution of gender roles in society. In more masculine societies, traits like competition, ambition, and material success are valued, whereas in more feminine societies, emphasis is placed on caring for others, quality of life, and modesty.
4. **Uncertainty Avoidance:** Indicates society's tolerance for ambiguity and uncertainty. Countries with high uncertainty avoidance tend to prefer rigid rules and avoid ambiguous situations, while those with low uncertainty avoidance are more open to innovation and change.
5. **Long-term Orientation vs. Short-term Orientation:** This dimension expresses the temporal orientation of culture. Short-term oriented cultures focus more on the present and tradition, while long-term oriented cultures are more future-oriented, emphasizing persistence and adaptability.

⁵Hofstede G., What is culture? A reply to Baskerville Accounting, Organizations and Society, 2003

6. Indulgence and Restraint: Added in the third edition, it reflects society's attitudes toward pleasure, self-expression, and controlling desires. Indulgent cultures tend to allow gratification and indulgence, while restraint-oriented cultures favor moderation and self-discipline.

Hofstede's analysis revealed how these cultural dimensions can influence various aspects of society, including entrepreneurship and gender differences in this field. For instance, in cultures oriented toward masculinity, where ambition and power are emphasized, higher entrepreneurship rates and more pronounced gender disparities are likely compared to cultures oriented toward femininity, where interpersonal relationships are considered more important than individual success.

1.2 Global Gender Gap and his dimensions

To best understand how this phenomenon is of international relevance, it is necessary to broaden the scope of observation, not only considering our own country but also other states.

Gender equality represents, in fact, a fundamental right for Italy and the entire European Union, as enshrined in the Universal Declaration of Human Rights of the United Nations. Due to its significance, it represents one of the main objectives that the entire European Union intends to pursue and protect.

When it comes to equal opportunities, the scope of application is quite extensive, encompassing areas such as health, power, finances, and knowledge, but primarily, in this context, in the workplace. Understanding gender inequalities between men and women within companies is the central point of this work.

Over the years, numerous milestones have been achieved that bring us closer to gender equality, but in some periods, there have been signals of regression rather than improvement. Compared to the early 2000s, the data show steps backward for our country in the context of the global trend.

According to the latest Global Gender Gap Index 2023, which ranks countries based on achieved gender pay equality, Italy ranks 79th out of 146 countries. Specifically, our country is in the 104th place concerning participation and economic opportunities, while for political representation, it ranks 64th.

The ⁶Global Gender Gap Report serves as a useful tool in this regard, as it compares 146 countries, assessing their progress toward gender equality across four thematic dimensions: economic participation and opportunity, educational attainment, health and survival, and political empowerment. The first dimension, in the economic field, considers three crucial thematic areas:

1. Economic Participation Gap: It measures the difference between women and men's participation in the workforce.
2. Wage Gap: This helps identify income disparities between women and men, and through the World Economic Forum's annual Executive Opinion Survey, it assesses wage equality for similar jobs.
3. Advancement Gap: This dimension uncovers disparities in progress between women and men, using two important statistics: the "ratio of women to men among legislators, senior officials, and managers" and the "ratio of women to men among technical and professional workers."

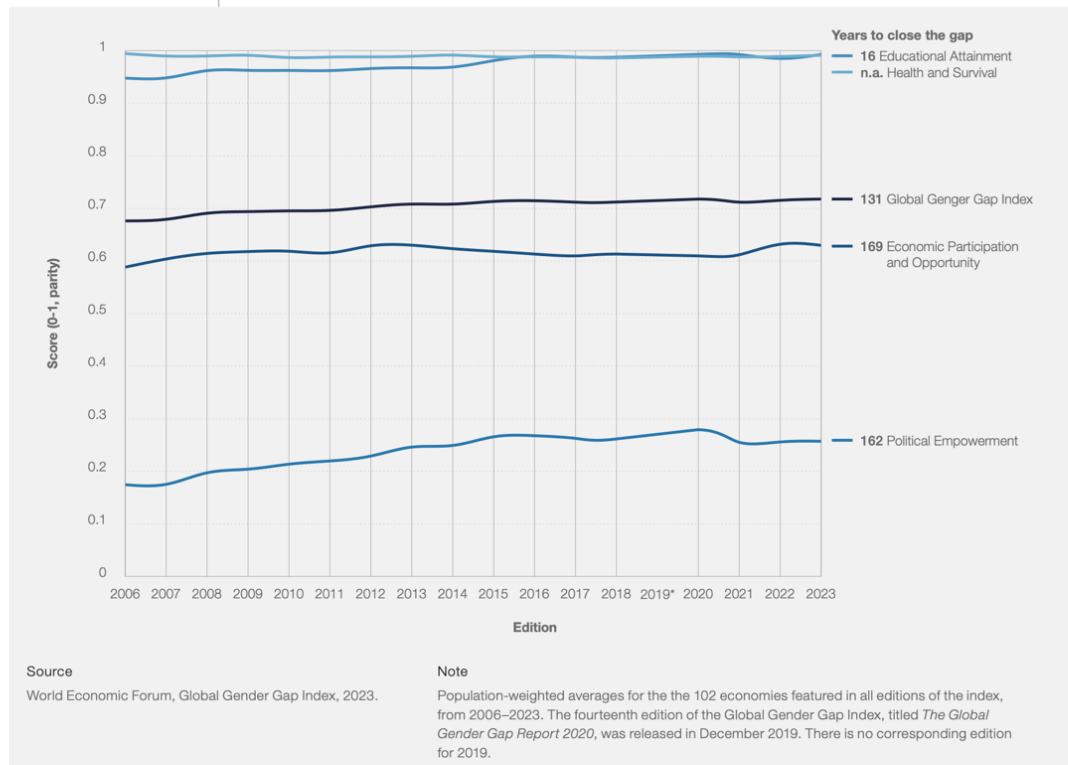
Today, the Global Gender Gap score stands at 68.4%. This represents the average weighted gap (considering all the dimensions listed above) that still exists between men and women in the 146 evaluated countries. It has remained nearly unchanged compared to the previous year, when it was 68.1%. This percentage is particularly significant as it underscores that no country has achieved gender equality yet; only some are getting close, reaching around 90%. Among these, the top three are Nordic countries: Iceland, Norway, and Finland, followed by New Zealand at the fourth position, Sweden at the fifth, and Germany and Nicaragua at the sixth and seventh positions, respectively. Finally, Namibia is at the eighth position, Lithuania at the ninth, and Belgium at the tenth.

Through this ranking, it is apparent that, compared to the previous year, 83 countries have marginally reduced their gender gap, while 59 have regressed towards a higher gap. Although there are still countries that worsen their gender equality percentage within a year, and progress continues at a slow pace, the fact that most countries are moving towards greater gender parity is encouraging and rewards the efforts to achieve a common goal: gender equality.

⁶https://www3.weforum.org/docs/WEF_GGGR_2023.pdf

As shown in Table n.1, you can understand the trend of the Global Gender Gap, with the four dimensions listed above. The table illustrates the evolution of the Global Gender Gap index and its sub-indices from the first edition of the report in 2006 up to 2023. Despite overall positive trends in most of the elements in the table below, the gender gap in terms of economic opportunity remains the dimension that requires the most time to be minimized, as does the gender gap in political empowerment. After experiencing an increase, it has reversed since 2020 and now stands at a minimum of 22.1%.

FIGURE 1.4 Evolution of the Global Gender Gap Index and subindexes over time
Evolution in scores, 2006-2023



Tab 1: Evolution of gender wage gap, https://www3.weforum.org/docs/WEF_GGGR_2023.pdf

1.2.1. Economic Participation and Opportunity

Once the overall gap among the 146 analyzed countries is identified, attention can be focused on the index of economic participation and opportunity, which reveals a significant gender gap. From this perspective, 13 countries in the Middle East and North Africa do not even reach 50%, while only 12 exceed 80%. These 12 evenly distributed countries are: Liberia, which claims the top spot with a percentage of 89.5%, followed by Jamaica, Moldova, Barbados, Lao PDR, Eswatini, Belarus, Burundi, Botswana, Zimbabwe, Norway, and Madagascar.

However, the majority of countries, specifically 145, have reached the threshold of 30%. These data help us understand that in the workplace, women still encounter significant obstacles in obtaining managerial or high-level positions. When considering the percentage of female managers in all analyzed countries, only 32.2% of the total is represented by women. Managerial opportunities for women vary widely among countries. This still reflects a widespread male predominance.

This comparison highlights that the limited presence of women in managerial roles is one of the primary obstacles to overcome, both in the public and private sectors, in order to achieve gender equality in the economy. While women and men in Liberia, Jamaica, Moldova, and Barbados have nearly equal opportunities for success at work, in the case of Afghanistan, the gap is 80% or higher.

In addition to disparities in professional roles, the index is also able to reflect income disparity, which approaches 60.1%. These income differences not only highlight wage discrepancies between men and women but also suggest that economic power is still predominantly in the hands of men, who remain the primary economic reference point for a family. These findings, supported by available data, suggest that in most countries, women still do not have direct control over economic resources and assets. Furthermore, women tend to engage in unpaid tasks for a significant portion of their time, taking care of the family and the household.

In Table n.2, the ranking of countries is indicated based on one of the before mentioned dimensions: economic participation and opportunity.

Economic Participation and Opportunity

Rank	Country	Score (0–1)	Rank	Country	Score (0–1)
1	Liberia	0.895	74	Austria	0.692
2	Jamaica	0.894	75	Israel	0.688
3	Moldova, Republic of	0.863	76	Paraguay	0.685
4	Barbados	0.860	77	Netherlands	0.684
5	Lao PDR	0.851	78	Sierra Leone	0.684
6	Eswatini	0.838	79	Peru	0.683
7	Belarus	0.819	80	Ghana	0.682
8	Burundi	0.810	81	South Africa	0.676
9	Botswana	0.807	82	Greece	0.676
10	Zimbabwe	0.801	83	Congo, Dem. Rep. of the	0.676
11	Norway	0.800	84	Costa Rica	0.676
12	Madagascar	0.800	85	Panama	0.674
13	Togo	0.796	86	Brazil	0.670
14	Iceland	0.796	87	Indonesia	0.666
15	Sweden	0.795	88	Germany	0.665
16	Kenya	0.791	89	Malaysia	0.664
17	Philippines	0.789	90	Bolivia (Plurinational State of)	0.658
18	Albania	0.786	91	Comoros	0.657
19	Namibia	0.784	92	Colombia	0.657
20	Finland	0.783	93	Cyprus	0.652
21	United States of America	0.780	94	Lesotho	0.648
22	Latvia	0.775	95	Argentina	0.644
23	Singapore	0.774	96	Chile	0.642
24	Thailand	0.772	97	Malta	0.641
25	Estonia	0.771	98	Nicaragua	0.640
26	Lithuania	0.767	99	Croatia*	0.639
27	Azerbaijan	0.766	100	Mauritius	0.637
28	Kazakhstan	0.765	101	Czech Republic	0.636
29	Brunei Darussalam	0.760	102	Uganda	0.623
30	Slovenia	0.760	103	El Salvador	0.619
31	Viet Nam	0.749	104	Italy	0.618
32	Cabo Verde	0.747	105	Tajikistan	0.618
33	Mongolia	0.745	106	Gambia	0.609
34	Portugal	0.745	107	Angola	0.605
35	Vanuatu	0.742	108	North Macedonia	0.605
36	Canada	0.740	109	Malawi	0.602
37	Suriname	0.740	110	Mexico	0.601
38	Australia	0.740	111	Côte d'Ivoire	0.601
39	Bulgaria	0.738	112	Bosnia and Herzegovina	0.601
40	Zambia	0.734	113	Myanmar	0.600
41	Ireland	0.732	114	Korea, Republic of	0.597
42	New Zealand	0.732	115	Fiji	0.588
43	United Kingdom	0.731	116	Ethiopia	0.587
44	Belgium	0.728	117	Guatemala	0.580
45	China	0.727	118	Kuwait	0.579
46	Denmark	0.727	119	Guinea	0.576
47	Uruguay	0.726	120	Timor-Leste	0.574
48	Spain	0.722	121	Niger	0.570
49	Belize	0.720	122	Bahrain	0.564
50	Slovakia	0.718	123	Japan	0.561
51	France	0.717	124	Sri Lanka	0.555
52	Armenia	0.716	125	Jordan	0.542
53	Tanzania, United Republic of	0.715	126	Chad	0.538
54	Nigeria	0.715	127	Lebanon	0.538
55	Ukraine	0.714	128	United Arab Emirates	0.536
56	Montenegro	0.710	129	Benin	0.530
57	Luxembourg	0.710	130	Saudi Arabia	0.521
58	Cambodia	0.710	131	Maldives	0.512
59	Bhutan	0.708	132	Qatar	0.508
60	Burkina Faso	0.708	133	Türkiye	0.500
61	Ecuador	0.705	134	Mali	0.489
62	Hungary	0.701	135	Oman	0.488
63	Switzerland	0.700	136	Nepal	0.476
64	Poland	0.699	137	Senegal	0.475
65	Dominican Republic	0.699	138	Tunisia	0.451
66	Honduras	0.699	139	Bangladesh	0.438
67	Rwanda	0.699	140	Egypt	0.420
68	Georgia	0.697	141	Morocco	0.404
69	Serbia	0.697	142	India	0.367
70	Cameroon	0.694	143	Pakistan	0.362
71	Kyrgyzstan	0.694	144	Iran (Islamic Republic of)	0.344
72	Romania	0.693	145	Algeria	0.317
73	Mozambique	0.692	146	Afghanistan	0.188

■ Eurasia and Central Asia
 ■ East Asia and the Pacific
 ■ Europe
 ■ Latin America and the Caribbean
 ■ Middle East and North Africa

Source

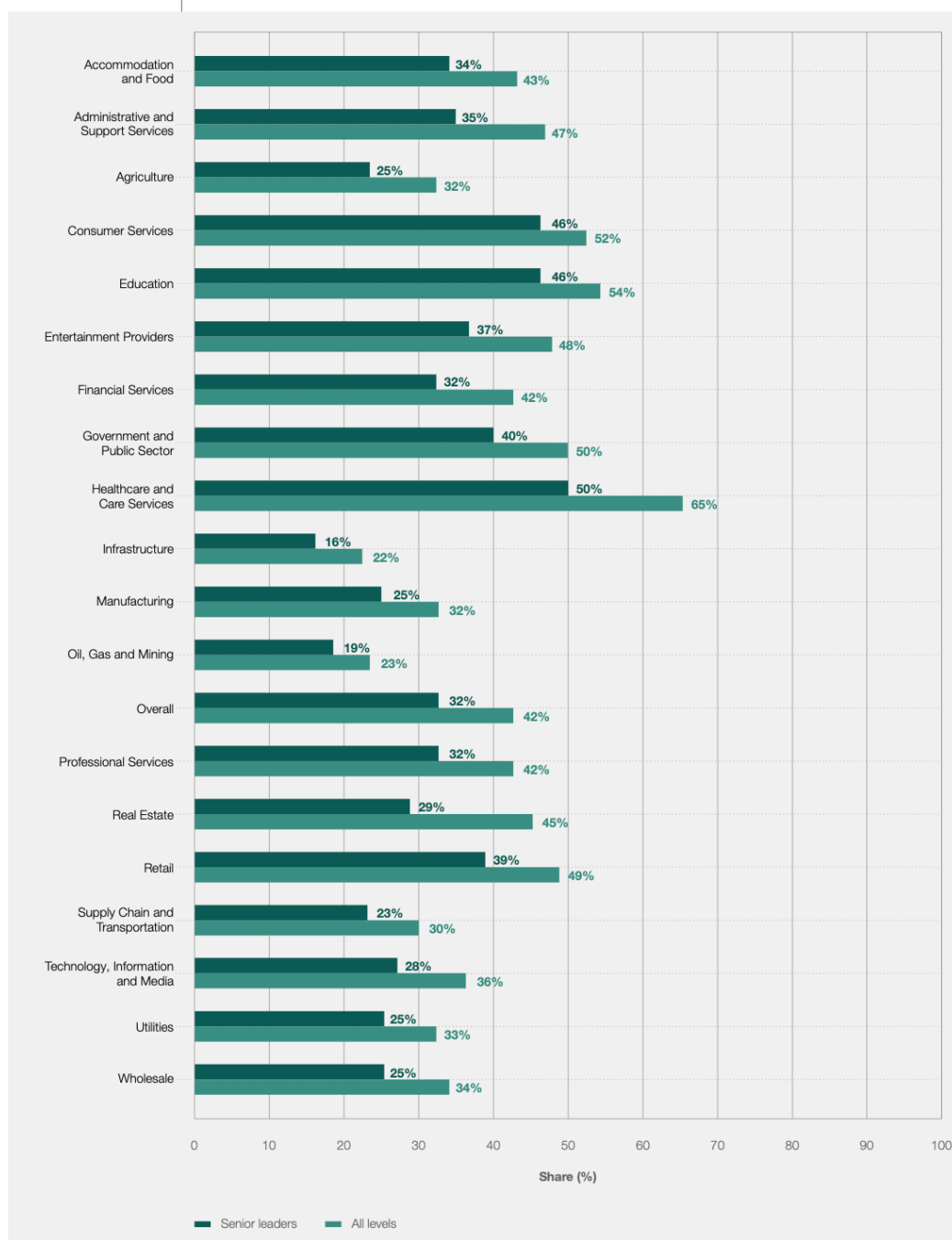
World Economic Forum, Global Gender Gap Index, 2023.

Note

* New to index in 2023

Tab. N. 2, gender gap for economic participation and opportunity, source: World Economic Forum, Global Gender Gap Index, 2023

FIGURE 2.6 | Women's representation in the workforce, overall vs. in leadership, by industry, 2022



Tab. N. 3, Woman's representation in the workforce, overall vs. in leadership divided by industry, source: World Economic Forum, Global Gender Gap Index, 2023

1.2.2 Political Empowerment

In practice, political empowerment remains a dimension with a rather significant gender gap; no country has completely bridged the political empowerment gaps. Even Iceland, which

secures the top position, still has a 10% gap. Following Iceland on the podium are Norway, New Zealand, and Finland.

On the other end of the ranking, almost a quarter of the evaluated countries have a gender gap that approaches 100%. The four countries with the worst performances are Lebanon, Vanuatu, and Afghanistan.

The global gender gap in political empowerment reflects a limited representation of women in various political roles and their particularly sporadic presence as heads of state. Over the course of fifty years in politics, it's only been in the last decade that an increase in their presence has become noticeable. However, despite these recent developments, only 11.3% of women hold the role of head of state, and 9.8% are heads of government, with a good percentage of European countries in the mix.

For instance, in Afghanistan, there is no female representation within the parliament, which is why it ranks as the worst country in terms of gender equality in the political sphere.

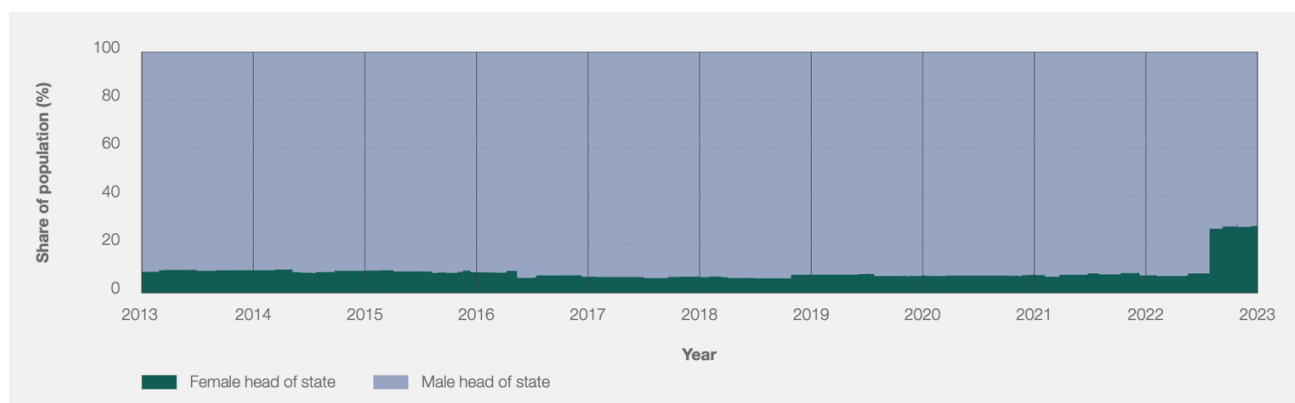
In the following Table No., countries are listed according to the dimension of political empowerment.

Political Empowerment

Rank	Country	Score (0–1)	Rank	Country	Score (0–1)
1	Iceland	0.901	74	Cameroon	0.210
2	Norway	0.765	75	Kenya	0.209
3	New Zealand	0.725	76	Madagascar	0.201
4	Finland	0.700	77	Tunisia	0.197
5	Germany	0.634	78	Mali	0.192
6	Nicaragua	0.626	79	Niger	0.185
7	Bangladesh	0.552	80	Slovakia	0.183
8	Mozambique	0.542	81	Indonesia	0.181
9	Rwanda	0.541	82	Montenegro	0.180
10	Costa Rica	0.524	83	Lesotho	0.179
11	Sweden	0.503	84	Eswatini	0.178
12	Chile	0.502	85	Egypt	0.175
13	South Africa	0.497	86	Togo	0.173
14	Switzerland	0.491	87	Ukraine	0.172
15	Mexico	0.490	88	Korea, Republic of	0.169
16	Belgium	0.486	89	Viet Nam	0.166
17	Ireland	0.482	90	Morocco	0.165
18	Spain	0.475	91	Georgia	0.163
19	United Kingdom	0.472	92	Benin	0.159
20	Lithuania	0.466	93	Tajikistan	0.156
21	Netherlands	0.460	94	Uruguay	0.152
22	Peru	0.450	95	Pakistan	0.152
23	Namibia	0.443	96	Israel	0.150
24	Denmark	0.432	97	Mauritius	0.148
25	Ethiopia	0.431	98	Bulgaria	0.148
26	Argentina	0.429	99	Bahrain	0.146
27	Latvia	0.424	100	Kazakhstan	0.146
28	Albania	0.419	101	Lao PDR	0.140
29	Australia	0.412	102	Greece	0.140
30	Philippines	0.409	103	Maldives	0.139
31	Estonia	0.377	104	Dominican Republic	0.138
32	Serbia	0.376	105	Chad	0.137
33	Canada	0.374	106	Sri Lanka	0.130
34	Colombia	0.373	107	Kyrgyzstan	0.128
35	United Arab Emirates	0.363	108	Czech Republic	0.128
36	Slovenia	0.358	109	Burkina Faso	0.125
37	Senegal	0.353	110	Paraguay	0.125
38	Portugal	0.352	111	Ghana	0.119
39	France	0.338	112	Côte d'Ivoire	0.118
40	Cabo Verde	0.334	113	Romania	0.117
41	Burundi	0.320	114	China	0.114
42	Bolivia (Plurinational State of)	0.317	115	Cambodia	0.112
43	Luxembourg	0.315	116	Congo, Dem. Rep. of the	0.111
44	Moldova, Republic of	0.314	117	Cyprus	0.109
45	Tanzania, United Republic of	0.309	118	Türkiye	0.106
46	Angola	0.305	119	Zambia	0.102
47	Croatia	0.305	120	Thailand	0.101
48	Austria	0.303	121	Mongolia	0.099
49	Uganda	0.297	122	Malaysia	0.098
50	Liberia	0.287	123	Guatemala	0.094
51	North Macedonia	0.283	124	Jordan	0.093
52	Honduras	0.278	125	Bhutan	0.093
53	Ecuador	0.278	126	Belize	0.090
54	Nepal	0.276	127	Botswana	0.088
55	El Salvador	0.265	128	Sierra Leone	0.087
56	Brazil	0.263	129	Comoros	0.083
57	Jamaica	0.263	130	Hungary	0.079
58	Barbados	0.256	131	Saudi Arabia	0.077
59	India	0.253	132	Gambia	0.073
60	Timor-Leste	0.253	133	Qatar	0.071
61	Panama	0.252	134	Azerbaijan	0.071
62	Malta	0.251	135	Algeria	0.065
63	United States of America	0.248	136	Brunei Darussalam	0.061
64	Italy	0.241	137	Kuwait	0.059
65	Bosnia and Herzegovina	0.240	138	Japan	0.057
66	Suriname	0.232	139	Fiji	0.052
67	Malawi	0.224	140	Oman	0.051
68	Singapore	0.220	141	Myanmar	0.047
69	Belarus	0.217	142	Nigeria	0.041
70	Guinea	0.217	143	Iran (Islamic Republic of)	0.031
71	Armenia	0.215	144	Lebanon	0.021
72	Zimbabwe	0.214	145	Vanuatu	0.006
73	Poland	0.211	146	Afghanistan	0.000

■ North America
 ■ Southern Asia
 ■ Sub-Saharan Africa
 ■ Middle East and North Africa

Tab. N. 4 gender gap for political empowerment, source: World Economic Forum, Global Gender Gap Index, 2023



Tab. N. 5 Global population under female head of state, 2013-2022, source: World Economic Forum, Global Gender Gap Index, 2023

1.2.3 Educational Attainment

The achievement of education represents a fundamental step towards gender parity. Globally, we've successfully reduced the gender gap in education to just 4.8%, a remarkable accomplishment. Within the subset of 145 countries studied in both 2022 and 2023, we observe that 25 economies have now attained complete gender parity in educational levels, up from the previous year's 21. This signals a positive trend towards narrowing the gender gap in education.

An encouraging trend is that a significant majority of participating countries, 80.1%, have achieved at least 95% closure of the gender gap in education. However, challenges persist. Afghanistan remains an outlier, with an educational gender parity score of only 48.2%. Additionally, several Sub-Saharan African countries like Chad, the Democratic Republic of the Congo, Guinea, Angola, Niger, and Mali have educational parity scores ranging from 63.7% to 77.9%, indicating areas for improvement.

Globally, literacy rates have achieved 94% gender parity, with 56 countries reaching full parity. Nevertheless, Afghanistan and several Sub-Saharan countries lag behind, with literacy parity scores below 55%. For primary education enrollment, complete parity scores are more widespread, with 65 countries having equal enrollment rates for both boys and girls. However, Sub-Saharan nations like Mali, Guinea, and Chad fall within the 80.4% to 89.9% range, suggesting the need for further progress.

Secondary and tertiary enrollment display wider variation across nations. While most countries have closed at least 80% of the gender gap in secondary enrollment, some countries like Congo, Chad, and Afghanistan remain below this threshold, indicating room for improvement. Tertiary education also exhibits disparities, with many countries achieving full parity, but others, especially in Sub-Saharan Africa and Southern Asia, still have substantial gender gaps to bridge.

In Table N. 6, countries are listed according to the dimension of educational attainment.

Educational Attainment

Rank	Country	Score (0-1)	Rank	Country	Score (0-1)
1	Argentina	1.000	74	Vanuatu	0.991
1	Belgium	1.000	75	Belarus	0.991
1	Botswana	1.000	76	Portugal	0.991
1	Canada	1.000	77	Zimbabwe	0.991
1	Colombia	1.000	78	Australia	0.991
1	Czech Republic	1.000	79	Iceland	0.991
1	Dominican Republic	1.000	80	Cyprus	0.990
1	Estonia	1.000	81	Greece	0.990
1	Finland	1.000	82	Germany	0.989
1	France	1.000	83	Lithuania	0.989
1	Honduras	1.000	84	Norway	0.989
1	Ireland	1.000	85	Sri Lanka	0.988
1	Israel	1.000	86	United Arab Emirates	0.988
1	Latvia	1.000	87	Saudi Arabia	0.986
1	Lesotho	1.000	88	Eswatini	0.985
1	Malaysia	1.000	89	Viet Nam	0.985
1	Malta	1.000	90	Lebanon	0.984
1	Namibia	1.000	91	Maldives	0.984
1	Netherlands	1.000	92	Bolivia (Plurinational State of)	0.984
1	New Zealand	1.000	93	Qatar	0.982
1	Nicaragua	1.000	94	Guatemala	0.982
1	Slovakia	1.000	95	Cabo Verde	0.981
1	Slovenia	1.000	96	Cambodia	0.981
1	Sweden	1.000	97	Timor-Leste	0.980
1	Uruguay	1.000	98	Bosnia and Herzegovina	0.980
26	India	1.000	99	Türkiye	0.980
27	Kazakhstan	1.000	100	Madagascar	0.979
28	Georgia	1.000	101	Zambia	0.979
29	Kyrgyzstan	1.000	102	Switzerland	0.978
30	Luxembourg	1.000	103	Myanmar	0.977
31	Costa Rica	0.999	104	Korea, Republic of	0.977
32	Philippines	0.999	105	Ghana	0.974
33	Albania	0.999	106	Indonesia	0.972
34	United Kingdom	0.999	107	Lao PDR	0.964
35	Armenia	0.999	108	Tanzania, United Republic of	0.964
36	Romania	0.999	109	Bhutan	0.963
37	Serbia	0.999	110	Rwanda	0.963
38	Croatia*	0.998	111	Peru	0.960
39	Spain	0.998	112	Iran (Islamic Republic of)	0.960
40	Denmark	0.998	113	Oman	0.957
41	Montenegro	0.998	114	Gambia	0.954
42	Ecuador	0.998	115	Morocco	0.953
43	South Africa	0.998	116	Algeria	0.951
44	Brunei Darussalam	0.997	117	Tunisia	0.950
45	Paraguay	0.997	118	Comoros	0.949
46	Fiji	0.997	119	Egypt	0.943
47	Japan	0.997	120	Burundi	0.942
48	North Macedonia	0.997	121	Tajikistan	0.942
49	Panama	0.997	122	Bangladesh	0.936
50	Poland	0.997	123	China	0.935
51	Kuwait	0.997	124	Sierra Leone	0.932
52	Belize	0.996	125	Senegal	0.926
53	Moldova, Republic of	0.996	126	Uganda	0.924
54	Azerbaijan	0.996	127	Nepal	0.918
55	Austria	0.996	128	Côte d'Ivoire	0.902
56	Ukraine	0.996	129	Malawi	0.897
57	Bahrain	0.995	130	Mozambique	0.896
58	Hungary	0.995	131	Liberia	0.896
59	United States of America	0.995	132	Cameroon	0.895
60	Italy	0.995	133	Burkina Faso	0.893
61	Thailand	0.995	134	Kenya	0.858
62	Mexico	0.994	135	Ethiopia	0.854
63	Bulgaria	0.994	136	Togo	0.837
64	Chile	0.994	137	Nigeria	0.826
65	Barbados	0.994	138	Pakistan	0.825
66	Jordan	0.994	139	Benin	0.802
67	Mongolia	0.994	140	Mali	0.779
68	Jamaica	0.993	141	Niger	0.769
69	El Salvador	0.993	142	Angola	0.738
70	Suriname	0.993	143	Guinea	0.710
71	Mauritius	0.993	144	Congo, Dem. Rep. of the	0.683
72	Singapore	0.993	145	Chad	0.637
73	Brazil	0.992	146	Afghanistan	0.482

Tab. N. 6 gender gap for Educational Attainment, source: World Economic Forum, Global Gender Gap Index, 2023

1.2.4 Health and Survival

In conclusion, the Health and Survival subindex represents a significant achievement in gender parity, boasting a global score of 96%. This reflects a high level of equality between genders in terms of health and longevity. What's particularly noteworthy is the minimal variation among countries in this subindex, with the vast majority (91.1%) scoring within 2 percentage points of the average.

However, a few countries such as Qatar, Viet Nam, Azerbaijan, India, and China fall below the 95% parity mark in this subindex. For instance, Qatar's lower ranking is due to a comparatively lower parity in healthy life expectancy. Interestingly, in certain regions like parts of the Middle East and North Africa, Sub-Saharan Africa, and Southern Asia, women don't necessarily have longer life expectancies than men, which is an uncommon trend.

Viet Nam, Azerbaijan, India, and China, on the other hand, face challenges in this subindex due to skewed sex ratios at birth, impacting gender parity. These disparities underline the necessity of addressing gender imbalances in healthcare and survival to ensure fair and equal treatment for all individuals.

In summary, while there's remarkable progress in education and health sectors globally, there remain persistent challenges in achieving complete gender equality. These insights emphasize the ongoing need to close the remaining gender gaps in crucial areas like education and healthcare, ensuring equal opportunities and access for everyone, irrespective of gender.

The subsequent Table N. 7 lists countries according to the dimension of health and survival, offering a comprehensive view of how nations fare in terms of gender parity in this aspect.

Health and Survival

Rank	Country	Score (0–1)	Rank	Country	Score (0–1)
1	Belarus	0.980	74	Bosnia and Herzegovina	0.970
1	Belize	0.980	75	Tanzania, United Republic of	0.970
1	Botswana	0.980	76	France	0.970
1	Brazil	0.980	77	Austria	0.970
1	Cabo Verde	0.980	78	United States of America	0.970
1	Dominican Republic	0.980	79	Serbia	0.969
1	El Salvador	0.980	80	Malaysia	0.969
1	Eswatini	0.980	81	Tunisia	0.969
1	Guatemala	0.980	82	Nepal	0.969
1	Hungary	0.980	83	Gambia	0.968
1	Kyrgyzstan	0.980	84	Comoros	0.968
1	Lesotho	0.980	85	Ecuador	0.968
1	Lithuania	0.980	86	Philippines	0.968
1	Malawi	0.980	87	Kuwait	0.968
1	Mauritius	0.980	88	Montenegro	0.968
1	Mongolia	0.980	89	Australia	0.968
1	Mozambique	0.980	90	Egypt	0.968
1	Namibia	0.980	91	Belgium	0.968
1	Poland	0.980	92	Barbados	0.968
1	Romania	0.980	93	Canada	0.968
1	Slovakia	0.980	94	Jamaica	0.967
1	Sri Lanka	0.980	95	Italy	0.967
1	Uganda	0.980	96	Greece	0.967
1	Uruguay	0.980	97	Senegal	0.967
1	Zambia	0.980	98	Spain	0.967
1	Zimbabwe	0.980	99	Nigeria	0.967
27	Burundi	0.979	100	Türkiye	0.966
28	Bulgaria	0.979	101	New Zealand	0.966
29	South Africa	0.979	102	Guinea	0.966
30	Togo	0.979	103	Madagascar	0.966
31	Suriname	0.979	104	Sierra Leone	0.966
32	Estonia	0.979	105	United Kingdom	0.965
33	Côte d'Ivoire	0.978	106	Timor-Leste	0.965
34	Nicaragua	0.978	107	Fiji	0.965
35	Croatia*	0.978	108	Luxembourg	0.965
36	Ghana	0.978	109	Israel	0.964
37	Czech Republic	0.978	110	Honduras	0.964
38	Cambodia	0.978	111	Ireland	0.964
39	Burkina Faso	0.978	112	Denmark	0.964
40	Moldova, Republic of	0.977	113	Niger	0.964
41	Argentina	0.977	114	Saudi Arabia	0.964
42	Thailand	0.977	115	Switzerland	0.964
43	Congo, Dem. Rep. of the	0.976	116	Iran (Islamic Republic of)	0.964
44	Angola	0.976	117	Peru	0.964
45	Ukraine	0.976	118	Sweden	0.963
46	Korea, Republic of	0.976	119	United Arab Emirates	0.963
47	Kazakhstan	0.975	120	Cyprus	0.963
47	Myanmar	0.975	121	Maldives	0.962
49	Mexico	0.975	122	Bhutan	0.962
50	Lao PDR	0.975	123	Liberia	0.962
51	Colombia	0.975	124	Netherlands	0.962
52	Latvia	0.975	125	Bolivia (Plurinational State of)	0.962
53	Kenya	0.975	126	Bangladesh	0.962
54	Paraguay	0.975	127	Norway	0.961
55	Rwanda	0.974	128	Iceland	0.961
56	Georgia	0.974	129	Oman	0.961
57	Cameroon	0.973	130	Morocco	0.961
58	Panama	0.973	131	Malta	0.961
59	Japan	0.973	132	Pakistan	0.961
60	Costa Rica	0.973	133	Albania	0.960
61	Benin	0.973	134	North Macedonia	0.960
62	Portugal	0.973	135	Mali	0.959
63	Slovenia	0.972	136	Bahrain	0.959
64	Germany	0.972	137	Algeria	0.958
65	Vanuatu	0.971	138	Jordan	0.957
66	Singapore	0.971	139	Armenia	0.955
67	Ethiopia	0.971	140	Brunei Darussalam	0.953
68	Lebanon	0.971	141	Afghanistan	0.952
69	Chile	0.970	142	India	0.950
70	Tajikistan	0.970	143	Qatar	0.947
71	Finland	0.970	144	Viet Nam	0.946
72	Chad	0.970	145	China	0.937
73	Indonesia	0.970	146	Azerbaijan	0.936

Tab. N. 7 gender gap for Health and Survival, source: World Economic Forum, Global Gender Gap Index, 2023

1.3 Analysis of the countries with the smallest Gender Gap: Iceland, Finland, Norway, New Zealand and Sweden

Observing the eight different geographical areas, it is possible to notice that progress towards gender equality is proceeding at different rates. In Table number 8 and 9 you can observe the improvements towards gender equality achieved in the last ten years in East Asia and the Pacific, Eastern Europe and Central Asia, North America, Western Europe, South Asia, Sub-Saharan Africa, the Middle East and north Africa, Latin America, and the Caribbean.

The Global Gender Gap Index rankings by region, 2023

Eurasia and Central Asia				Europe			
Country	Rank		Score	Country	Rank		Score
	Regional	Global			Regional	Global	
Moldova, Republic of	1	19	0.788	Iceland	1	1	0.912
Belarus	2	41	0.752	Norway	2	2	0.879
Armenia	3	61	0.721	Finland	3	3	0.863
Kazakhstan	4	62	0.721	Sweden	4	5	0.815
Ukraine	5	66	0.714	Germany	5	6	0.815
Georgia	6	76	0.708	Lithuania	6	9	0.800
Kyrgyzstan	7	84	0.700	Belgium	7	10	0.796
Azerbaijan	8	97	0.692	Ireland	8	11	0.795
Tajikistan	9	111	0.672	Latvia	9	13	0.794
Türkiye	10	129	0.638	United Kingdom	10	15	0.792
				Albania	11	17	0.791
				Spain	12	18	0.791
				Switzerland	13	21	0.783
				Estonia	14	22	0.782
				Denmark	15	23	0.780
				Netherlands	16	28	0.777
				Slovenia	17	29	0.773
				Portugal	18	32	0.765
				Serbia	19	38	0.760
				France	20	40	0.756
				Luxembourg	21	44	0.747
				Austria	22	47	0.740
				Croatia	23	55	0.730
				Poland	24	60	0.722
				Slovakia	25	63	0.720
				Bulgaria	26	65	0.715
				Montenegro	27	69	0.714
				Malta	28	70	0.713
				North Macedonia	29	73	0.711
				Italy	30	79	0.705
				Bosnia and Herzegovina	31	86	0.698
				Romania	32	88	0.697
				Greece	33	93	0.693
				Hungary	34	99	0.689
				Czech Republic	35	101	0.685
				Cyprus	36	106	0.678
East Asia and the Pacific							
Country	Rank		Score				
	Regional	Global					
New Zealand	1	4	0.856				
Philippines	2	16	0.791				
Australia	3	26	0.778				
Singapore	4	49	0.739				
Lao PDR	5	54	0.733				
Viet Nam	6	72	0.711				
Thailand	7	74	0.711				
Mongolia	8	80	0.704				
Indonesia	9	87	0.697				
Cambodia	10	92	0.695				
Timor-Leste	11	95	0.693				
Brunei Darussalam	12	96	0.693				
Malaysia	13	102	0.682				
Korea, Republic of	14	105	0.680				
China	15	107	0.678				
Vanuatu	16	108	0.678				
Fiji	17	121	0.650				
Myanmar	18	123	0.650				
Japan	19	125	0.647				

Tab. N. 8, source: World Economic Forum, Global Gender Gap Index, 2023

The Global Gender Gap Index rankings by region, 2023

Latin America and the Caribbean

Country	Rank		Score
	Regional	Global	
Nicaragua	1	7	0.811
Costa Rica	2	14	0.793
Jamaica	3	24	0.779
Chile	4	27	0.777
Barbados	5	31	0.769
Mexico	6	33	0.765
Peru	7	34	0.764
Argentina	8	36	0.762
Colombia	9	42	0.751
Ecuador	10	50	0.737
Suriname	11	52	0.736
Honduras	12	53	0.735
Bolivia	13	56	0.730
Brazil	14	57	0.726
Panama	15	58	0.724
Uruguay	16	67	0.714
El Salvador	17	68	0.714
Dominican Republic	18	81	0.704
Belize	19	89	0.696
Paraguay	20	91	0.695
Guatemala	21	117	0.659

Middle East and North Africa

Country	Rank		Score
	Regional	Global	
United Arab Emirates	1	71	0.712
Israel	2	83	0.701
Bahrain	3	113	0.666
Kuwait	4	120	0.651
Jordan	5	126	0.646
Tunisia	6	128	0.642
Saudi Arabia	7	131	0.637
Lebanon	8	132	0.628
Qatar	9	133	0.627
Egypt	10	134	0.626
Morocco	11	136	0.621
Oman	12	139	0.614
Algeria	13	144	0.573

North America

Country	Rank		Score
	Regional	Global	
Canada	1	30	0.770
United States of America	2	43	0.748

Southern Asia

Country	Rank		Score
	Regional	Global	
Bangladesh	1	59	0.722
Bhutan	2	103	0.682
Sri Lanka	3	115	0.663
Nepal	4	116	0.659
Maldives	5	124	0.649
India	6	127	0.643
Pakistan	7	142	0.575
Iran (Islamic Republic of)	8	143	0.575
Afghanistan	9	146	0.405

Sub-Saharan Africa

Country	Rank		Score
	Regional	Global	
Namibia	1	8	0.802
Rwanda	2	12	0.794
South Africa	3	20	0.787
Mozambique	4	25	0.778
Burundi	5	35	0.763
Cabo Verde	6	37	0.761
Liberia	7	39	0.760
Zimbabwe	8	45	0.746
Eswatini	9	46	0.745
Tanzania, United Rep. of	10	48	0.740
Madagascar	11	51	0.737
Botswana	12	64	0.719
Ethiopia	13	75	0.711
Kenya	14	77	0.708
Uganda	15	78	0.706
Lesotho	16	82	0.702
Zambia	17	85	0.699
Togo	18	90	0.696
Cameroon	19	94	0.693
Mauritius	20	98	0.689
Ghana	21	100	0.688
Senegal	22	104	0.680
Burkina Faso	23	109	0.676
Malawi	24	110	0.676
Sierra Leone	25	112	0.667
Comoros	26	114	0.664
Angola	27	118	0.656
Gambia	28	119	0.651
Côte d'Ivoire	29	122	0.650
Nigeria	30	130	0.637
Niger	31	135	0.622
Guinea	32	137	0.617
Benin	33	138	0.616
Congo, Dem. Rep. of the	34	140	0.612
Mali	35	141	0.605
Chad	36	145	0.570

Tab. N. 9, source: World Economic Forum, Global Gender Gap Index, 2023

However, the top positions in the ranking continue to be occupied by small Western European countries, with a particular emphasis on the Nordic countries and New Zealand, which maintain their dominance in the top five positions.

Leading the way in gender parity is Iceland, a country that has consistently made progress towards closing the gender gap since the first edition in 2006. Remarkably, Iceland has secured the top position for the 14th consecutive year. Currently, Iceland has closed 91.2% of the gender gap, marking a 0.4 percentage point increase from the previous edition.

Iceland's strong performance in both the Political Empowerment and Economic Participation and Opportunity sub-indices significantly contributes to its high overall gender parity ranking. Notably, Iceland has nearly doubled its gender parity score in Political Empowerment since 2006, with female leadership playing a crucial role in driving this progress. More than two-fifths of ministerial and parliamentary positions in Iceland are held by women, contributing to the country's impressive 90.1% gender gap closure.

While Iceland ranks relatively high at 14th place with a score of 79.6% in the Economic Participation and Opportunity sub-index, there have been some setbacks since 2021. Specifically, wage equality and representation of senior officials have experienced challenges. However, Iceland has managed to maintain gender parity in the share of women in technical roles since 2006.

In terms of Health and Survival parity, there has been a slight regression, partially attributed to a decline in women's healthy life expectancy by 1.5 years since the 2020 edition. Despite this, Iceland continues to maintain almost perfect parity in Educational Attainment, with a score of 99.1%.

Overall, Iceland's consistent progress towards gender parity over the years is commendable, with notable achievements in political empowerment and economic participation. However, there are still areas that require attention and improvement, particularly in economic opportunities and health outcomes. It is clear that Iceland is leading the way in gender equality, but there is still work to be done to ensure complete parity in all aspects of society.

Norway has consistently progressed towards gender equality, achieving an improved gender parity score of 87.9% and moving up one position to 2nd place in this year's index. A significant part of Norway's ongoing improvement can be attributed to its achievements in Political Empowerment, with a score of 76.5% that has increased by 27.1 percentage points since 2006. Women now hold 50% of ministerial positions and 46.2% of parliamentary positions. Furthermore, Norway has had female leadership for 18 out of the last 50 years. Norway also achieves gender parity in primary and tertiary education enrollment. However, there is still work to be done in achieving gender parity in Economic Opportunity and Participation (80%), which, although showing slight recovery since the last edition, remains 1.8 percentage points below the 2016 level. There has been a reduction in the gender pay gap since 2016, and full parity in technical roles has been achieved and maintained. However, the gender gap in senior roles (score 50.3%) has widened, and the labor force participation rate (84.5%) is yet to recover from the pandemic. The healthy life expectancy of women at birth, which stands at 71.6 years, remains 2.7 years below the 2020 edition, contributing to a 1.1 percentage point widening of the gender gap in health attainment to 96.1% compared to the

2020 edition. Even here, despite the progress made, it is evident that there are still challenges to be addressed in achieving full gender equality in all aspects of Norwegian society.

Finland has made significant progress towards achieving gender equality, although its advancement has been more gradual in recent years. In the 2023 edition, Finland achieved a gender equality score of 86.3%, representing a modest increase of 0.3% compared to the previous edition. This result positions Finland in third place globally.

One area where Finland has consistently excelled is in education, maintaining gender equality for a long time. The country has also experienced positive developments in political empowerment, with the recent presence of a female head of state and gender equality in ministerial positions. This has contributed to Finland earning a score of 70% in political empowerment, the fourth highest globally.

However, Finland's progress in economic participation and opportunities shows signs of stagnation, with slight setbacks in senior positions and wage equality compared to the last edition. Despite this, Finland has consistently demonstrated gender equality in technical positions, with women representing 50% or more of such roles since 2006.

Similar to other high-income economies, Finland has experienced a decline in women's healthy life expectancy by nearly 1.5 years since 2006. This decline has contributed to a slight widening of the gender gap in health and survival, which currently stands at 97%.

Despite Finland's commendable progress in various aspects of gender equality, continuous efforts are still needed to address disparities in economic participation and opportunities, as well as to improve health outcomes for women.

Regarding New Zealand, in the past five years, it has made remarkable progress in achieving gender equality. The country has successfully closed over 5% of the overall gender gap, resulting in an impressive gender parity score of 85.6%. These achievements have led New Zealand to rank 4th globally in 2023.

One area where New Zealand excels is political empowerment. With gender parity in parliamentary positions and a history of having a woman as head of state for 16 out of the last 50 years, New Zealand boasts the third-highest level of political empowerment parity in the world. This is a testament to the country's commitment to inclusivity and equal representation. Additionally, New Zealand has successfully bridged the gender gap in enrollment at all education levels and literacy rates. This demonstrates the country's dedication to providing equal opportunities for both men and women in education.

However, there are still areas where progress is needed. In terms of economic participation and opportunity, there is a persistent gender gap of 12.5% in labor force participation, with a score of 73.2%. Although estimated earned incomes for both men and women have increased since 2006, men's incomes have risen at a higher rate, resulting in a 4% increase in the gender pay gap, which now stands at a score of 64.2%. This highlights the ongoing need to address wage disparities and ensure equal economic opportunities for everyone.

On the health and survival front, there has been a concerning decline in women's healthy life expectancy over the past three years. This decline has affected parity on this sub-index, with a score of 96.6%. Efforts must be made to understand and address the factors contributing to this decline in order to ensure fair access to healthcare and promote the overall well-being of women in New Zealand.

Sweden maintains its 5th position in the Global Gender Gap Report, having made significant progress in closing the gender gap. The country has closed 81.5% of the gender gap, although this is 0.7 percentage points lower than the previous edition in 2018.

In terms of political empowerment, Sweden performs well with 46.4% women parliamentarians and 47.8% women ministers heading ministries. This translates to a political empowerment parity score of 50.3%. Women in Sweden have a strong presence in political leadership positions, contributing to a more balanced and inclusive decision-making process. However, there are challenges in achieving gender parity in economic participation and opportunity. The parity score in this area stands at 79.5%, which has stagnated recently and even decreased by 1.7 percentage points since the last edition. The labor force participation rate for women has not shown significant improvement, and the gender gap in this aspect has widened. Despite this, there has been steady progress in increasing the share of women in senior positions over the past decade. It is worth noting that Sweden has maintained a share of over 50% of women in technical positions since 2006, indicating a positive trend in this area.

Sweden has consistently achieved full parity in educational attainment, demonstrating its commitment to providing equal opportunities for both men and women in education. This is a significant achievement and reflects the country's dedication to promoting gender equality from an early age.

On the other hand, there has been a decrease in parity in health and survival, with a score of 96.3%. This decline is primarily due to a reduction of almost 1.3 years in female healthy life expectancy at birth since the 2020 edition. It is crucial to address the factors contributing to this decline and ensure equal access to healthcare and well-being for women in Sweden.

Overall, while Sweden has made progress in various areas, there are still challenges to overcome in achieving full gender equality.

There is an explanation for why these countries have such a small gender gap; in fact, the Nordic countries (Iceland, Finland, Norway, and Sweden) have implemented a series of specific policies and initiatives to promote gender equality.

For example, Norway has introduced mandatory paternity leave, known as the "daddy quota," which encourages greater paternal involvement in childcare and promotes gender equality in both family and professional life and it was also one of the first countries to introduce gender

quotas on the boards of publicly traded companies to increase the representation of women in decision-making positions within corporations.

Additionally, these countries rigorously enforce laws and policies to ensure equal pay for equal work, prohibiting gender-based wage discrimination.

Finland provides high-quality and accessible childcare services, allowing women to fully participate in the workforce without compromising family needs and in Sweden, investments in women's education and the elimination of gender disparities in education are a top priority. Also, initiatives to promote women's participation in the workforce, such as support for female entrepreneurship and women's training, are particularly notable in Iceland.

In conclusion, all these countries have anti-discrimination laws that prohibit gender-based discrimination in various contexts, including employment and education.

1.4 The gender gap in Italy

To assess our country's situation and position in terms of gender equality, it is essential to understand how Italy has addressed this issue and what strategies have been undertaken to combat the still prevalent gender disparity.

Italy fits into a broader, highly diverse context, with an overall gender parity rating of 70.5%. In the global ranking compiled by the report, Italy is positioned 79th out of 146 countries. Specifically, it ranks 104th in the category of economic participation and opportunities, 60th in educational outcomes, 95th in health and survival, and 64th in political participation.

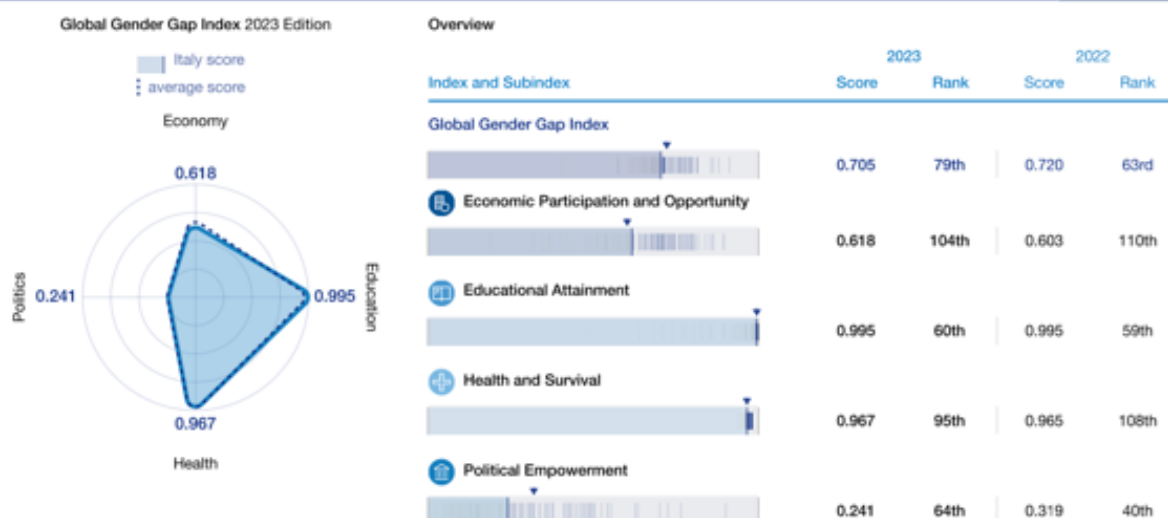
As mentioned earlier, Italy has not yet achieved full gender parity. In the political sphere, there has been improvement in recent years, with women's representation reaching approximately 47%, and the number of women holding ministerial roles at around 36%.

There is some positive news regarding female employment, as per the latest Istat report for April 2023. The employment rate has risen to 61%, with the female category experiencing a more substantial increase compared to the previous period: +1.4% for those aged 15 to 64, compared to the same period in 2022. Unfortunately, Italy still records the lowest value in the European Union. Employment among women is not uniform across the country, with the Northern regions having higher employment rates than the South.

An inevitable consequence of this gender inequality is the wage disparity. Women not only have fewer job opportunities compared to men but also receive lower wages. This is a paradoxical situation considering that, in Italy, female workers are often more educated and qualified than their male counterparts.

In Figure n. 10, an overview of Italy is presented, based on the before mentioned data. Specifically, it illustrates the scores achieved by our country in the four observed dimensions.

Economy Profile	Score (parity = 0, parity = 1)	Rank (out of 146 countries)	Index Edition
Italy	0.705	79th	2023



Global Gender Gap Index Indicators						2023
Indicator	Rank	Score*	Compare with Global average	Difference F-M	Female vs Male	Min Max
Economic Participation and Opportunity	104th	0.618		-	Min - Max	-
Labour-force participation rate %	93rd	0.696		-17.53	40.11 57.64	0-100
Wage equality for similar work 1-7 (best)	80th	0.616		-	-	-
Estimated earned income int'l \$ 1,000	107th	0.550		-24.49	29.99 54.48	0-150
Legislators, senior officials and managers %	100th	0.401		-42.78	28.61 71.39	0-100
Professional and technical workers %	86th	0.885		-6.08	46.96 53.04	0-100
Educational Attainment	60th	0.995		-	-	-
Literacy rate %	65th	0.997		-	-	-
Enrolment in primary education %	77th	0.997		-0.28	95.65 95.94	0-100
Enrolment in secondary education %	95th	0.985		-1.50	100.14 101.64	0-200
Enrolment in tertiary education %	1st	1.000		21.43	59.16 80.59	0-200
Health and Survival	95th	0.967		-	-	-
Sex ratio at birth** %	1st	0.944		-	-	-
Healthy life expectancy** years	105th	1.020		-	-	-
Political Empowerment	64th	0.241		-	-	-
Women in parliament %	48th	0.477		-35.40	32.30 67.70	0-100
Women in ministerial positions %	53rd	0.364		-46.67	26.67 73.33	0-100
Years with female/male head of state (last 50)	72nd	0.007		-49.29	0.36 49.64	0-50

Figure N. 10, Italian situation about gender gap and his subindex, source: World Economic Forum, Global Gender Gap Index, 2023

Complementary Targets and Contextual Indicators

2023

General indicators				
Indicator	Unit	Value		
GDP	US\$ billions	2,107.7		
GDP per capita	constant '17, intl. \$ 1000	41.93		
Population sex ratio	female/male	1.05		
Population growth rate	%	-0.56		
Indicator	Million people	Female	Male	Value
Total population		30.25	28.79	59.04
Work participation and leadership				
Indicator	Unit	Value		
Gender pay gap	% (OECD countries only)	7.64		
Share of women's membership in boards	% (OECD countries only)	38.80		
Firms with female majority ownership	% firms	11.50		
Firms with female top managers	% firms	15.30		
Share of workers in informal sector	% workers	11.20		
Indicator	1-7 (best)	Value		
Advancement of women to leadership roles		4.38		
Indicator	Unit	Female	Male	Value
Unemployed adults	% of labour force (15-64)	9.50	7.30	8.20
Workers employed part-time	% of employed people	50.67	24.67	35.64
Proportion of time spent on unpaid domestic and care work	%	20.40	8.40	n. a.
Indicator	Million people	Female	Male	Value
Labour-force		10.15	13.47	23.63
Access to finance				
Indicator	0-1 (Equal rights)	Value		
Access to financial services		Near-equal rights		
Inheritance rights for widows and daughters		Equal rights		
Access to land assets		Equal rights		
Access to non-land assets		Equal rights		
Civil and political freedom				
Indicator	Unit	Value		
Year women received right to vote	year	1945		
Number of female heads of state to date	number	0		
Seats held in upper house	% total seats	34.50		
Indicator	Yes/No	Value		
Election list quotas for women, national	Yes			
Party membership quotas, voluntary	Yes			
Indicator	0-1 (Equal rights)	Value		
Access to justice		Equal rights		
Freedom of movement		Equal rights		

Family and care				
Indicator	Unit	Value		
Public spending on family benefits	% GDP	1.42		
Unmet family planning	% women 15-49	n. a.		
Early marriage	%	0.20		
Mean age of women at birth of first child	years	31.40		
Indicator	0-1 (Equal rights)	Value		
Right to divorce		Equal rights		
Indicator	Days	Female	Male	Value
Length of parental leave		150.00	14.00	0
Education and skills				
Graduates	Attainment %	Female	Male	Parity
STEM Graduates		n. a.	n. a.	n. a.
Agri., Forestry, Fisheries & Veterinary		50.36	49.64	1.01
Arts & Humanities		71.17	28.83	2.47
Business, Admin. & Law		n. a.	n. a.	n. a.
Education		93.34	6.66	14.01
Engineering, Manuf. & Construction		n. a.	n. a.	n. a.
Health & Welfare		n. a.	n. a.	n. a.
Information & Comm. Technologies		n. a.	n. a.	n. a.
Natural Sci., Mathematics & Statistics		57.95	42.05	1.38
Social Sci., Journalism & Information		71.43	28.57	2.50
Vocational training		15.67	25.59	0.61
PhD graduates		0.38	0.43	0.40
Graduates	%	Female	Male	Value
Graduates from tertiary education		50.96	34.38	42.35
Health				
Indicator	Unit	Value		
Prevalence of gender violence in lifetime	% women	19.00		
Births attended by skilled personnel	% live births	99.80		
Maternal mortality	deaths per 100,000 live births	2.00		
Total fertility rate	births per woman	1.24		
Indicator	0-1 (Equal rights)	Value		
Reproductive autonomy		Equal rights		

*Scores are on a 0 to 1 scale, where 1 represents the optimal situation or "parity". Please see Appendix A and B for detailed methodology, definitions, sources and periods.

**For all indicators, except the two health indicators, parity is benchmarked at 1. In the case of sex ratio at birth, the gender parity benchmark is set at 0.944 (see Klasen and Wink, 2003). In the case of healthy life expectancy the gender parity benchmark is set at 1.06, given women's longer life expectancy.

Figure N. 11, Italian situation about gender gap and his subindex, source: World Economic Forum, Global Gender Gap Index, 2023

1.4.1 Gender Gap Reduction in Italy

The National Recovery and Resilience Plan (PNRR) "encompasses an integrated set of investments and reforms aimed at improving the equity, efficiency, and competitiveness of the country, promoting investment attraction, and increasing the trust of citizens and businesses." This plan consists of six Missions, which address: digitalization, innovation, competitiveness, culture, and tourism; green revolution and ecological transition; infrastructure for sustainable mobility; education and research; inclusion and cohesion; health.

For Italy, this program "represents not only an opportunity to achieve a full ecological and digital transition but also to address the historical disadvantages that have penalized the country, affecting people with disabilities, youth, women, and the South." Indeed, the country's recovery must ensure equal conditions for all its citizens to be effective and align with the objectives of the European Pillar of Social Rights. As persistent gender differences and a lack of equal opportunities constitute significant obstacles to economic growth, the six Missions of the Plan include cross-cutting priorities that address generational, gender, and territorial equivalence.

To achieve the goals of promoting gender equality, companies participating in programs financed by the PNRR, REACT-EU and FCN funds will be subject to regulatory provisions linking the execution of projects to the recruitment of women and young people. These measures aim to promote greater inclusion and representation of women and young people in the labor market.

Starting from August 2021, the Italian government, through the Department for Equal Opportunities, launched a national gender equality strategy for the period 2021-2026. This strategy focuses on five priorities: work, income, skills, time and power. The goal is to improve Italy's ranking in the Gender Equality Index of the European Institute for Gender Equality by at least five points by 2026.

The strategy aims to directly and indirectly promote female participation in the labor market, reducing gender disparities that hinder access to equal opportunities from an early age. This implies adopting measures to ensure equal opportunities in terms of work, pay, skills development, work-life balance and access to leadership positions.

Through the implementation of this strategy, the aim is to create a more inclusive work environment, where women have equal opportunities for employment, professional development and access to leadership positions. It also seeks to reduce gender pay gaps, ensuring that women have access to fair and equal pay compared to their male colleagues.

The ultimate goal is to create a more fair and just society, where men and women have the same opportunities to realize their full potential and contribute to the social and economic progress of the country. Promoting gender equality not only represents a fundamental right but is also a key factor for economic growth and sustainable development.

Analyzing the before mentioned Missions, it can be seen that most of them emphasize the attainment of the stated objectives. Mission 1 (Digitalization, innovation, competitiveness, culture, and tourism) aims to ensure equal opportunities in entering the workforce and advancing in careers through the adoption of new recruitment procedures in the Public Administration and a review of promotion opportunities to the highest-level management positions. Furthermore, this mission, by promoting the renewal of cultural and tourism offerings, intends to support segments characterized by greater female participation, such as the restaurant, hospitality, and cultural activities sectors. The goal is to identify economic branches in culture and tourism, enhance historical and cultural sites, and improve tourist accommodation facilities and services.

Mission 4 (Education and research) aims to support mothers with young children and contribute to increasing female employment through expanding childcare services, strengthening early childhood educational services (ages 3-6), and extending full-time school hours. The combination of a lack of childcare services and the division of domestic and family duties negatively affects female labor force participation, impacting the percentage of women in the workforce. The Plan also invests in acquiring scientific and technological skills among high school students to improve their employment prospects.

Mission 5 (Cohesion and inclusion) seeks to support female entrepreneurship, steer businesses toward reducing disparities in areas less conducive to women's professional development, and strengthen wage transparency. The mission also aims to alleviate the burden of unpaid care activities traditionally assigned to women, enhancing social infrastructure and creating innovative pathways to autonomy for individuals with disabilities. In conclusion, the employment policy introduced in this Mission supports: "Promoting the creation of women-led businesses and introducing gender equality certification. Achieving full economic and social emancipation of women in the labor market, involving a systematic restructuring of current support tools that are more closely aligned with women's needs through an integrated strategy of financial investments and support services for the promotion of female entrepreneurship."

Mission 6 (Health), through the enhancement of support services for home and proximity care, also aims to reduce the caregiving burden on the female population.

To understand the effects of the initiatives introduced by the PNRR on female employment, the MACGEM-IT model, a Computational General Equilibrium (CGE) model developed based on the characteristics of the Italian economic system, has been used to quantify the disaggregated, direct, and indirect impact of fiscal policies and reform scenarios throughout the entire PNRR time horizon.

Figure N. 11 represents the percentage deviations of employment, as a percentage change compared to the baseline scenario throughout the entire PNRR time horizon.

	2021	2022	2023	2024-2026
Occupazione Totale	0,7	2,2	3,2	3,2
Occupazione Femminile	0,7	2,2	3,5	4,0
Occupazione femminile Mezzogiorno	1,3	3,8	5,0	5,5

Fonte: Elaborazione MEF-DT su dati MACGEM-IT.

Figure N. 11, percentage deviations of employment

From the Figure N. 11, there is an increase in female employment by 4.0 percentage points by 2026. It's noteworthy that this increase is more pronounced when considering the Southern region.

Additionally, due to the cross-cutting nature of gender gap objectives, all the Missions of the Plan will have positive consequences on female participation in the labor market, as highlighted in Figure n. In particular, Missions 4 and 5 have a more direct impact on female employment. Nevertheless, other interventions within the PNRR will also facilitate the entry and continued presence of both parents in the labor market in the medium to long term, even though they may not achieve leveling impacts during the Plan's execution period.

	2021	2022	2023	2024-2026
Totale PNRR	0,7	2,2	3,5	4,0
M1	0,1	0,5	0,9	1,1
M2	0,3	0,6	0,7	0,8
M3	0,0	0,1	0,2	0,2
M4	0,1	0,4	0,8	0,8
M5	0,1	0,5	0,7	0,7
M6	0,1	0,1	0,2	0,4

Fonte: Elaborazione MEF-DT su dati MACGEM-IT.

Figure N.12

In conclusion, it is essential to emphasize that the implementation of this Plan is contingent on the use of European funds from the Next Generation EU, which is a temporary financial instrument requiring the European Union to disburse 500 billion euros to its member states in the form of grants, including guarantees, and adding an additional 250 billion euros in the form of long-term loans. These resources will be raised by the European Commission on behalf of the EU through the issuance of bonds in financial markets.

1.4.2 Italian Scholars and Their Research on Gender Differences

In recent decades, interest in the study of gender differences has significantly grown in Italy. Numerous Italian scholars have conducted innovative and influential research across a wide range of academic disciplines, contributing to a deeper understanding of gender dynamics in contemporary society.

Italian psychology has witnessed significant contributions to the study of gender differences. For instance, Prof. Alberto Oliverio has pioneered research on gender differences in behavioral and biological sciences. His studies have addressed themes such as the formation of gender identity, differences in cognitive functioning, and implications for mental health. His research has shed light on how biological and social factors interact to influence gender differences in behavior and thought.

Anna Bravo's feminist commitment has continued in harmony with the experiences of collectives in the Turin area, primarily addressing the social dimension (inter-category union, struggles at S.Anna Hospital, combating violence against women, and the establishment of archives). She has also embraced the contributions of self-awareness feminism, influencing the continuation of her teaching work at the University of Turin. This multifaceted commitment has culminated in her significant essays dedicated to women's history.

Scholars such as Roberta Guerrina and Luciano Gallino have examined the political and economic implications of gender differences. Guerrina has focused on European Union gender policies, exploring how these policies have influenced the Italian political landscape and gender equality issues. Her research has highlighted the progress and challenges in pursuing gender equality through the analysis of policies and power dynamics. Gallino has analyzed gender inequality in the labor market and economic dynamics, identifying challenges and opportunities for greater economic equity.

Italian scholars have played a significant role in advancing research on gender differences in various academic disciplines. Through their commitment to analyzing gender issues, these scholars have contributed to greater awareness and understanding of the challenges and opportunities associated with gender differences in Italian and global society. Their research continues to influence debates and policies on gender equality, pushing toward a more equitable and inclusive society. Ongoing research and innovative perspectives from Italian scholars promise further progress in addressing and overcoming the challenges related to gender differences in contemporary society.

1.5 Women's Entrepreneurship in Today's Startups

The subject of numerous modern studies is startups, today serving as a vehicle for the dissemination of cutting-edge business solutions within tight timelines. A recent article in the Harvard Business Review (2016) confirms startups as an economic phenomenon based on the natural expression of entrepreneurial spirit, which, for all countries, presents an opportunity to leverage technological innovation and human resources. Therefore, precisely because the creation of value is intrinsic to the composition of the team, it is natural to imagine how infusions of human capital can add experience and credibility. Researchers and policymakers have always sought to promote entrepreneurial activity, focusing on the elements that constitute the creation of a business. Ecosystems are capable of generating a positive impact on the creation of new enterprises and the entire economy, and therefore receive a lot of attention from scholars. As Audretsch (2009) argues: "a society, which understands entrepreneurship as the driving force for growth and development as an entrepreneurial society."

It is essential to observe the implementation of female entrepreneurship within these startups to better understand its effects. The study conducted by ⁷Elisabeth S.C. Berger and Andreas Kuckertz offers an insightful perspective into female entrepreneurship within startups, unveiling its multifaceted impact through the lens of the 5M Framework. This framework, consisting of Market, Money, Management, Meso environment, and Macro environment, serves as a comprehensive tool to scrutinize the intricate process of establishing new businesses.

Firstly, it scrutinizes the market aspect, delving into the presence of a viable market that can effectively gauge the performance and value delivery of startups. This foundational element plays a crucial role in shaping the trajectory of entrepreneurial ventures and their ability to thrive within specific economic systems.

⁷Berger Elisabeth S.C., Kuckertz Andreas, Female entrepreneurship in startup ecosystems worldwide, Journal of Business Research, Volume 69, Issue 11, November 2016

Secondly, the framework evaluates access to funding, a pivotal determinant in assessing the financial resources available within an economic setup. Adequate funding is essential for nurturing startups, and the accessibility of capital often dictates the potential for growth and sustainability.

The third dimension revolves around management, specifically analyzing the representation of female employees within technology startups. Understanding the percentage of women in leadership and managerial roles sheds light on the inclusivity and diversity within these entrepreneurial ventures.

By encapsulating these dimensions, the study navigates through the micro and macro environments, serving as indicators to gauge gender equality within the countries housing these ecosystems. This holistic approach interweaves different facets of the entrepreneurial landscape to paint a comprehensive picture of the interplay between gender dynamics and the global entrepreneurial ecosystem.

Moreover, the study's focus on the 20 most technologically advanced economic systems across diverse global cities facilitates a nuanced understanding of the varied proportions of female founders. By establishing reference values based on these multidimensional elements for each country, the study enables a comparative analysis within regional contexts. This comparative assessment is crucial for identifying disparities and trends in female representation within startups across different economic landscapes, offering invaluable insights into the factors that foster or hinder female entrepreneurship.

Ultimately, this rigorous examination provides a roadmap to identify ecosystems with a significant presence of female founders and those struggling to unlock their full potential. It underscores the imperative of promoting greater gender diversity and inclusivity within the entrepreneurial realm and emphasizes the need to create conducive environments that empower and enable female entrepreneurship worldwide.

The resulting outcomes are significant, as the authors write: "increasing the proportion of female founders operating in those startup ecosystems would lead to raising the level of entrepreneurial activity of women in the entire economy (...) However, the analysis also suggests that greater gender equality in combination with a favorable microenvironment fosters female entrepreneurship." The benefits found by researchers ⁸Herrmann, Gauthier, Holtschke, Berman, and Marmer are equally substantial. Firstly, it was highlighted that an increase in levels of female entrepreneurship contributes to improving entrepreneurial quality, in terms of both gender and in relation to products, processes, or forms of organization. The presence of women in positions of power allows the company to focus more on social objectives rather than exclusively economic ones.

⁸Herrmann, B.L., Gauthier, J.F., Holtschke, D., Berman, R., Marmer, M.: The Global Startup Ecosystem Ranking 2015. Tech. rep., Compass (2015)

In Figure N. 13, you can identify the 20 most startup-oriented economic systems, classified based on the proportion of female founders working within each system. Despite adopting a global approach, it is notable that systems in China, Japan, South Korea, or Taiwan are not considered.

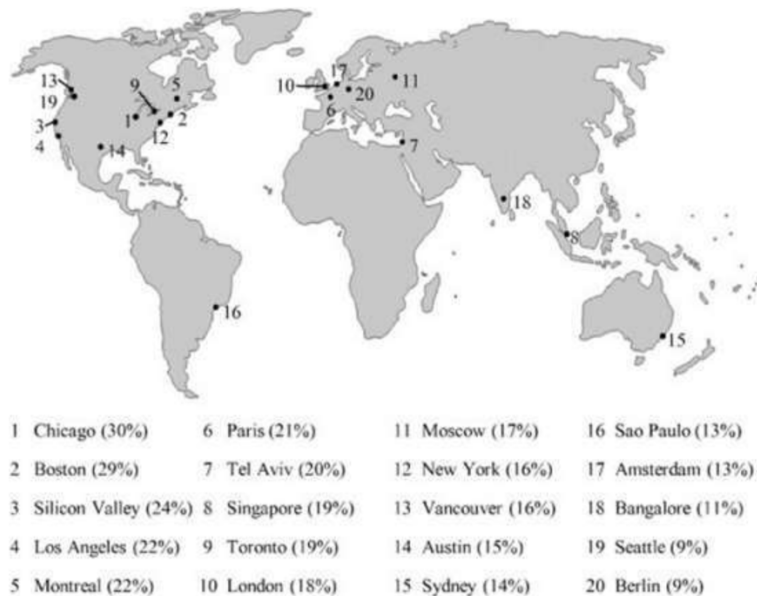


Figure N. 13, source: Berger Elisabeth S.C., Kuckertz Andreas, Journal of Business Research, Female entrepreneurship in startup ecosystems worldwide

After analyzing the collected data and processing new information, configurations have been created to group the studied systems into different categories. In this sense, several configurations can be formed depending on the presence or absence of certain elements: in the case of the absence of a local government and high market performance, a very high female presence rate has been recorded, which is consequently associated with high levels of gender equality; for example, Tel Aviv, Singapore, and London fall into this category. Another configuration, in addition to the elements of the first configuration, also includes high levels of funding and management access, which stimulate an increase in the proportion of female founders in many startups, as is the case in the Silicon Valley. These types of combinations have allowed for an increase in the percentage of women, which stands at 76%.

Configurations 3 and 4, unlike what was mentioned above, first involve the presence of an efficient local government. This element, which includes access to management in terms of talent and experience, is a crucial factor in reducing the percentage of women present, as in the case of Texas. When you add the possibility of market access to these elements, you may find startups in which the male presence is significantly higher; Berlin and New York are representative examples of the fourth and final configuration.

The comparison among the top 20 systems worldwide shows that there are significant differences in the percentages of female entrepreneurship in leading startups on a global scale. As ⁹Baughn suggests, "these differences point to the untapped potential of women and suggest potential avenues to even higher growth in entrepreneurial ecosystems."

Furthermore, it is worth noting that configurations 1 and 2 describe situations characterized by high percentages of female founders; in fact, the absence of a population that views the local government positively is the central condition that allows women to progress. Conversely, configurations 3 and 4 manifest high male presences, with a percentage of women barely approaching 35%.

It's worth considering how the results of this study could be invaluable for policymakers, as they highlight the importance of implementing policies that do not stimulate entrepreneurship in general but specifically target female entrepreneurship. Such policies could help stimulate female entrepreneurship in startup systems and could effectively be an appropriate approach to impact the entrepreneurship of an entire economy and achieve gender equality. In fact, the most effective way to prevent women from realizing their entrepreneurial potential is to rely on vague public policies that further increase already high male percentages.

In summary, this study encourages a discussion of using systems to achieve the goal of both female and male entrepreneurial societies, while also offering practical implications for policymakers on how to develop metropolitan areas by increasing levels of female entrepreneurial activity. Future research should aim to validate models that strike a balance between female entrepreneurship and economic success, as it is not an absolute rule that many startups with high valuations are benefiting solely from the male component.

1.6 Gender Diversity in Corporate Boards

As previously reiterated, many companies witness a significant underrepresentation of women, particularly in executive positions. We will now delve into corporate boards to ascertain whether the presence of women is deemed sufficient for making crucial corporate decisions that significantly impact the company's future.

⁹Baughn C.C, Chua ., B.L., Neupert K.E., The normative context for women's participation in entrepreneurship: A multicountry study *Entrepreneurship Theory and Practice*, 2006

In this context, the ¹⁰McKinsey and LeanIn 2018 report, "Women in the Workplace," delves into the intricate challenges faced by female employees across various industries. Its focus on gender diversity and equal treatment in the workplace uncovers disparities in career advancement, promotions, and salary increases for women. This extensive survey, encompassing over seventy thousand employees, underscores the significance of gender balance within corporate spaces.

While companies often advocate for gender diversity as a catalyst for improved business outcomes, the report notes a discrepancy: only 37% of surveyed employees agree with this viewpoint. Interestingly, the lower percentage predominantly comprises younger men and women who advocate for increased female representation in the workforce. These findings highlight a lingering underestimation among many male employees regarding the advantages of gender-balanced workplaces.

The statistics provided by McKinsey reflect an unsettling reality: while women constitute 47% of entry-level positions, their representation diminishes significantly as they climb the corporate ladder. Only one-third of women hold senior management positions, and a mere one-fifth occupy executive roles, emphasizing the persistent gender gap in leadership levels. The situation is even more challenging for women of color, with a drastic decline in representation as they advance in their careers. Holding just 17% of entry-level positions, the numbers plummet to 8% in senior management and a mere 3% in executive roles for women of color. This disparity underscores the compounded challenges faced by minority women in corporate hierarchies.

Given these challenges, considerable attention has been drawn to the composition of corporate boards and the impact of gender diversity on corporate governance. Analyzing the gender makeup of board members becomes crucial to evaluate whether equitable gender representation contributes to a more balanced and effective organizational structure.

For instance, Catalyst's study in 2007 highlighted the stark underrepresentation of women in Fortune 500 boards, with only 14.8% of seats held by women in the United States. The numbers were even lower in other regions: approximately 8.7% in Australia, 10.6% in Canada, a mere 0.4% in Japan, and 8.0% in Europe.

These statistics underscore the urgent need for fostering gender diversity and inclusion across all levels of corporate structures. It emphasizes the imperative of proactive measures to address the existing disparities and create environments that empower and support the advancement of women, especially those from diverse backgrounds, in leadership roles. Achieving gender balance in leadership not only promotes equality but also contributes to organizational effectiveness and innovation.

¹⁰McKinsey e LeanIn. Company, Women in the Workplace, The Shortlist, 2019

To provide a more comprehensive overview of "female representation in the boardroom," researchers Renée B. Adams and Daniel Ferreira (2009) analyzed data from companies in the Standard & Poor's 500, S&P MidCaps, and S&P SmallCap indices from 1996 to 2003. They used information from the Investor Responsibility Research Center and ExecuComp to obtain data on financials, executive compensation, and CEOs, resulting in 86,714 observations from 1,939 companies. The IRRC dataset proves invaluable for this analysis, as it contains information on 24,820 directors holding a total of 125,319 director positions.

The data provides a comprehensive overview. Initially, women make up only 8.11% of all director roles, with just 6.64% serving as inside directors on corporate boards. However, analyses reveal a significant increase, with the percentage of board seats occupied by women rising by 25% over time, from 8.10% in 1996 to 10.41% in 2003.

Although evidence regarding the relationship between gender diversity in corporate boards and company performance can be challenging to interpret, it is clear that women exhibit different behaviors compared to men. They have a considerable impact on board governance, particularly in terms of attendance. The higher the percentage of active women, the better the behavior of all individuals involved, especially men.

Furthermore, it has been observed that women are more likely to assume roles related to risk management and control systems rather than corporate governance positions. Additionally, the comparison reveals that in years with female board representation, better performance in terms of ROA, sales percentages, and business activities was recorded. In Table 14, a comparison is presented between companies with female and male executives regarding various company characteristics, such as sales, ROA, and volatility, to assess whether the female presence can be a positive factor for the overall organization among 8,253 observations.

Firm characteristic	Mean for firm years, with female directors, n=5,006	Mean for firm years, without female directors, n=3,247	Difference
Sales	7,78	6,47	1,309%
Business Segment	6,58	4,87	1,715%
ROA	4,52	1,16	3,36%
Volatility	0,37	0,5	-0,126%
Board size	10,37	7,85	2,514%

Table n. 14, source: Renée B. Adams e Daniel Ferreira, Women in the boardroom and their impact on governance and performance, Journal of Financial Economics Volume 94, Issue 2, 2009

The analysis delves into the multifaceted impact of female executives across various domains within companies, shedding light on their contributions compared to their male counterparts. Specifically, in critical areas such as sales, business segment management, and board size, female executives exhibit a higher level of contribution, indicating their efficacy in these roles. Notably, it's identified that the compensation structure and company performance play pivotal roles in attracting and retaining female executives, thus influencing gender diversity within companies.

To gauge the positive aspects of gender diversity in governance, researchers scrutinized the behavior and roles assumed by individuals of different genders. Behavior emerged as a crucial factor influencing how directors gather information about employee performance and participation in meetings. The findings indicate that female executives demonstrate a 30% probability of attendance issues, primarily among long-term company workforce members. Despite this, their presence positively affects the behavior of the entire board, fostering improved performance.

Moreover, the analysis highlights that female executives exhibit a penchant for assuming diverse roles across various bodies within the company, showcasing versatility without particular preference. Their prominence in bodies overseeing internal control and corporate governance, accounting for 5.2% and 5.1%, respectively, underscores their value in critical decision-making spheres.

The discussion also emphasizes the potential positive effects of boards with higher female representation, fostering broader director participation and enhanced oversight, thereby positively impacting company performance.

However, the underlying intentions driving changes in board gender diversity remain somewhat ambiguous. Despite correlations between board composition and female representation, it's unclear whether different countries have actively pursued initiatives to promote this change. This underscores the imperative of addressing gender diversity in various organizations, with a particular focus on exploring the relationship between female representation and corporate risk. This scrutiny aims to uncover the intricate dynamics at play and their potential ramifications on organizational effectiveness and risk management.

1.7 Female Representation and Business Risk

The rise of sustainability principles and corporate social responsibility (CSR) has triggered a notable focus on achieving gender equality in corporate decision-making, prompting several reforms. Previous analyses consistently support the notion that gender diversity within corporate governance structures significantly impacts business success. However, despite a

wealth of available talent, women remain conspicuously underrepresented in high-level decision-making positions. Consequently, many companies have initiated various initiatives aimed at fostering greater female representation in top-tier roles.

A pivotal study conducted by ¹¹Vathunyoo Sila, Angelica Gonzales, and Jens Hagendorff (2016) delves into the potential influence of gender diversity on corporate boards on business risk. This analysis aims to ascertain whether initiatives pursued by certain countries regarding gender diversity could yield positive or negative effects on companies. To achieve this, the scholars utilized a dataset encompassing 13,581 U.S. companies over the period from 1996 to 2010 to establish a causal relationship between gender diversity and risk.

The study's focus on understanding the impact of gender diversity on corporate boards serves as a critical step in comprehending the potential implications of promoting greater female representation in leadership positions. Through a comprehensive examination of this relationship, the researchers sought to unravel the nuanced effects that gender diversity might exert on overall business risk. Such investigations carry significant weight in deciphering the outcomes of efforts aimed at diversifying corporate boards and the subsequent ramifications for company performance and stability.

By analyzing a substantial sample size over a considerable timeframe, the study endeavors to uncover patterns and correlations that could shed light on how gender diversity within boards could potentially shape a company's risk profile. Understanding these dynamics holds relevance not only for individual companies but also for broader discussions concerning gender equality, corporate governance, and sustainable business practices.

A classic driver of business risk is represented by the company's stance on social responsibility. It is well known that companies promoting CSR are capable of attracting many female executives, thereby ensuring greater control over the company's set objectives, reducing systematic risk. In support of this, one of the world's leading companies, Coca-Cola Enterprises, explicitly stated in their 2018 Corporate Responsibility and Sustainability Report that the entire company aimed for greater female representation in top positions, earning the title of Most Inclusive Brand of 2018.

Various studies in economics and psychology confirm the hypotheses put forth by Sila, Gonzales, and Hagendorff, asserting that women tend to have better risk control than their male counterparts. Specifically, Deaves, Lurdes, and Luo (2009) show that among the student samples analyzed, no women were found to be less inclined to face risky situations.

¹¹Gonzales Angelica, Sila Vathunyoo, e Hagendorff Jens, Women on board: Does boardroom gender diversity affect firm risk?, Journal of Corporate Finance, 2016

However, among scholars, there are also those who support a negative relationship between risk and female figures. ¹²Wilson and Altanlar's research (2011) illuminates a negative correlation between the proportion of female executives and the risk of insolvency. Their findings imply that higher female representation in executive roles might contribute to reducing the risk of company insolvency, indicating a potential risk-mitigating effect.

¹³Levi et al. (2013) observed that companies predominantly governed by male-dominated boards exhibit a higher tendency to engage in merger and acquisition activities. This insight suggests a potential link between a male-dominated board composition and a propensity for riskier strategic decisions.

Berger et al. (2014) identified a different perspective by noting that an increase in the percentage of female bank executives correlates with an increase in portfolio risk. This finding seems to counter the notion that female leadership automatically translates to risk reduction, adding a layer of complexity to the gender-diversity-risk relationship.

Contrarily, Adams and Ferreira's study in 2004 highlighted that companies with more volatile stock returns tend to have fewer female directors on their board. This observation raises questions about the potential reasons behind the underrepresentation of female directors in companies with volatile stock returns.

Farrell and Hersch's research in 2005 proposed a different angle, emphasizing that companies exhibiting less riskiness and better performance are more inclined to appoint female directors. This perspective supports the idea that companies with stable and successful performance might be more open to embracing gender diversity in their leadership ranks.

These divergent findings underscore the complexity of the relationship between gender diversity and business risk. The conflicting results highlight the need for further nuanced research to understand the multifaceted interplay between gender representation, corporate decision-making, and risk management within different organizational contexts.

It is, therefore, easily understood that the positions taken by different scholars do not allow for a definitive conclusion. The perspective that gender diversity is a choice made by companies themselves must be taken into more serious consideration.

¹²Altanlar, A., Wilson, N., Director characteristics, gender balance and insolvency risk: An empirical study, Unpublished Working Paper, 2011

¹³Levi M.D, K. Zhang Li, F., Director gender and mergers and acquisitions, J. Corp. Financ., 28, 2013

Returning to the study undertaken by Sila, Gonzales, and Hagendorff, the next step is determined by a control performed on the positive relationship between female representation and business risk. For this reason, two relevant elements for this analysis have been identified: omitted and unobserved factors, and reverse causality. In the first case, the scholars explain that omitting unobservable firm characteristics can influence the selection of particular administrators and, consequently, can affect the overall risk. In fact, maintaining good relationships among the various parties involved increases the legitimacy of the company while reducing the presence of firm-specific risk factors, such as legal proceedings, regulatory sanctions, and customer boycotts. As a result, more accurate control management is achieved, allowing the company to reduce its risk.

As for the second element, it is explained that risk influences decisions to appoint certain individuals over others. In particular, for risky companies, boards may decide to increase control by hiring more female directors, who appear to have a better monitoring capability across a range of factors, as supported by Adams and Ferreira.

Once the two elements have been identified for analysis, the next step involves precisely measuring the influence of board composition on business risk. For this reason, it is necessary to use an empirical model that takes into account the influence of unobserved heterogeneity and past risk manifestations that influence the selection. As stated earlier, the representation of female directors and other board characteristics are decisions made by companies, and these may be influenced by unobservable factors such as the CEO's ability and company culture. Given these limitations, it is necessary to construct an assumption based on the fact that companies choose a certain proportion of female executives to achieve a certain level of managerial effectiveness.

To choose the level of female representation, the CEO and directors rely on the information available to them at the time of appointment. The set of information used includes past levels of risk reached and the characteristics of the board and the company. In other words, the same scholars argue that decisions regarding the appointment of women over men are made based on the expected level of the company's future risk.

Once all the collected information has been analyzed, the results can be observed. Approximately 63% of the analyzed companies reported having at least one female director. In fact, the data suggests that, in an average board consisting of ten members, one out of ten is a woman in the board of directors. Furthermore, it was found that the presence of women on the board is more widespread in larger and independent companies, where they most often assume the role of directors.

In the following table, the data related to the presence of women on boards in relation to company size and relationships with men are summarized, estimating the relationship between female representation and business risk.

	Full sample					Number of women on board			
	Mean	SD	P25	P50	P75	0	1	2	3
Board Characteristics									
Firms with at least one woman	0,628	0,483	0,00	1,00	1,00				
Number of women	0,938	0,925	0,00	1,00	1,00				
Proportion of women	0,096	0,092	0,00	0,10	0,143				
Board size	9,098	2,386	7,00	9,00	11,00	7,665	9,392	10,63	11,25
Board independence	0,687	0,171	0,57	0,71	0,833	0,64	0,696	0,737	0,768
Director connectedness	5,805	5,92	2,00	4,00	8,00	2,961	6,490	8,797	9,888
Male director connectedness	5,040	5,119	1,00	4,00	7,00	2,961	5,755	7,080	7,279
Proportion of male directors with board connections to women	0,290	0,243	0,11	0,25	0,444	0,168	0,327	0,405	0,464

Table n. 14, Source: database RiskMetrics Compustat e Execucomp elaborati da Vathunyoo Sila, Angelica Gonzales e Jens Hagendorff, Women on board: Does boardroom gender diversity affect firm risk?,2016

Overall, it is understood that the possibility of risk influencing the gender of board members exists. However, the presence of a relationship between corporate risk and the gender of board members does not rule out issues of reverse causality, in which female board representation affects corporate risk.

The findings indicate that despite the correlation between the gender of newly appointed executives, there isn't a substantial link between the presence of women on corporate boards and overall corporate risk. When synthesizing the outcomes discussed earlier, the collective

analysis leads to a crucial conclusion: while it's commonly believed that companies with lower risks tend to have a higher proportion of male executives on their boards, there isn't robust evidence supporting the idea that a greater representation of women on boards leads to increased stock risk.

However, any negative correlation observed between female executives and corporate risk is likely influenced by other undisclosed factors within the corporate environment. These might include elements like corporate culture or management capabilities. In simpler terms, a board with more gender diversity might demonstrate different behavioral patterns compared to a board primarily dominated by men, but this variance isn't necessarily caused by the presence of women. Instead, it might be influenced by external factors that drive differing behaviors within the board.

Moreover, the analysis doesn't showcase any significant correlation between the proportion of women on boards and the standard deviation of asset returns. This suggests that, overall, the presence of female board members doesn't have a direct impact on the risk policies adopted by the company.

In essence, the study suggests that while gender diversity might influence board behavior, it might not directly impact the risk profiles or policies of companies. Any observed differences in risk factors between boards with varying gender compositions might stem from external and unobserved factors within the corporate environment rather than solely due to the presence or absence of women in board positions.

Table n. 15. shows a line graph indicating the proportion of female members in the 13,581 companies analyzed from 1996 to 2010. It can be observed that changes in female boardroom representation result from two sources of variation: firstly, an increase in the number of women on boards of directors, and secondly, a decrease in the overall size of the board. It is evident that during the analysis period, the sizes of the analyzed companies decreased more rapidly than the rate at which the number of women increased.

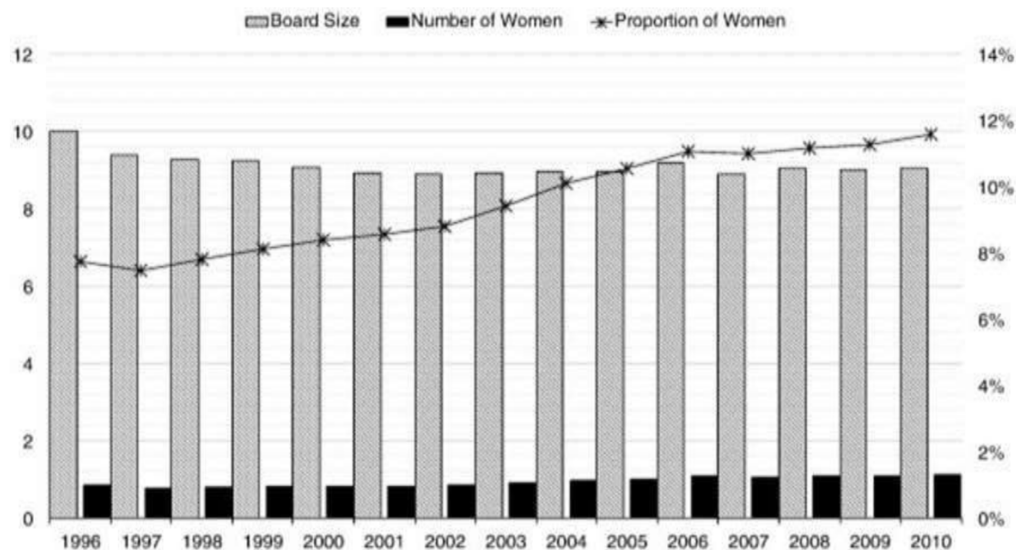


Table n. 15, source: database RiskMetrics Compustat e Execucomp, Vathunyoo Sila, Angelica Gonzales e Jens Hagendorff, Women on board: Does boardroom gender diversity affect firm risk? ,2016

Finally, in Table n.16, it is possible to observe the change in the number of women within the companies, year by year, from 1997 to 2010. The data is positive: every year, the percentage of women grows significantly, increasing from 7.61% in 1997 to 10.80% in 2010, with an average growth of 11.46%.

Year	Number of Women	Proportion of Women	Board size	Board independence
1997	7,61%	29.39%	37.24%	50.23%
1998	9,61%	30.60%	40.69%	54.80%
1999	9,72%	29.86%	36.46%	51.85%
2000	11.58%	29.98%	38.74%	52.38%
2001	11.86%	30.21%	39.69%	54.02%
2002	11.46%	31.48%	40.25%	52.63%
2003	13.60%	35.38%	45.30%	60.22%
2004	14.24%	36.18%	45.15%	59.39%
2005	13.06%	36.72%	43.79%	56.00%
2006	12.60%	37.53%	42.82%	55.96%
2007	10.49%	28.54%	32.53%	46.07%
2008	12.63%	35.11%	41.68%	49.08%
2009	11,24%	34.95%	43.61%	50.62%
2010	10.80%	32.82%	37.35%	44.55%
Average	11.46%	32.77%	40.38%	52.70%
1997-2010				
Percentage of firms	40.26%	54.59%	74.80%	80.36%
Percentage of firm-years	10,92%	31.09%	38.34%	49.97%

Table n. 16, source: database RiskMetrics Compustat e Execucomp, Vathunyoo Sila, Angelica Gonzales e Jens Hagendorff, Women on board: Does boardroom gender diversity affect firm risk? ,2016

1.8 The European Union's Gender Equality Strategy 2020-2025

Gender equality is a central goal for the European Commission, outlined in its ambitious strategy for the period 2020-2025. This strategy aims to transform Europe into a place where gender-based violence, sexual discrimination, and structural inequalities are things of the past. Achieving this goal involves a combination of targeted measures and a deeper integration of

the gender dimension across all sectors. However, the path to equality is fraught with challenges.

Starting with artificial intelligence, a strategically important sector presents both opportunities and threats to gender equality. Women's participation in AI development as researchers and programmers is crucial. However, algorithms can inadvertently perpetuate gender biases. The Commission's White Paper on Artificial Intelligence establishes a European strategy based on fundamental values, including gender equality.

Media and cultural sectors also play a crucial role in shaping societal beliefs and values. The Commission has adopted multiple approaches, funding cultural projects promoting gender equality and launching an EU-wide communication campaign. However, addressing the risks of perpetuating gender stereotypes in media and culture remains a challenge. The Commission's strategy commits to combating gender stereotypes through an intersectional approach, with a particular focus on youth education and engagement.

The European Union has set the ambitious goal of closing the gender gap in the labor market and society as a whole. Despite a continuous increase in female employment rates, challenges persist, necessitating an integrated strategy addressing key issues such as work-life balance, women's participation in specific sectors, and reducing the gender pay and pension gaps.

The Commission's directive on work-life balance aims to promote gender equity through minimum standards for family leave and flexible working arrangements. It encourages Member States to properly implement this directive, urging them to go beyond minimum standards to effectively address childcare challenges, especially in less populated areas. Within its administration, the Commission commits to promoting and monitoring the fair use of flexible work arrangements.

Gender-related issues, focused on the labor market, social inclusion, and education, will be monitored within the European Semester framework. Through the Social Scoreboard, the European Semester will assess these dimensions in relation to the European Pillar of Social Rights. Country reports in the semester will contribute to monitoring Sustainable Development Goals, including gender equality, and evaluate the contribution of economic and employment policies.

The Structural Reform Support Program aims to integrate the gender dimension into public administration, budgeting, and financial management of Member States. It seeks to contribute to national structural reforms addressing the gender employment gap and female poverty, especially in later life stages.

The Commission supports women's empowerment in the labor market by encouraging female entrepreneurship and reintegration. Through the European Innovation Council, measures will be developed to promote female participation in innovation, including a pilot project supporting women-led startups. Additionally, the Commission will promote female presence in leadership positions in private equity and venture capital funds, supporting gender-diverse investments through the InvestEU program.

In Europe, despite women outnumbering men in educational achievements, there is still female underrepresentation in higher-paying professions. The digital transformation plays a crucial role in this context, as 90% of jobs require basic digital skills. However, only 17% of students in information and communication technology (ICT) fields and 36% of graduates in science, technology, engineering, and mathematics (STEM) disciplines are women.

To address the gender gap, various initiatives and strategies are being implemented. One of these is the digital education action plan, which aims to promote gender equality in digital education. This plan recognizes the importance of ensuring equal opportunities for women in the digital sector, where they are often underrepresented. By providing targeted support and resources, it seeks to encourage more women to pursue careers in digital fields and bridge the gender gap in this sector.

The "Women in Digital" ministerial declaration is another important step towards promoting gender equality in the digital industry. This declaration emphasizes the need to increase the participation of women in digital roles and leadership positions. It highlights the importance of creating an inclusive and diverse digital workforce, where women can thrive and contribute their skills and talents.

The updated Skills Agenda for Europe is a comprehensive framework that addresses various aspects of gender inequality, including the gender gap in education and training. It aims to reduce horizontal segregation, which refers to the concentration of men and women in different fields of study or occupations. By challenging gender stereotypes and promoting equal access to education and training opportunities, this agenda seeks to create a more balanced and equitable society.

The Council Recommendation on vocational education is another important tool in promoting gender equality. It focuses on improving gender balance in traditionally male or female professions, challenging gender stereotypes, and creating equal opportunities for all. By encouraging women to pursue careers in fields where they are underrepresented and breaking

down barriers to their participation, this recommendation aims to create a more inclusive and diverse workforce.

In the sports sector, a renewed strategic framework for gender equality is being implemented. This framework aims to promote the participation of women and girls in sports and address gender imbalances in leadership positions within sports organizations. By creating a more inclusive and equal playing field, it seeks to empower women and girls in sports and challenge gender stereotypes that may limit their opportunities.

The principle of equal pay for equal work or work of equal value has long been recognized as a fundamental right. However, the gender pay gap persists, with women earning lower average salaries than men. This not only affects women's current earnings but also has long-term consequences, such as a wider gender pension gap and an increased risk of poverty among elderly women. To address this issue, it is crucial to tackle the root causes of the gender pay gap, including factors such as women's lower labor market participation, unpaid and invisible work, extensive part-time work, and career interruptions. Additionally, addressing vertical and horizontal segregation based on gender stereotypes and discrimination is essential in closing the gender pay gap and achieving true gender equality in the workplace.

The European Commission is committed to presenting binding measures on pay transparency by the end of 2020, aiming to strengthen workers' right to detailed information on wage levels. Despite this, the current lack of transparency makes it difficult for many women to identify and prove they are underpaid. The Commission is evaluating the current framework on pay equality and has initiated a broad and inclusive consultation with citizens, Member States, and social partners to gather input on the strategy and actively engage stakeholders. Discussions with social partners will focus on implementing concrete actions to address the occupational and pay gender gap.

Lower earnings, higher prevalence in part-time work, and career gaps related to family care responsibilities significantly contribute to the gender pension gap. In the 2021 Pension Adequacy Report, the Commission will assess the risk and resource-sharing model in pension systems. To promote a fairer distribution of family care responsibilities between men and women, the Commission will consider granting pension credits for career interruptions due to care responsibilities, as recommended by the high-level group on pensions.

Balancing family responsibilities and professional fulfillment is a particular challenge for women, who often adapt their work choices and methods to family care needs, especially if they are single parents or live in remote areas lacking support services. Women also

experience a significant burden of unpaid work, constituting a substantial part of overall economic activity.

An equitable distribution of family care responsibilities is essential, as is access to affordable, quality care services for children, social care, and domestic care, especially for single parents. The lack of access to affordable formal care services is a major factor contributing to gender disparity in the labor market. Investing in these services is crucial to promote women's participation in paid work, support female professional development, and generate job opportunities for both women and men.

Although the ¹⁴Barcelona Targets for the provision of early childhood education and care services are largely achieved, some Member States lag significantly behind. The Commission will propose a review of the targets to ensure further convergence among Member States regarding early childhood education and care. Additionally, the Commission's proposal on the Child Guarantee in 2021 will focus on the main obstacles preventing minors from accessing necessary services for their well-being and personal development, aiming to break the cycle of poverty and reduce inequalities.

The underrepresentation of women in leadership positions, both in the public and private sectors, persists despite progress at lower levels. Exclusive male leadership over extended periods influences hiring practices, often due to unconscious biases.

Inclusive and diverse leadership is crucial to address the complex challenges of the current political landscape. The Commission emphasizes the importance of gender diversity to foster new ideas and innovative strategies, essential to responding to the needs of a dynamic European society. The inclusion of citizens from different backgrounds is a prerequisite for the proper functioning of democracy and for improving policy effectiveness.

Despite some progress, women are still underrepresented in executive positions in European companies. The Commission seeks to overcome this disparity by supporting the adoption of the 2012 directive proposal aimed at improving gender balance on boards of directors, setting a minimum target of 40% representation of the underrepresented sex. Concurrently, it will promote the exchange of best practices through the European Diversity Charters platform, gathering examples of national or regional projects fostering gender balance.

¹⁴<https://www.consilium.europa.eu/media/20936/71065.pdf>

The Commission is committed to achieving a gender balance of 50% at all levels of its staff by the end of 2024, through quantitative targets and leadership development programs. This commitment demonstrates the Commission's willingness to promote gender equality and ensure a balanced representation between men and women within the organization.

President von der Leyen has called for achieving gender parity in the college of commissioners, resulting in the highest representation of female commissioners in the history of the EU. This is a significant step toward the goal of ensuring greater female participation in leadership positions within the European Union. The aim is to break traditional patterns and promote greater diversity and inclusion in European politics.

Additionally, the Commission aims to ensure a balanced gender representation in EU bodies, agencies, and conferences it organizes. This means measures will be taken to ensure that both men and women have opportunities to participate and play an active role in these organizations and events. This will contribute to creating a more inclusive and representative environment for all European citizens.

The Commission will also support Member States in developing more effective strategies to increase female representation in leadership positions. This may include providing guidance, training, and resources for women aspiring to leadership roles, as well as identifying and removing barriers that may hinder their professional advancement. The goal is to create a supportive environment in which women can develop their skills and achieve positions of responsibility. They commits to disseminating data and analysis on gender representation. This will enable monitoring of progress toward the gender balance goal and identifying any challenges or gaps that need to be addressed. Collaboration with the European Institute for Gender Equality will ensure access to reliable information and tools to assess the effectiveness of policies and measures implemented.

In addition, the Commission proposes a broader inclusion of the gender dimension in the EU's Multiannual Financial Framework (MFF), with a specific focus on various funding instruments. These include several prominent programs such as the European Social Fund Plus, the European Regional Development Fund, Creative Europe, the European Maritime and Fisheries Fund, the Cohesion Fund, and the InvestEU program.

The funding allocation aims to target several key areas: promoting women's participation in the labor market, enhancing work-life balance, supporting female entrepreneurship, and addressing gender segregation in specific professions. Moreover, it seeks to tackle the imbalance in the representation of girls and boys within certain educational and training sectors.

One significant aspect of this proposal is the incorporation of "enabling conditions." These conditions mandate that Member States must establish a national gender equality strategic framework, which becomes a prerequisite for accessing the funds. This strategic framework pertains to investments directed at enhancing gender balance in the labor market, fostering work-life balance, and developing childcare infrastructure. The integration of gender equality as a fundamental principle aligns with the implementation of the Charter of Fundamental Rights.

The Citizens, Equality, Rights, and Values program provides specific funding for projects supporting civil society organizations and public institutions combating gender-based violence. In the asylum and migration sector, the Asylum and Migration Fund will support actions addressing the specific needs of women during the asylum procedure and facilitating the integration of women into the new society.

In the field of research and innovation, Horizon Europe will introduce measures to strengthen gender equality, such as requiring a gender equality plan for access to the program and supporting women-led technological startups. Funding will also be available for gender and intersectional research.

The strategy for inclusion and diversity in Erasmus+ will guide the program in addressing gender disparities in all sectors of education, training, youth, and sports. The Commission's guidelines on socially responsible public procurement will promote gender equality in public procurement tenders.

Finally, the Commission will assess the gender impact of its activities and the methods of quantifying gender-related spending in the MFF 2021-2027. This process will contribute to improving the integration of the gender dimension into the Commission's budgetary process.

The EU recognizes gender disparity as a global challenge and makes gender equality and women's empowerment a key goal of its external action. It commits to ensuring coherence between internal and external actions, promoting gender equality in its international partnerships, political dialogues, human rights engagements with third countries, trade policy, and neighborhood and enlargement policies, including accession negotiations and the stabilization and association process. The EU also integrates gender-related actions in situations of fragility, conflict, and emergency.

The Action Plan on Gender Equality and Women's Empowerment in External Relations for the period 2016-2020 aims to end violence against women, promote women's economic and

social empowerment, and ensure respect for their human, political, and civil rights. GAP III, starting in 2020, will be global and consistent with the strategy's priorities, integrating all relevant elements into the EU's external action.

The EU continues to prioritize the support for the human rights of women, sexual and reproductive health, and actions against gender-based violence worldwide, including in situations of fragility and conflict. To address these issues, the EU launched the Spotlight initiative, allocating €500 million to eliminate all forms of violence against women and girls. This initiative aims to raise awareness, strengthen legal frameworks, and provide support services for survivors of violence.

In 2020, the EU introduced the #WithHer campaign, which aims to counter harmful social norms and gender stereotypes. The campaign seeks to challenge gender inequality and promote gender equality through various activities and initiatives.

Furthermore, the EU will adopt the Action Plan on Human Rights and Democracy (2020-2024) and implement the Action Plan on Women, Peace, and Security (2019-2024). These plans outline specific actions and measures to promote and protect human rights, including gender equality, within the EU and in its external relations.

The EU's commitment to supporting the human rights of women, promoting sexual and reproductive health, and combating gender-based violence is reflected in its funding programs and initiatives. By allocating resources from various funding instruments such as the European Social Fund Plus, the European Regional Development Fund, Creative Europe, the European Maritime and Fisheries Fund, the Cohesion Fund, and the InvestEU program, the EU aims to promote women's participation in the labor market, improve work-life balance, support female entrepreneurship, and address gender segregation in certain professions. Additionally, the EU aims to address the imbalanced representation of girls and boys in certain education and training sectors.

In partner countries, the EU will use the external investment plan to support women's entrepreneurship and increase women's participation in the labor market. The EU has specific financial instruments, such as the Women's Financial Inclusion Tool, which aims to mobilize €100 million to improve women's access to financing. In 2020, the EU's strategy for relations with Africa will be particularly focused on gender equality and women's empowerment.

In the framework of EU external policies, the gender dimension is integrated into the budgeting process, with the goal of ensuring that 85% of all new programs contribute to gender equality and women's empowerment. This financial inclusion reflects the EU's

commitment to actively promote gender equality and women's empowerment in its external actions and relations.

1.9 In-depth analysis of “Pink” quotas

Female participation in the workforce isn't just about numerical presence; it also involves career advancement and assuming leadership roles. However, the question arises whether there's fair female representation in companies concerning the overall number of positions. To address this concern, in 2011, Italy introduced ¹⁵Law 120, mandating the presence of women in the boards of directors and supervisory boards of publicly traded and owned companies. This directly tackled the issue of low female presence in the economic sphere, especially at the top levels. Due to its innovative nature, the application of these so-called "pink quotas" has yielded positive results: the latest Consob report in 2022 revealed that the proportion of board director positions held by women in publicly traded companies reached 43%. Nevertheless, there are still very few women in top leadership roles, with only 2% serving as CEOs and 4% as chairpersons.

The introduction of gender quotas was a significant attempt to promote gender equality in corporate leadership. However, the challenge lies in ensuring that female representation isn't limited to middle management but extends to higher leadership roles. The question now revolves around how to ensure that women, once they enter boardrooms, can further progress and access higher-level roles within organizations.

To achieve this, mechanisms ensuring female presence in boards are vital, but equally crucial are company policies and cultures that support genuine inclusion and the development of women throughout their careers. Promoting diversity and inclusion shouldn't be confined to quotas but should be accompanied by initiatives that value and support female talent, breaking down cultural and structural barriers that might limit their growth within organizations.

Identifying the "ultimate goal" characterizing both quotas and other instruments for promoting female political representation may not be entirely straightforward. The goal would clearly be to promote female political and economic representation to achieve a historically unbalanced situation. So, in response to the question "what are quotas for," one could provide an answer in terms of positive law: they serve, like all other available regulatory instruments, to pursue a constitutional policy goal. The pink quotas, subject to significant political debates, have been a means for Italy to promote and support female presence in society, institutions, and top political positions. Some companies had already anticipated the effects of Law No. 120 of 2011; however, many others remain indifferent.

¹⁵Gazzetta Ufficiale della Repubblica italiana, LEGGE 12 luglio 2011, n.120, 2011:
<https://www.gazzettaufficiale.it/eli/id/2011/07/28/011G0161/sg>

The path towards true gender equality in our country is still long, but as Marilisa D'Amico and Anna Puccio (2013) argue: "The approval of Law No. 120 of 2011, a law also appreciated in Europe and considered a model by Commissioner Reding, is undoubtedly a fundamental step that we consider important to study and disseminate. We are all convinced that the richness of diversity will greatly improve the quality of the top economic world, confirming the thesis, now supported by data and concrete experiences, that dealing with female presence in the 'public sphere' is not a theme or action that involves only women, but it is a central and decisive issue for the development of society as a whole." The Italian initiative is not an isolated case but is part of a framework of activities to promote female representation on boards of directors at the European level.¹⁶ Numerous countries (since 2012) have adopted similar initiatives or are currently discussing them. Norway introduced a law requiring publicly traded companies to have at least 40% women on their boards of directors as early as 2006. Finland, on the other hand, limited gender quotas to 40% for public companies only. Sweden is discussing the issue but has not yet taken legislative action in this regard. Starting in 2015, Spain also mandated a minimum presence of 40% women on boards of directors through a law that came into effect in 2012. France has also introduced a 40% quota and required its companies to comply with this quota starting in 2017. Belgium and the Netherlands have drafted legislative proposals in this direction but have not yet been approved. Finally, the United Kingdom does not yet have a law imposing a specific quota, but its Corporate Governance Code explicitly requires that the selection of candidates for boards of directors be conducted with particular attention to the benefits of board diversity, including gender diversity.

Leaving aside the comparison between the Italian situation and European countries, it is worth focusing on understanding the differences that may result from increased female participation on boards of directors to thoroughly analyze the main purpose of gender quotas and understand their actual effectiveness. Several studies have examined the effects of female representation on corporate boards on company performance. The empirical evidence reported is mixed, with some studies finding positive effects while others find negative or insignificant effects. Despite the mixed results, in the majority of cases, the observed effects are positive.

¹⁶Clara Graziano, *Diversità di genere e ruolo delle donne nei consigli di amministrazione. Possibili effetti della nuova legge sulle quote rosa*, in Silvana Serafin e Marina Brollo, *Donne, politica e istituzioni: varcare la soglia?* Udine, Forum, 2012

Two studies are particularly relevant: the first is by ¹⁷Adams and Ferreira (2009) on U.S. companies in the period 1996-2003. The authors highlight that women are more present at board meetings and have a higher likelihood of participating in monitoring committees. The results suggest a positive contribution made by women on corporate governance, but when it comes to performance outcomes, the situation is not entirely positive. The explanations could be varied, but two seem to be the most appropriate to explain this negative effect. Female presence, linked to increased monitoring activity, which is one of the primary functions of boards of directors, may be excessive and create a conflict with the need to incentivize management to take initiatives. This contrast could have negative repercussions on the company's value. It has been understood that excessive monitoring activity may interfere with and discourage other activities carried out by the board in collaboration with the CEO, whose role is primarily characterized by a spirit of cooperation rather than control.

The second study is conducted by ¹⁸Adams, Nowland, and Gray (2011) on publicly traded companies in Australia, where they examined market reactions to announcements of women's appointments to boards of directors. Analyzing whether the relationship between stock prices and these appointments is positive or negative, the authors find that it is positive and statistically significant: on average, the reaction to the appointment of a woman to the board of directors is more than 2% higher than the reaction to the appointment of a man. This data reflects a strong desire on the part of women to take on important roles to demonstrate their abilities to others. It also indicates that the market expects a positive contribution from female directors, particularly in financial companies, large companies, and companies with low levels of debt. This suggests that companies with greater monitoring needs benefit more from female board representation.

In conclusion, the studies examined so far indicate that there are indeed differences in the behavior of men and women on boards of directors and in general management style. However, these differences appear to be advantageous for companies that require greater monitoring activity, showing that women are more willing and prepared to perform these functions.

¹⁷Adams R., Ferreira D., Women in the Boardroom and Their Impact on Governance and Performance, in Journal of Financial Economics, 2009

¹⁸Adams R., Nowland J., Gray S., Is There a Case for Female Directors? Evidence from the Market Reaction to All New Director Appointments, 2011, mimeo

But what is more important is to understand what factors have led companies to change their labor policies, assuming that the inexperience and the lack of significant differences in the leadership styles of male and female executives were factors that had no basis until recently. Without any evidence that the impact dictated by the law is driven by other causes, it is natural to consider a possible connection with the gender of the board member. A growing body of literature in economics, management, and social psychology has observed some differences. As ¹⁹Koenig et al. (2011) argue, traditional stereotypes associate corporate leadership with masculinity and common male traits such as power, confidence, aggression, and objectivity. However, today, rather than adopting typically masculine behavior, successful female executives in management literature exhibit a particular "transformative" style, in which women position themselves at the center of attention, overturning the classic characteristics of corporate leadership.

The study by ²⁰Adams and Funk (2012) offers compelling insights into gender disparities among corporate leaders, particularly focusing on resident CEOs and managing directors of publicly traded companies in Sweden in 2005. Their findings shed light on distinctive approaches taken by female executives, emphasizing a focus on maximizing long-term shareholder value and mitigating layoffs.

Notably, female executives seem inclined towards strategies that prioritize the long-term interests of the company, aiming to boost morale among employees and circumvent the expenses incurred in recruitment and training due to layoffs. This perspective suggests a shift in the approach to human capital within organizations. Women in leadership positions seem to advocate for strategies that perceive employees as valuable assets contributing to the company's success rather than as expendable costs to be reduced.

This shift in perspective could potentially lead to improved long-term profitability by fostering a positive work environment, enhancing employee engagement, and retaining skilled personnel. By prioritizing the preservation of human capital and employee morale, companies may reap the benefits of a committed and motivated workforce, ultimately translating into enhanced financial performance and sustained growth.

The discussions around gender quotas for corporate boards have gained momentum across Europe to bolster gender diversity in corporate leadership. While the impact of such quotas may vary based on the economic, social, and cultural context of each country, the significant effects observed in Norway stand out.

¹⁹Koenig, Anne M., Alice H. Eagly, Abigail A. Mitchell, and Tiina Ristikari, Are Leader Stereotypes Masculine? A Meta-Analysis of Three Research Paradigms, *Psychological Bulletin*, 2011

²⁰Adams, Renée, and Funk Patricia, Beyond the Glass Ceiling: Does Gender Matter?, *Management Science*

Nordic countries, known for their high levels of gender equality, have seen tangible results from implementing gender quotas. However, the potential impact of quotas could potentially be even more profound in countries entrenched in more traditionalist systems. Introducing quotas in such contexts could challenge existing norms and encourage a cultural shift towards greater gender diversity in corporate leadership.

Expanding this cultural shift beyond Nordic countries is crucial. Encouraging gender diversity in corporate leadership not only promotes inclusivity but also introduces diverse perspectives and approaches crucial for fostering innovation and effective decision-making within organizations. It's essential to propagate and encourage this new culture of diversity and inclusion across various cultural landscapes to leverage its potential benefits and drive positive change in corporate governance worldwide.

For instance, after the introduction of women to corporate boards through quotas, there was an initial marginal decrease in profitability, but a significant uptick in employment. While the Norwegian experience serves as a unique case study due to its quotas, broader assessments suggest that the values and preferences exhibited by female executives extend beyond Norway, even in environments without quota mandates.

In the United States, companies owned by women notably reduced worker layoffs during the recent recession compared to those owned by men. This trend underscores the potential impact of gender diversity on business strategies, revealing distinct approaches to navigating economic downturns. Similarly, an International Survey Research conducted in 2004 revealed substantial differences between women and men in leadership roles. Women tended to prioritize aspects related to workplace relationships, customer quality, and communication, while men were perceived as more driven by personal rewards like career development and compensation.

These observed differences in managerial styles between male and female leaders today might not necessarily be permanent. Over time, as more women assume leadership roles and organizational cultures evolve, these differences could potentially diminish. As more diverse perspectives converge within leadership circles and traditional gender roles continue to evolve, it's plausible that the managerial styles exhibited by both genders will converge. This evolution could lead to a more balanced and inclusive approach to leadership, integrating the strengths of diverse viewpoints and priorities.

Ultimately, understanding these nuanced differences and potential convergences in managerial styles between male and female leaders offers valuable insights into the dynamics

shaping contemporary leadership and presents opportunities for fostering more comprehensive and effective leadership practices in the future.

The increased availability of female talent could lead to a reduction in gender differences if shareholders are increasingly able to select women who match their preferences from a wide pool of candidates. As the authors suggest: ²¹"The long-term effects of greater gender diversity in corporate leadership present an important area for future research."

Over time, the presence of more women in board seats has also influenced the balance between men and women in the same company. For example, Adams and Ferreira (2009) found that board members have a higher attendance rate when they serve on boards composed of both sexes and are able to see their skills and potential valued and enhanced through collaboration and professionalism.

Making the action to support women's participation on the boards of Italian companies, both listed and unlisted, more effective, coordinated, and impactful is the goal of the new Inter-Institutional Observatory on Female Participation in the Administrative and Control Bodies of Italian Companies. Established through a Memorandum of Understanding in 2018, the Observatory operates from January 1, 2019, and serves as a center for data collection, analysis, and research in the field of gender equality considering the application of Law No. 12 of 2011, known as the "pink quotas" law.

²¹David A. Matsa and Amalia R. Miller, A Female Style in Corporate Leadership? Evidence from Quotas, American Economic Journal, 2011

2. GENDER WAGE GAP

2.1 Definition and Theories on Gender Wage Gap

The term "Gender Wage Gap" refers to the difference between male and female salaries, calculated based on the difference in the average gross hourly wage, which is the wage before tax and deductions. This index reflects discrimination and inequalities in the labor market and society in general. It is a somewhat ambiguous statistical measure because the gender pay gap varies depending on the country and does not consider factors that can influence it, such as differences in education, work experience, hours worked, the type of work performed, and other factors that affect compensation, such as benefits, seasonal bonuses, or production incentives. Therefore, when the gender wage gap is calculated based on the average salary, it is referred to as the "unadjusted gender wage gap." If, on the other hand, at least some of the factors that influence wages are considered, it is called the "adjusted gender wage gap."

However, it is important to note that the labor market is not easily comparable from one country to another because each state has its own legislation on this matter.

In the study of the gender pay gap, economists have traditionally highlighted some variables such as human capital, including education, work experience, or unpaid labor division, which can compensate for differences and wage discrimination. In the human capital model, women earn less than men because they have not accumulated enough work experience. However, this observation does not explain the gender pay gap in Europe or the United States. Current literature on the gender wage gap also takes into account the impact of laws, psychological and non-cognitive traits, and individual skills to arrive at more comprehensive results.

According to neoclassical economic theory, given the productive resources, technology, and individual preferences, the result is the most efficient allocation of all available resources, as the market is a rational and infallible system capable of self-regulation without the intervention of the state. In this model of supply and demand, there are competitive conditions in the labor market, and female workers are considered individuals similar to male workers, although "not perfectly identical... but comparable in their fundamental characteristics." Therefore, neoclassical theory condemns gender wage disparities because it considers it discriminatory that some workers - men - are paid more, and others - women - are paid less than their marginal productivity due to characteristics not directly associated with productivity, such as "being a woman rather than a man."

The causes of gender wage disparities are complex and interconnected. They can be summarized in different labor market participation, direct discrimination, gender segregation,

career and wage structure, level of education, undervaluation of women's work in female-dominated sectors, and the persistent imbalance in decision-making positions and the sharing of caregiving responsibilities within the family. In terms of labor market participation, according to some economic literature, the female gender is a group with low employment potential, characterized by low employment levels, temporary contracts, and part-time work. Additionally, the work-life balance penalizes women in their search for better jobs at a crucial stage of life for building a career and an independent family. As a result, women's working hours are lower than men's. This explains why women often engage in low-skilled work with lower career prospects, satisfaction, and earnings. In addition, the poor quality of employment, defined as the ability of labor market participation to provide adequate and stable income to workers, is a serious concern for social policies. Thus, a higher percentage of women fall into the category of "working poor," meaning that even though they are employed, they receive a salary below 60% of the average.

In this sense, it is worth noting that the welfare system of a country certainly influences the gender pay gap for various reasons. First, it determines the availability of public services as an alternative to care work, such as childcare, nursery schools, and kindergartens. Second, social infrastructure that supports workers allows shaping incentives for entering the labor market based on age and family conditions through the tax and social security system. Third, the state's intervention also affects women's tendency to participate, temporarily or continuously, in the labor market through parental leave or assistance, work flexibility, and other measures aimed at promoting a satisfactory balance between work and private life.

Gender differences in wages and employment represent aspects related to gender inequalities that can be complementary or counterbalance each other. For example, in the labor force participation rate, the wage gap widens when women become mothers due to the likely interruption of work that can have negative effects on their career and earnings. Furthermore, horizontal segregation results in the underestimation of women's skills in occupations considered "typically female," as their abilities are fundamentally undervalued because they are seen as innate rather than acquired competencies. In addition, gender roles certainly influence individual educational choices, such as in STEM (Science, Technology, Engineering, and Mathematics) studies, which have a low female concentration, and subsequent professions. Education is, indeed, one of the most significant factors underlying gender wage disparities. According to some scientific research, women have lower labor income than men as a result of the jobs they choose to pursue.

On the other hand, a different interpretation of the phenomenon has been proposed, including a typically female propensity to avoid competition in the workplace, mainly for two reasons. First, the lower self-confidence or self-esteem of women, while men are more optimistic about

their performance; second, the reluctance to take risks, dictated by the typically female predisposition to "play it safe." In other words, women might prefer jobs that do not expose them to the stress of competitiveness, even if they are less remunerative. Nevertheless, female competition exists, albeit not as overt as male competition, but in Western cultures, due to patriarchal legacies, it is considered a predominantly male trait, creating a series of gender stereotypes.

The female tendency to avoid competition can potentially create a vicious circle in which employers have no interest in financially rewarding the work of women – for example, through monetary incentives or benefits – or offering them career advancement opportunities. Therefore, the different gender approaches to competition can influence the types of work that men and women desire, as well as their earnings and career advancement opportunities. This is where the issue of vertical segregation comes in, with women's lower inclination for professional growth and reaching leadership positions, and the consequent relegation to departments with limited development and career advancement opportunities.

Gender discrimination in the workplace and the resulting wage gap can be attributed to vertical and horizontal segregation and the persistence of the "glass ceiling," which is the invisible barrier that hinders, or at least slows down, women in reaching leadership positions. Such limitations are the result of the interaction of structures within male-dominated organizations that hinder women from advancing to positions of responsibility. When women do manage to take on top executive roles, they may be subject to the "glass cliff" phenomenon, occupying those positions for shorter periods of time and risking a fall to lower levels.

The lower tendency of women for competition has been scientifically attributed to personality traits that characterize women more than men, particularly emotional instability, which refers to the tendency to experience negative emotions such as anxiety, insecurity, and anger and to be vulnerable to stress. According to the study by ²²Müller and Schwioren (2011), women with low emotional instability would self-select into competitive environments, while others would be excluded. In contrast to the female gender, men do not seem to be influenced by this personality variable. Consequently, if it were possible to understand how personality variables can be influenced, it could potentially encourage women to be more competitive by focusing on these traits during education to allow equal development in both males and females. The education system is, in fact, a successful approach to closing the gender gap by promoting equal opportunities. However, it is also essential to consider the negative side of encouraging women to be competitive because high emotional instability could lead to failure, reinforcing the stereotype of female weakness and potentially limiting other women from following their example.

²²Müller J., Schwioren C., Can personality explain what is underlying women's unwillingness to compete? in Discussion Paper Series. University of Hiedelberg. Department of Economics, n. 511, 2011

Finally, it is important to note that setting a lower female salary compared to males inevitably has consequences for women's position in society, creating an obstacle to gender parity in economic independence in both the short and long term. The effects of the gender pay gap are clearly felt even after the conclusion of individuals' working lives when this index transforms into a "pension gap," increasing the risk of poverty for women.

2.2 Analysis of Gender Wage Gap in EU

The equality of access to economic resources, therefore, is not only a matter of ensuring equal economic independence between women and men but has also been recognized as a prerequisite for achieving economic growth, prosperity, and competitiveness. Analyzing the WEF (World Economic Forum) report and considering the analysis conducted in the first part of this paper, it is evident that, despite numerous advancements, gender inequalities persist in all countries worldwide. More specifically, it can be observed that on a global scale, gender inequalities are more pronounced in certain countries compared to others. Additionally, within the EU, there are significant differences between countries.

In the previous analysis, Europe is divided into Western and Eastern regions, with Western Europe demonstrating the best performance on the Global Gender Gap Index (GGGI), achieving full parity in just 54 years. On the other hand, it may take nearly 20 more years for the Eastern region to reach the current Western European standards (WEF, 2020).

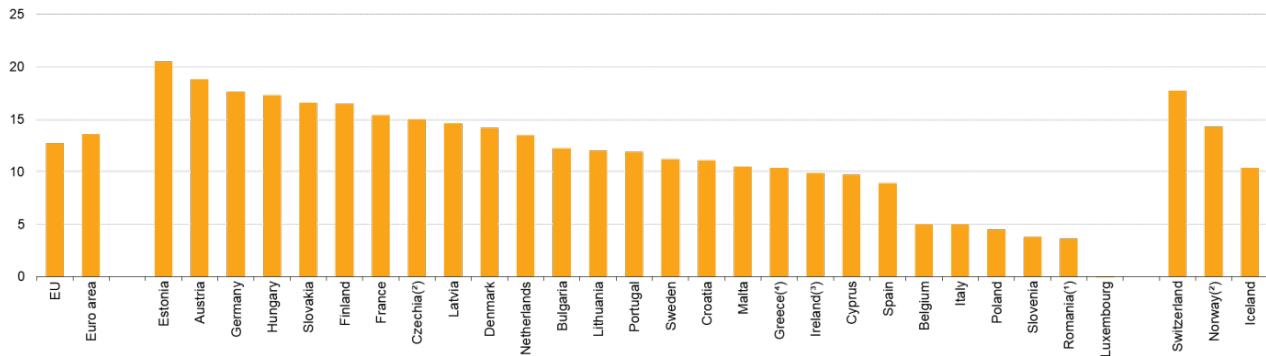
If we consider the latest update of the article "Gender pay gap statistics" by Eurostat in 2021, we can see that gender wage disparities vary widely within EU Member States.

In 2021, women's gross hourly earnings across the EU were, on average, 12.7% lower than their male counterparts. This disparity becomes even more pronounced in the euro area, where the gender pay gap reaches 13.6%.

The data showcases a staggering variation in the gender pay gap across EU Member States, with a range of 20.7 percentage points. For instance, Luxembourg boasts a negative gender pay gap of -0.2%, meaning that women out-earn men on average, while Estonia faces a substantial 20.5% pay gap. These variations reflect the complex interplay of socio-economic, cultural, and policy factors at the national level.

The unadjusted gender pay gap, 2021

(difference between average gross hourly earnings of male and female employees as % of male gross earnings)



Note: For all the countries except Czechia and Iceland: data for enterprises employing 10 or more employees, NACE Rev. 2 B to S (-O); Czechia: data for enterprises employing 1 or more employees, NACE Rev. 2 B to S; Iceland: NACE Rev. 2 sections C to H, J, K, P, Q. Gender pay gap data for 2021 are provisional until benchmark figures, taken from the Structure of Earnings survey, become available in December 2024.

(*) Estimated data

(*) Definition differs (see metadata)

(*) 2020 data

(*) 2018 data

Source: Eurostat (online data code: sdg_05_20)

eurostat

Table n. 17, source: Eurostat

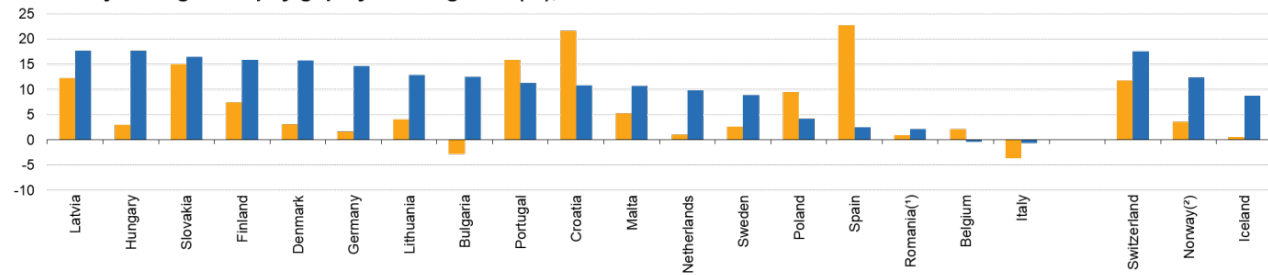
A lower gender wage gap often occurs in countries with a lower female employment rate, typically characteristic of a labor market where a significant percentage of women work part-time.

So, it's important to differentiate between the gender wage gap in part-time and full-time work. In the EU, 4% of women work part-time (2021), a share that is only 1.8% for men. Part-time work, therefore, has more than double the incidence among women.

Analyzing the percentages of the gender wage gap in part-time and full-time work, we find that Italy reported a negative gender pay gap for part-time workers (-3.6%), suggesting that women in part-time employment earn more on average than their male counterparts. This phenomenon is often attributed to selection bias, where women in the labor market possess comparatively higher skills and education levels than men. In contrast, Spain faces a substantial 22.7% pay gap for part-time workers, reflecting a severe earnings disparity.

For full-time workers, the gender pay gap also varies significantly across EU Member States. Italy presents a negative pay gap of -0.7%, indicating women out-earning men, while Latvia grapples with a considerable 17.7% gap. These statistics highlight that women still face substantial earnings disparities even when employed full-time.

The unadjusted gender pay gap by working time (%), 2021



Note: For all the countries except Iceland: data for enterprises employing 10 or more employees; NACE Rev. 2 B to S (-O); Iceland: NACE Rev. 2 sections C to H, J, K, P, Q. Data not available for CZ, EE, IE, EL, FR, CY, LU, AT and SI.
Gender pay gap data for 2021 are provisional until benchmark figures, taken from the Structure of Earnings survey, become available in December 2024
(1) Estimated data.
(2) Definition differs (see metadata)
Source: Eurostat (online data code: earn_gr_gpgr2wt)

eurostat

Table N. 18, source: Eurostat

A noteworthy observation that consistently arises from Eurostat data relates to how the gender wage gap varies depending on age. It is generally much lower for individuals under 25 and tends to widen as they grow older. This often occurs due to frequent career interruptions that women must face during their lives.

The unadjusted gender pay gap by age (%), 2021

	< 25 years	25 - 34	35 - 44	45 - 54	55 - 64	65 years +
Belgium(3)	-0.1	3.0	4.5	4.4	8.5	:
Bulgaria	6.2	14.1	17.2	14.6	4.7	-14.6
Czechia(2)	4.2	10.0	20.0	18.6	8.5	7.1
Denmark	5.2	11.1	14.3	17.1	16.7	10.5
Spain	-3.8	1.3	6.9	12.1	14.4	27.0
France	2.6	8.6	11.1	17.3	21.1	23.8
Croatia	3.9	8.5	12.4	18.2	8.1	4.7
Italy	3.0	4.9	4.7	6.7	9.2	15.8
Cyprus	17.7	4.2	8.4	13.1	9.7	21.3
Latvia	8.4	19.1	22.3	16.4	12.1	9.3
Lithuania	12.8	13.0	16.8	9.5	7.9	6.1
Hungary	7.0	14.3	22.2	19.6	12.5	13.2
Malta	12.0	6.4	12.3	12.1	8.4	16.7
Netherlands	2.3	1.3	7.6	17.9	19.7	13.6
Poland	8.2	7.2	9.4	5.5	-6.8	9.1
Portugal	7.7	9.7	11.9	14.2	12.0	28.0
Romania(1)	5.4	8.1	4.4	-1.2	-5.4	-17.8
Slovenia	5.0	6.4	7.1	5.8	1.3	2.2
Slovakia	6.7	12.6	19.8	20.0	12.9	14.2
Finland	5.8	10.0	15.9	19.4	18.7	22.3
Sweden	5.2	7.1	12.0	15.2	14.2	7.9
Iceland	0.9	3.8	10.0	15.3	16.7	14.2
Norway	2.0	7.9	14.2	17.8	19.2	16.5
Switzerland	3.2	6.4	15.3	23.0	25.0	27.5

(:) not available

Note: For all the countries except Czechia: data for enterprises employing 10 or more employees, NACE Rev. 2 B to S (-O); for Czechia: enterprises employing 1 or more employees, NACE Rev. 2 B to S;

Data breakdown by age not available for DE, EE, IE, EL, LU, AT

Gender pay gap data for 2021 are provisional until benchmark figures, taken from the Structure of Earnings survey, become available in December 2024

(1) Estimated data.

(2) Definition differs (see metadata)

(3) Confidential data: BE : 65 years+.

Source: Eurostat (online data code: earn_gr_gpgr2ag)

eurostat

Table N. 19, source: Eurostat

These wage disparities have significant repercussions on their retirement pensions.

Also, an analysis by economic sectors uncovers intriguing trends. Notably, in some EU Member States, the gender pay gap in financial and insurance activities surpasses that of the business economy as a whole. This sector-specific disparity ranged from 7.0% in Belgium to a staggering 37.5% in Czechia. On a broader scale, Sweden recorded the lowest gender pay gap at 8.6%, while Estonia faced the highest gap at 22.3%.

Moreover, certain economic sectors exhibited negative gender pay gaps in several EU Member States. For example, in the water supply, sewerage, waste management, and remediation activities sector, ten countries recorded negative gaps. Additionally, twelve countries observed negative gaps in the construction sector. These anomalies may reflect gender imbalances in the workforce within these sectors.

The unadjusted gender pay gap by economic activity (%), 2021

	Business economy (B to N)	Manufacturing (C)	Electricity, gas, steam and air conditioning supply (D)	Water supply; sewerage, waste management and remediation activities (E)	Construction (F)	Information and communication (J)	Financial and insurance activities (K)	Real estate activities (L)	Professional, scientific and technical activities (M)
Belgium	9.2	9.5	6.1	11.2	6.8	11.2	7.0	9.1	4.8
Bulgaria	14.5	22.2	7.7	8.0	-14.2	22.1	33.5	-7.2	15.4
Czechia ⁽²⁾	12.4	23.1	17.2	3.8	7.6	28.9	37.5	9.0	21.3
Denmark	14.0	8.5	15.5	2.6	9.5	16.1	16.4	8.6	17.1
Germany	20.9	21.4	19.5	2.2	11.5	23.4	23.3	15.2	26.6
Estonia	22.3	23.4	9.8	10.1	15.7	23.3	31.0	17.6	15.4
Spain	14.7	13.8	15.1	7.8	-6.4	7.5	13.8	14.9	20.1
France	12.8	13.1	8.7	-2.8	-9.4	14.3	31.0	13.8	21.8
Croatia	12.6	23.6	0.6	-2.1	-15.7	13.4	23.5	1.7	15.0
Italy	13.1	13.1	10.7	0.7	3.2	15.6	23.7	12.7	23.9
Cyprus ⁽²⁾	16.8	22.8	-0.4	-18.3	-0.9	15.9	20.1	-41.2	28.8
Latvia	19.0	21.6	2.1	17.2	5.9	31.1	30.4	18.7	24.1
Lithuania	14.8	24.0	7.4	10.6	-1.7	29.3	34.3	9.3	17.7
Luxembourg ⁽⁴⁾	9.7	8.8	:	-3.3	-13.9	15.4	23.1	23.1	21.9
Hungary ⁽²⁾	16.2	24.0	18.0	0.1	-4.0	24.9	34.1	5.8	19.9
Malta ⁽²⁾ ⁽⁴⁾	14.2	23.9	:	20.9	2.2	15.8	24.1	25.6	23.0
Netherlands	19.3	16.1	10.2	-0.8	8.4	15.6	24.1	15.5	19.4
Austria	20.7	20.2	12.5	7.2	7.8	19.7	27.2	27.0	25.8
Poland	12.4	16.6	3.3	-1.2	-9.6	27.0	30.4	6.2	18.4
Portugal	15.0	22.1	2.9	-11.5	-8.4	17.1	22.3	20.1	15.8
Romania ⁽¹⁾	10.4	20.8	2.1	2.5	-15.3	18.9	32.3	3.8	-0.2
Slovenia	9.2	11.7	-2.0	-19.0	-22.5	19.0	24.0	-3.3	12.8
Slovakia	18.4	25.0	10.3	-4.3	2.7	26.6	30.8	16.5	11.3
Finland	15.9	9.5	17.2	3.2	3.3	11.4	26.4	18.7	14.9
Sweden	8.6	2.1	3.9	-5.7	0.3	10.5	23.2	4.6	12.5
Iceland	13.8	13.1	4.3	-5.8	-8.9	12.7	29.7	:	:
Norway ⁽²⁾	17.4	11.9	9.3	-2.1	1.8	13.7	25.8	23.1	18.9
Switzerland	19.4	16.1	11.5	3.1	8.1	21.8	31.5	21.4	26.0

(:) not available

Note: For all the countries except Czechia: data for enterprises employing 10 or more employees, NACE Rev. 2 B to S (-O); for Czechia: enterprises employing 1 or more employees, NACE Rev. 2 B to S.

Data not available for Ireland, Greece

Gender pay gap data for 2021 are provisional until benchmark figures, taken from the Structure of Earnings survey, become available in December 2024

⁽¹⁾ Estimated data: RO: all sections.

⁽²⁾ Definition differs (see metadata)

⁽³⁾ Unreliable data: CY: sections D, E, F, L; MT: section L; IS: section E, F.

⁽⁴⁾ Confidential data: LU: section D; MT: section D.

Source: Eurostat (online data code: earn_gr_gpr2)

Table N. 20, source: Eurostat

It is also essential to analyze the differences between the public and private sectors.

Data showed that, in the majority of EU Member States, the gender pay gap was higher in the private sector than in the public sector. This phenomenon could be due to transparent wage grids in the public sector that apply equally to both genders. The gender pay gap in the private sector ranged from 8.1% in Belgium to 22.1% in Germany, whereas in the public sector, it ranged from -0.6% in Poland to 17.2% in Hungary.

The unadjusted gender pay gap by economic control (%), 2021

	Public	Private
Belgium	1.1	8.1
Bulgaria	11.0	13.6
Czechia ⁽²⁾	12.2	19.5
Denmark	10.8	13.7
Germany	9.2	22.1
Spain	8.4	13.4
Croatia	10.7	13.9
Italy	5.5	15.5
Cyprus	-0.2	19.3
Latvia	15.6	15.5
Lithuania	9.7	14.3
Hungary	17.2	16.9
Netherlands	11.1	19.2
Poland	-0.6	13.0
Portugal	15.0	13.4
Romania ⁽¹⁾	1.7	10.2
Slovenia	5.1	10.8
Slovakia	12.3	18.4
Finland	17.1	16.4
Sweden	7.8	10.1
Iceland	10.3	13.9
Norway	6.8	18.0
Switzerland	15.5	18.5

Note: For all the countries except Czechia: data for enterprises employing 10 or more employees, NACE Rev. 2 B to S (-O); for Czechia: enterprises employing 1 or more employees, NACE Rev. 2 B to S;
Data not available for EE, IE, EL, FR, LU, MT, AT
Gender pay gap data for 2021 are provisional until benchmark figures, taken from the Structure of Earnings survey, become available in December 2024

⁽¹⁾ Estimated data.

⁽²⁾ Definition differs (see metadata)

eurostat 

Source: Eurostat (online data code: earn_gr_gpgr2ct)

Table N. 21, source: Eurostat

In conclusion, the data on the gender pay gap in the European Union reveals a complex web of factors influencing the earning disparities between men and women. Addressing this issue effectively requires multifaceted approaches that consider not only national policies but also career interruptions, employment sectors, and age-related patterns. Achieving gender pay equity is not only a matter of economic justice but also a key step towards gender equality and empowering women in the labor market.

2.2.1 Measures to reduce the gender pay gap in the EU.

As we have just seen, on average, for every hour worked, women earn 13% less than men. Recognizing the urgency of this issue, the European Parliament has made it a priority to take action and rectify this inequality. In March 2022, the European Parliament took a significant step by approving binding regulations aimed at improving transparency in pay. These new rules are designed to make it easier for employees to compare salaries and, more importantly, to expose existing gender pay gaps. If wage reporting reveals a gender pay gap of at least 5%, employers are required to conduct a joint pay assessment in collaboration with worker representatives. Furthermore, EU member countries are expected to impose sanctions, including fines, on employers who do not comply with these rules. Additionally, job vacancy announcements and job titles must now be gender-neutral, ensuring a level playing field for all.

It's important to note that the Council has not yet ratified this agreement, which is a necessary step for the rules to come into effect.

In 2019, the European Parliament took a proactive stance by adopting the Directive on work-life balance. This directive introduced new rules on parental leave in Europe, with the aim of encouraging women's participation in the workforce, creating incentives for fathers to take family leave, and, as a result, promoting gender equality. In a resolution dated January 21, 2021, discussing the EU Gender Equality Strategy, Members of the European Parliament called on the European Commission to present an ambitious strategy for gender equality, complete with clear and concrete measures for Member States to reduce the wage gap over the next five years.

Moreover, the resolution included a request for an annual review by the Commission regarding the implementation of the directive. MEPs also urged European countries to adopt measures that go beyond the directive, such as promoting flexible working hour agreements. The Parliament's ultimate goal is to eliminate the traditional association between gender and specific professions by adopting specific measures that make it easier for women and girls to enter fields of education and work that have historically been male dominated.

MEPs are not only addressing the gender pay gap but also advocating for concrete actions to combat poverty among women. This includes improving working conditions in sectors predominantly occupied by women and, in doing so, tackling the issue of the gender pension gap.

2.3 Analysis of Gender Wage Gap in Italy

Regarding Italy, we have the latest available data on the gender pay gap, which dates to ²³2018.

Italy reported a Gender Wage Gap (GWG) of 5.5%, a figure significantly lower than the EU28 average of 15.3%. This calculation involved excluding the Public Administration, Defense, and Compulsory Social Security sector due to optional data collection within European regulations. Notably, Italy's GWG had decreased from 6.1% in 2014.

However, when focusing solely on the private sector, Italy's GWG spikes to 17.7%. This increase is due to the prevalence of women in the public sector, which is known for having a lower GPG at 4.4%.

In 2018, the average annual gross earnings per employee in Italy amounted to 35,062 euros. However, these figures showed variations when analyzed across different sectors of the economy. Specifically, the Industry sector, with a more stringent definition, reported higher earnings, averaging 36,610 euros per year, while the Construction sector had the lowest income, with an average of 31,967 euros.

Gender disparities became evident when examining the data. Female employees earned approximately 6,500 euros less than their male counterparts, with women earning an average of 31,335 euros compared to men's 37,912 euros. This wage difference can be attributed in part to variations in the number of paid hours, with women working an average of 1,552 hours annually, in contrast to men's 1,840 hours.

When looking at hourly wages, the overall average was 15.8 euros, with a distinction observed between genders. Women, on average, earned 15.2 euros per hour, representing a one-euro difference compared to men's hourly wage.

Within the macrosector labeled "Other services," the highest hourly wages were recorded. Women in this sector earned 17.8 euros per hour, while men earned 19.4 euros. This variation can be attributed to the presence of the Education sector within this macrosector, accounting for approximately one-third of the employees. In education, teaching staff generally have a lower number of nominal service hours, contributing to higher hourly wages.

The Gender Wage Gap (GWG), calculated as the percentage difference between the average hourly wages of men and women in relation to men's wages, amounted to 6.2% in 2018. Notably, this gap widened in specific sectors, reaching 15.9% in Market Services and 14.2% in the strictly defined Industry sector.

²³https://www.istat.it/it/files//2021/03/REPORT_STRUTTURA_RETRIBUZIONI_2018.pdf

RETRIBUZIONE E DIFFERENZIALE RETRIBUTIVO DI GENERE							
Anno 2018, valori in euro e valori percentuali							
MACROSETTORI (ATECO)	Retribuzione media annua (€)			Retribuzione oraria media (€)			GPG (%)
	Femmine	Maschi	Totale	Femmine	Maschi	Totale	
Industria in senso stretto (B-E)	31.846	38.217	36.610	13,3	15,5	15,0	14,2
Costruzioni (F)	31.331	32.059	31.967	12,9	13,9	13,7	7,2
Servizi di mercato (G-N)	31.503	37.885	35.218	12,7	15,1	14,1	15,9
Altri servizi (O-S)	31.064	38.557	34.084	17,8	19,4	18,5	8,2
Totale (B-S)	31.335	37.912	35.062	15,2	16,2	15,8	6,2

Table N. 22, Salary and Gender Pay Gap, source: Istat 2018

Examining the data more closely reveals that the gender wage gap widens as an individual's educational attainment increases. Notably, the lowest average annual income is attributed to women with primary education, amounting to 24,738 euros, while men with tertiary education boast the highest income, averaging 53,816 euros. Even when individuals possess the same level of education, men consistently earn more than women. This disparity is particularly pronounced, with men earning 20.5% more when both have primary education and 21.7% more when they hold secondary education qualifications. The gap becomes even more substantial, reaching 45.7%, when both men and women have tertiary education.

Moreover, the wage premium associated with educational attainment varies between men and women, particularly for those with tertiary education. For instance, women with secondary education earn an average of 20.9% more than those with primary education, mirroring a similar gap in men at 22.1%. However, among women with tertiary education, this gap surges to 49.3%, representing just over half of the 80.5% gap observed in men with similar educational backgrounds.

Additionally, annual incomes tend to rise with age, a trend more pronounced among male employees. In comparison to younger workers aged 14 to 29, those aged over 50 enjoy a 52.5% increase in income. When considering gender disparities, the income differential ranges from 34.9% to 41.1% among women, depending on the sector, and from 41.4% to 84.6% among men within the same sector.

FIGURA 1. RETRIBUZIONE MEDIA ANNUA PER LIVELLO DI ISTRUZIONE, SETTORE DI ATTIVITÀ E GENERE
Anno 2018, valori in euro

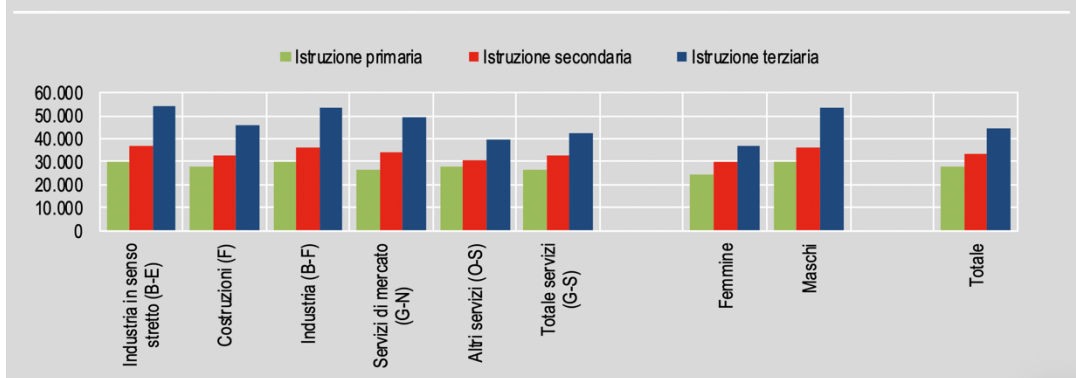


Table N. 23, The average annual salary by level of education, sector of activity, and gender, source: Istat 2018

Regrettably, in Italy, a considerable gender wage gap exists, and this gap is even more pronounced when comparing the North and South regions. In 2018, the average paid hours, including both regular and overtime hours, amounted to 1,716 hours per year on average. However, regional disparities were evident, with the Northwest recording the highest average at 1,749 hours, followed by the Central region with 1,740 hours, the Northeast with 1,734 hours, and the South and the Islands reporting lower averages, at 1,624 and 1,605 hours, respectively.

The gender wage gap is further influenced by the prevalence of part-time employment, which varies significantly. In companies with a workforce of at least 10 employees, the proportion of female part-time workers, relative to the total workforce, is more than twice that of men, standing at 17.1% for women and 6.4% for men.

In the South and the Islands, female paid hours are lower than those of men by 19.4% and 17%, respectively. The impact of a higher proportion of female part-time workers in these regions is somewhat less than the national average. In the South, the percentage of women in part-time work exceeds that of men by only 4.5 percentage points, with a 6.1-point difference in the Islands.

In the Northeast and Northwest, where some of the highest average paid hours in Italy are observed, female employees continue to receive relatively high wages despite the prevalence of part-time work (20.6% in the Northeast and 18.6% in the Northwest). Nonetheless, a clear gender wage gap persists, amounting to 16% in the Northeast and 14.8% in the Northwest.

In the Services sector, the average paid hours (1,604) are approximately 300 hours less than those in the Industry sector (1,916). Notably, the percentage of part-time employment among women in the Services sector is significantly higher (19.2%, compared to 6.9% among men), contributing to the gender wage gap in paid hours (15.1% in Services).

Within the industrial sector, the sector related to "Water supply; sewerage, waste management, and remediation activities" records the lowest average annual hours (1,827), while the "Mining and quarrying of minerals" sector reports the highest (1,986). Among the Market Services, the "Accommodation and food service activities" sector has 1,398 hours, nearly 500 hours less than the "Information and communication services" sector (1,859). Finally, the Education sector is characterized by fewer annual hours (1,263) and a predominantly female workforce, in contrast to the high hours seen in the sector of "Public administration and defense; compulsory social security" (1,845), which has a strong male presence.

Annual paid hours increase with age, particularly among male employees. In comparison to older workers (aged 50 and above), the younger workforce (aged 14 to 29) earns 10.1% less in terms of paid hours. These differences also vary by economic sector, with female workers experiencing a gap between 6% and 16.2%, and male workers between 9.5% and 17.3%. Notably, significant disparities are observed at a regional level: younger workers receive fewer paid hours compared to those aged over 50, with percentages varying between 4.8% (in the Northeast) and 15.5% (in the South) for women and between 10.2% (in the Northeast) and 19.6% (in the Islands) for men.

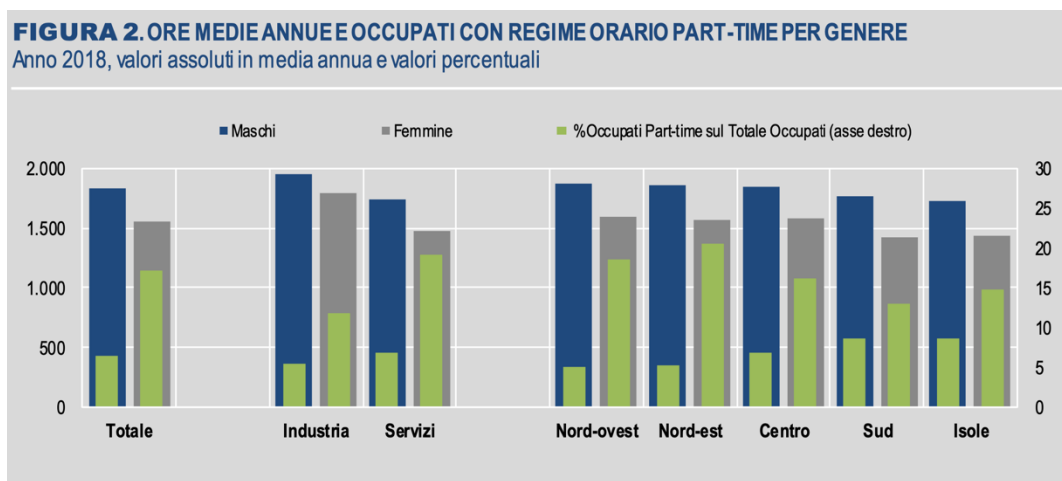


Table N. 24, Average annual hours and employed individuals under part-time employment by gender, source: Istat 2018

Even in Italy, the gender pay gap is more pronounced among graduates and executives. This gap in hourly wages is a result of men earning an average hourly wage of 16.2 euros, while women earn 15.2 euros per hour. The gap tends to widen among graduates, reaching 18%. For women with a higher education level, the average hourly wage is 19.6 euros, while for men, it's 23.9 euros. Even among employees with primary education, the gap exists at 15%, though the hourly wage levels are notably lower, with women earning 10.8 euros and men

earning 12.7 euros per hour. The gap is less significant (10.4%) for those with secondary education, which is the most common qualification among both men and women, with hourly wages of 13.8 euros for female graduates and 15.4 euros for male graduates.

The gender pay gap also widens in professions with lower female representation. Notably, the Executive group exhibits a substantial gender pay gap of 27.3%, with both women (33.6 euros) and men (46.2 euros) having the highest hourly wages. Following that, the Craftsmen and Skilled Workers group has an 18.5% gap, with women earning 10.1 euros and men earning 12.4 euros per hour. The Armed Forces group has an 18.8% gap, with hourly wages of 15.5 euros for women and 19.1 euros for men.

Excluding the Skilled Agricultural, Forestry, and Fishing Workers, which has limited representation, the lowest gender pay gap is observed in the Unskilled Professions group, with a 9.3% gap, where hourly wages are the lowest at 9.7 euros for women and 10.7 euros for men.

The group of Intellectual and Scientific Professions stands out with high wage levels (second only to executives), with women earning 22.9 euros and men earning 25.6 euros, and a relatively low gender pay gap of 10.5%. This group also features a significant presence of female workers.

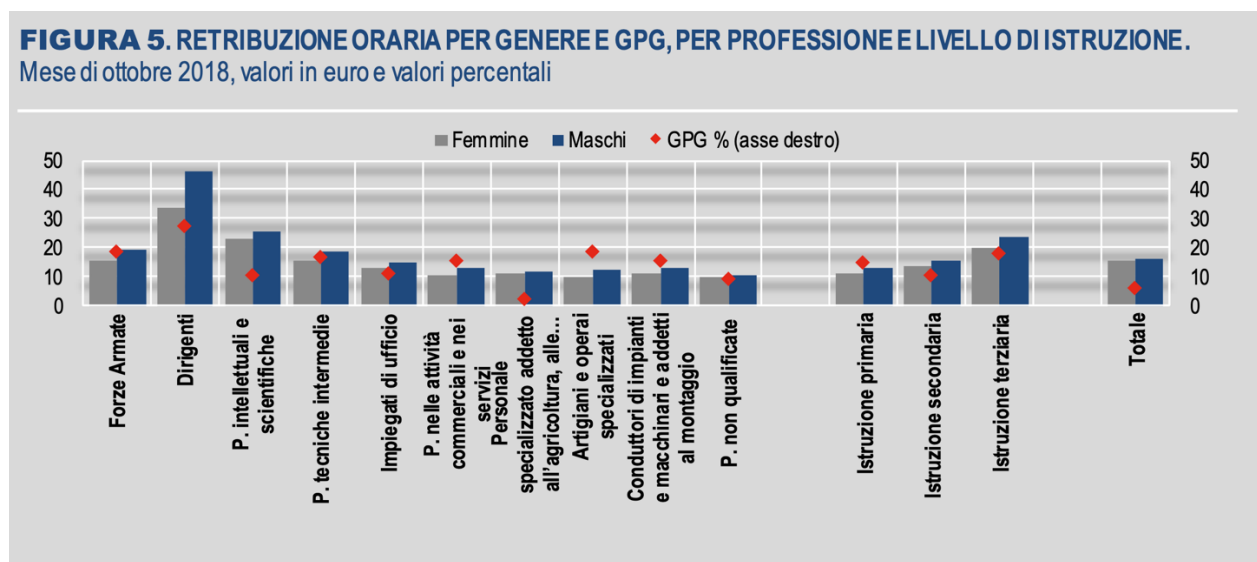


Table N. 25, Hourly wage by gender and gender pay gap, by occupation and level of education, source: Istat 2018

Another influential factor contributing to the gender wage gap is the sector of employment, specifically, the public sector (encompassing public institutions and companies with predominantly public control) versus the private sector (comprising companies with complete

or predominant private control). In the private sector, the gender pay gap stands at 17.7%, while it decreases to 2% in the public sector. In the public sector, women constitute the majority (55.4% of employees), and there is a greater concentration of highly educated women with higher hourly wages. Female graduates in the public sector earn an hourly wage of 22.6 euros, which is 7.5 euros higher than that of their counterparts in the private sector. For men, the difference narrows to 4 points, with hourly wages decreasing from 26.1 euros in the public sector to 22.1 euros in the private sector.

2.3.1 Gender Pension Gap

The gender wage gap has a significant impact on pensions. Since women tend to earn less than men during their working years, their pension entitlements are typically lower. This results in a gender pension gap, which can lead to financial insecurity for retired women.

The gender pension gap is influenced by several factors, including the gender wage gap, career interruptions due to caregiving responsibilities, and the prevalence of part-time work among women. Women often take on caregiving roles, such as raising children or caring for elderly family members, which can lead to reduced work hours or career breaks. As a result, they may contribute less to their pension funds and accrue fewer retirement benefits.

Additionally, women are more likely to work in lower-paid or part-time positions, which can further exacerbate the pension gap. Part-time work often comes with reduced access to workplace retirement plans, making it challenging for women to build substantial pension savings.

Analyzing the latest available report on this matter (²⁴Istat, 2021) we can see that Table N. 25 shows the evolving pattern of average annual pension income for both men and women over time, with figures presented in nominal terms (indicated by dotted lines) and in real terms adjusted for constant 2021-euro values. These data encompass all forms of social security and welfare benefits. In nominal terms, there is a consistent growth in the gender disparity in pension income, which rises from 3,900 euros in 2001 to 6,100 euros in 2021. When the data is adjusted for constant 2021-euro values, the increase over time is still noticeable but less pronounced. In relative terms, the gender gap decreases from 42% to 37%.

²⁴[Rapporto annuale \(2021\), Istat, https://www.inps.it/content/dam/inps-site/pdf/dati-analisi-bilanci/rapporti-annuali/xxi-rapporto-annuale/XXI_RA_22_07modificato_18_07_23.pdf](https://www.inps.it/content/dam/inps-site/pdf/dati-analisi-bilanci/rapporti-annuali/xxi-rapporto-annuale/XXI_RA_22_07modificato_18_07_23.pdf)

Grafico 2.4 – Importo medio lordo annuo reddito pensionistico per genere. Anni 2001-2021

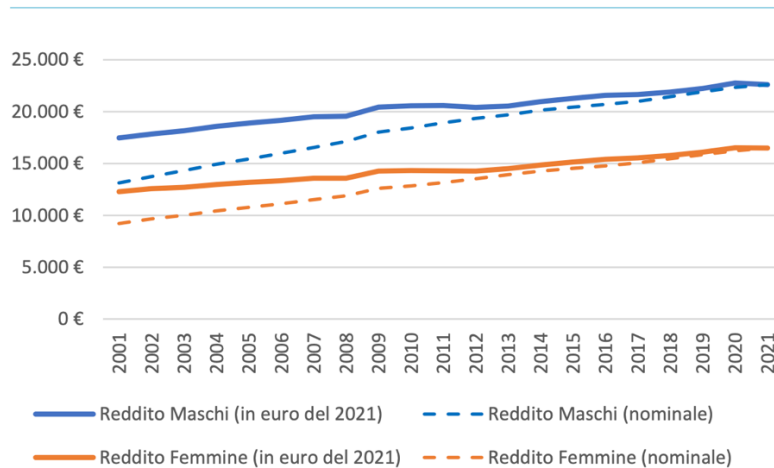
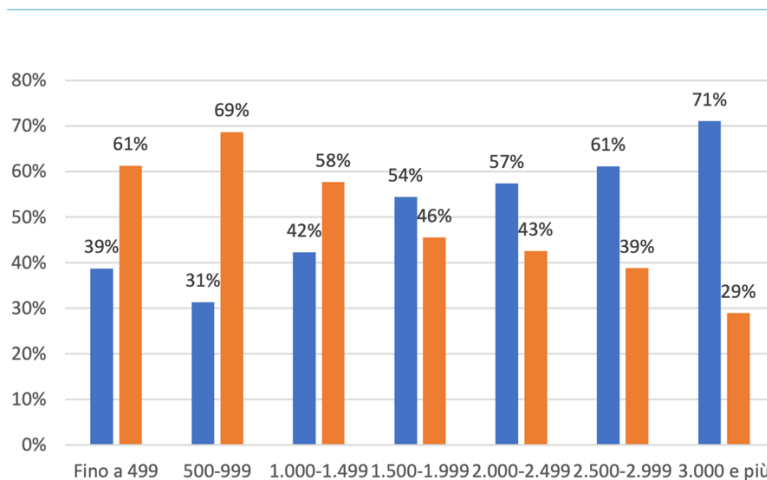


Table N. 26, Gross average annual amount, pension income by gender, source Istat 2021

A more detailed analysis of gender disparities within income classes uncovers distinct patterns. In the lower pension income classes, which encompass individuals receiving up to 1,500 euros per month, women predominate, outnumbering men. In contrast, as we move into the higher income classes, typically exceeding 1,500 euros per month, a notable shift occurs. In the top income bracket, those receiving over 3,000 euros per month, men represent the majority, comprising 70% of the recipients. This shift in gender distribution among pension income classes highlights the evolving dynamics of pension earnings and their impact on gender-based financial disparities.

Grafico 2.5 - Pensionati INPS per classi di reddito pensionistico mensile* e genere. Anno 2021



* Nel 2021, i pensionati con pensioni inferiori a 500 euro sono circa 1,5 milioni; quelli con pensioni da 3.000 euro in su sono circa 1,4 milioni.

Table N. 26, Pensioners INPS by monthly pension income classes and gender, source: Istat 2021

Efforts to address the gender wage gap and promote pay equity can help mitigate the gender pension gap. Implementing policies that support work-life balance, affordable childcare, and encouraging women's participation in higher-paying fields can contribute to narrowing these disparities.

Overall, recognizing the link between the gender pay gap and pension disparities is essential for achieving gender equality and financial security in retirement.

2.4 Female Representation in Boards of Directors and the Gender Wage Gap.

As we have just seen, the gender wage gap, the disparity in earnings between men and women, is a social and economic phenomenon that has raised global concerns. This wage inequality continues to be a barrier to women's progress in the workplace. In recent years, one of the most debated topics has been the effect of women's participation in corporate boards of directors on the reduction of the gender wage gap. In this chapter, we will delve more deeply into the impact of female representation in corporate boards based on studies and research conducted by scholars and organizations worldwide.

Let's start by examining the study "Gender Roles and Medical Progress" (2016) by ²⁵Albanesi and Olivetti, in which they investigate the role of women in corporate boards of directors and their impact on gender equality within organizations. The study was conducted in the United States, and to conduct their research, Albanesi and Olivetti used data from various sources, including historical labor data, data related to female participation in boards of directors, and data on wage parity. They also examined gender dynamics within companies through interviews and qualitative analysis. The study's findings indicate that the presence of women on corporate boards of directors is associated with more favorable company policies for women, including fairer wage policies. This discovery is relevant because it suggests that female leadership in decision-making positions can have a positive impact on corporate culture and wage policies.

In particular, Albanesi and Olivetti have demonstrated that companies with a higher representation of women on corporate boards tend to develop fairer wage policies, promoting wage parity between men and women. This implies that women on corporate boards can positively influence corporate decisions, advocating for wage policies that reduce the gender wage gap.

²⁵Albanesi Stefania, Olivetti Claudia, Gender Roles and Medical Progress, Journal of Political Economy, Vol. 124, No. 3 (June 2016)

The organization ²⁶Catalyst has also conducted several studies on the effect of women's participation in corporate boards of directors. One of their most well-known studies, "The Bottom Line: Corporate Performance and Women's Representation on Boards" (2007), focuses on gender diversity in the boards of publicly traded companies and its consequences for corporate performance. While the study primarily relates to the United States, its findings and research have global applicability. Throughout the study, Catalyst analyzed a substantial amount of data from a sample of publicly traded companies. They assessed the incidence of female participation in corporate boards of directors for these companies and examined the financial performance of each company over a significant period. Additionally, Catalyst conducted interviews and surveys with board members and corporate executives to gain a deeper understanding of the factors that can influence corporate performance.

The results of the study "The Bottom Line: Corporate Performance and Women's Representation on Boards" indicated a positive correlation between gender diversity in corporate boards and corporate performance. In other words, companies with a higher representation of women on corporate boards tend to achieve better financial performance compared to those with exclusively male representation. This finding suggests that the presence of women on corporate boards significantly contributes to corporate success.

Catalyst also highlighted that companies with more diversified boards of directors tend to adopt more inclusive corporate policies and practices that promote gender equity and reduce the gender wage gap. Several studies have shown that women on corporate boards tend to support fairer wage policies. Their presence in decision-making roles can positively influence corporate decisions, advocating for wage policies that reduce the gender wage gap. Female representation on corporate boards can also contribute to cultural changes within companies, fostering greater awareness of gender issues and wage parity. These cultural changes can lead to a more inclusive corporate culture that promotes a fair working environment for both men and women.

Other studies have suggested that companies with a higher representation of women on corporate boards tend to achieve better corporate performance. This may be due to the positive influence of diversified leadership, which can encourage investments in human resources and the promotion of fairer wage policies.

²⁶https://www.catalyst.org/wp-content/uploads/2019/01/The_Bottom_Line_Connecting_Corporate_Performance_and_Gender_Diversity.pdf

While the majority of research tends to suggest a positive effect of women's participation on corporate boards on reducing the gender wage gap and corporate policies, there are also studies that indicate a neutral or ambiguous effect. However, it's important to note that studies showing a neutral effect may be less common than those suggesting a positive impact.

²⁷Aaron Dhir and Katherine Booth, in an article published in "The Harvard Law School Forum on Corporate Governance," explored the effects of gender quota legislation on corporate boards in Norway and noted that the impact on gender diversity in boards might have been more significant than its effects on the gender wage gap.

It's essential to acknowledge that the conclusions of studies on gender diversity in corporate boards can vary based on various factors, including geographic context, industry, and specific company policies. While some studies indicate a neutral or ambiguous impact, the majority of evidence suggests that gender diversity can have a positive effect on reducing the gender wage gap and corporate policies.

²⁷<https://corpgov.law.harvard.edu/2015/08/19/corporate-governance-and-diversity/>

3. Gender Wage Gap in Italy: Regressions Analysis.

The objective of this chapter is to analyze the gender wage gap using regression methods. Firstly, regressions are a set of statistical techniques used to explore relationships between variables. They are widely employed to understand how one or more variables might influence another, aiding in predicting and comprehending data interactions.

Linear regression is one of the most common forms. In this technique, an attempt is made to find a linear relationship between a dependent variable (or target) and one or more independent variables (or predictors). For instance, one might seek to understand how an individual's income is related to education, work experience, and age.

Regressions can be simple, involving just one independent variable, or multiple, encompassing several independent variables. Regression can also be in a non-linear form and they are suitable for more complex relationships between variables. This methodology can be useful when the relationship between variables doesn't follow a direct linear structure but can be modeled linearly through parameter transformations. This allows capturing nonlinear patterns or behaviors in variable relationships through manipulations of the parameters themselves.

The primary objective of regressions is to identify and quantify the relationship between variables, enabling predictions, evaluating the importance of predictive variables, and enhancing understanding of observed data dynamics. In contexts such as the gender wage gap, regressions can be utilized to appreciating gender-based wage differentials through these variables like gender, work experience, job tenure or education.

Thus, through the use of variables such as logarithmic salary, gender, job tenure and work experience, it is possible to thoroughly examine wage disparities between men and women controlling for the characteristics that affect wage.

Data has been obtained from Istat's collection (labor force survey) dated the fourth quarter of 2020.

The analysis we are about to conduct is based on the concept of the wage equation, utilized in economics and labor market analyses to model and understand the determinants of a worker's compensation. This equation seeks to represent the factors that influence an individual's salary.

Typically, the wage equation can be simplified as:

Salary = f(education, work experience, job tenure, industry sector, gender, geographical location, etc.)

The variables included in the wage equation can be multiple and depend on the specific context in which salary is being analyzed.

The level of education attained, work experience, and job tenure can significantly influence salary. Generally, higher education and broader experience tend to be associated with higher compensation. The type of sector or industry in which an individual works can also impact salary, with certain sectors offering higher compensation than others, and wage disparities varying within specific occupations within a sector.

Unfortunately, gender can affect salary, with women often being paid less than men for the same type of work, known as the gender wage gap. Additionally, the region where work is conducted can impact salary levels. Wage disparities can vary significantly between locations due to differences in living costs, labor demand, and local economic conditions.

The salary is considered in logarithmic form and constitutes the central parameter of this analysis. This transformation allows the evaluation of the relationship between gender and salary, considering salary differences in percentage terms and providing a deeper understanding of wage discrepancies. For instance, using logarithms allows us to explain in percentage terms the effect that experience and other variables can have on wages, indicating how much the salary increases or decreases in percentage.

Gender, as a categorical variable, is pivotal in this analysis. Wage differences between men and women will be assessed and quantified using this variable, aiding in identifying the degree of wage inequality.

Job tenure serves as a critical element. Examining how long an individual has spent in a particular role or with a company can offer insights into salary disparities related to experience and career progression.

Work experience is another pivotal variable. The amount of accumulated professional experience may correlate with salary levels and could reveal significant differences between men and women.

It's important to highlight that job tenure and experience impact the marginal productivity of workers. Marginal productivity refers to the change in total production when an additional unit of input is employed, and in this context, it refers to the change in production or work when a worker's job tenure or experience increases.

Generally, an increase in job tenure or an individual's experience can positively influence marginal productivity. The more tenure or experience accumulated, the greater the skills

acquired over time, familiarity with the job, and ability to handle specific job challenges. This can lead to increased efficiency and productivity in performing certain tasks or roles.

However, it's essential to note that the increase in job tenure or experience may not always result in a linear or constant increase in marginal productivity. This depends on various factors, including the type of work, training received during the experience, and the nature of tasks performed over time. In some cases, there might be a point where the increase in experience could lead to diminishing returns in terms of marginal productivity.

It's crucial to consider the type of profession since different sectors and professional roles can exhibit significant differences in working conditions, career opportunities, and salary levels. Some sectors tend to be historically dominated by one gender over the other. For instance, roles in the technology or engineering sector might have a higher male presence, while sectors like healthcare or teaching might have more women. This occupational segregation can influence salary differences.

Certain professions or sectors may undervalue or overvalue the work performed, leading to unjust salary disparities. This evaluation can be influenced by gender stereotypes, with traditionally 'male' jobs often being more highly valued than 'female' ones.

Some professions offer greater opportunities for career advancement and earnings than others. These differences can be linked to barriers women face in career advancement, such as the glass ceiling or the lack of female representation in decision-making positions.

Considering both the type of profession and the sector allows for a more in-depth analysis of the causes of gender wage disparities and enables the adoption of specific measures to address inequalities stemming from the structure of work and professional opportunities.

Lastly, the analysis will also consider Italian regions as control variables. Exploring wage differences among various regions can shed light on any geographic and contextual salary inequalities.

Through the use of regression models, such as multiple linear regression, it will be possible to evaluate the impact and association between these variables and the gender wage gap. The quantitative analysis derived from regressions will allow a more detailed and scientifically grounded understanding of the gender wage gap in Italy, identifying the factors that contribute most to these disparities.

So, the analysis through regressions represents an effective tool to investigate and comprehend wage inequalities between men and women in the Italian context, providing an empirical and experimental approach to critically examine the gender wage gap.

This analysis through regressions was conducted using Stata software. The latter is a statistical software widely used in the field of social research, economics, healthcare, and many other scientific disciplines. It is designed for data analysis, information management, and graph creation. Stata offers a wide range of statistical tools and allows for various analysis techniques, including regression analysis, statistical modeling, and data visualization. It is appreciated for its flexibility, analytical power, and ability to handle large datasets.

The data obtained from the Istat survey for the fourth quarter of 2021 was imported into Stata, and it was verified that the import was successful.

During the data import, since the goal is to establish the gender wage gap, only employed individuals were considered, so some columns have been removed, and missing values have been eliminated.

The target population comprises all members of families residing in Italy, even if temporarily emigrated abroad, while excluding permanent members of cohabitations (shelters, religious institutions, barracks, etc.), and the number of samples collected is 97,157 individuals. The adopted sampling design is two-stage with stratification of the first-stage units; the first-stage units are municipalities, and the second-stage units are families. The sampling design adopted for each quarterly survey is based on a temporal stratification on a monthly basis; indeed, the quarterly sample of final sampling units (families) is divided into three distinct groups, each of which is randomly assigned to a month of the quarter in such a way that each of the three groups constitutes a representative sample of the reference population in the considered month.

Unlike families, which rotate according to the introduced scheme, the sampled municipalities remain constant over time.

The salary refers to the pay received by the interviewee during their last month of work. The job tenure variable, indicates the number of years worked for the same employer or the number of years engaged in the same job for self-employed workers.

Additionally, there is the experience variable, indicating the number of years of experience a person has in the labor market. The Italian regions analyzed were numbered from 1 to 20 as follows: Piedmont (reg_dum1), Valle D'Aosta (reg_dum2), Lombardy (reg_dum3), Trentino-Alto Adige (reg_dum4), Veneto (reg_dum5), Friuli Venezia Giulia (reg_dum6), Liguria (reg_dum7), Emilia Romagna (reg_dum8), Tuscany (reg_dum9), Umbria (reg_dum10), Marche (reg_dum11), Lazio (reg_dum12), Abruzzo (reg_dum13), Molise (reg_dum14), Campania (reg_dum15), Puglia (reg_dum16), Basilicata (reg_dum17), Calabria (reg_dum18), Sicily (reg_dum19), Sardinia (reg_dum20).

Instead, professions have been grouped into categories as follows:

- Legislators, entrepreneurs and top management (PROF1_dum1)
- Intellectual, scientific and highly specialized professions (PROF1_dum2)
- Technical professions (PROF1_dum3)
- Executive professions in office work (PROF1_dum4)
- Qualified professions in commercial activities and services (PROF1_dum5)
- Craftsmen, skilled workers and agricultural workers (PROF1_dum6)
- Plant operators, operators of fixed and mobile machinery and vehicle drivers (PROF1_dum7)
- Unqualified professions (PROF1_dum8)
- Armed forces (PROF1_dum9)

Furthermore, as we can see in the table, the number of individuals used is 22,607 employed individuals.

Subsequently, descriptive statistics of the logarithmically transformed salary, are displayed and analyzed. The mean of a logarithmically transformed salary represents the average value of the salaries converted into logarithmic form, providing a representation of the central tendency of the data that in our case is around 1328.5 euro (7.16). On the other hand, the standard deviation of 0.44 that measures the dispersion or variability of the data around the mean. In other words, it indicates how far the data points are from the mean and provides information about the distribution of salaries around the average value.

The last descriptive statistic we find is the percentiles, which indicate the value below which a certain percentage of the data falls. For instance, the 25th percentile (or first quartile) represents the value below which 25% of the salaries lie, while the 75th percentile (third quartile) indicates the value below which 75% of the salaries lie. These percentiles offer an overview of the salary distribution in terms of logarithm, illustrating how the data is distributed around the mean. In this case, we can observe a shift from a gap of around 251.89 euros to 2980.96 euros.

```

. * statistiche descrittive di log wage, nostra variabile dipendent
> e
. sum LN_W

```

Variable	Obs	Mean	Std. Dev.	Min
Max				

LN_W	22,607	7.156414	.4419261	5.525453
6701				8.00

```

. sum LN_W, d

```

LN_W				
Percentiles		Smallest		
1%	5.525453	5.525453		
5%	6.274762	5.525453		
10%	6.580639	5.525453	Obs	22,607
25%	7.003974	5.525453	Sum of Wgt.	22,607
50%	7.244942		Mean	7.156414
		Largest	Std. Dev.	.4419261
75%	7.409136	8.006701		
90%	7.601402	8.006701	Variance	.1952987
95%	7.783641	8.006701	Skewness	-1.126727
99%	8.006701	8.006701	Kurtosis	5.175046

Table N.27, Descriptive statistics of the dependent variable

Afterward, the regression is created using only the constant of the logarithmic salary.

The coefficient of the constant variable indicates the level of the reference salary. It represents the predicted value of the salary (in logarithmic scale) when all other independent variables in the model are zero or have no influence on the salary.

Of course, the coefficient for the constant variable (the salary in logarithmic form) is 7.16, suggesting that when all other variables are at zero, the predicted value of the salary (in logarithmic scale) is approximately 7.16. Meanwhile, the standard error of 0.0029 represents the estimation of the standard deviation of the coefficient. In this context, a lower standard error implies higher precision in estimating the coefficient.

In this case, $t = 2434.82$, a higher absolute t-value generally suggests that the coefficient is more statistically significant, $P > |t| = 0.000$, which indicates an extremely low probability of observing such an extreme t-value under the assumption of no effect (essentially suggesting strong evidence against the null hypothesis). The interval range here is between 7.15 and 7.16 for the coefficient of the constant variable, with a confidence level of 95%, this means we can be 95% confident that the actual coefficient falls within this interval.

```

. * regressione con solo la costante
. reg LN_W, robust

Linear regression                               Number of obs   =
>      22,607                                F(0, 22606)      =
>      0.00                                  Prob > F         =
>      .                                    R-squared       =
>      0.0000                                Root MSE       =
>      .44193

-----
> -----
>      LN_W |          Coef.      Robust      t    P>|t|    [95% Conf
> . Intervall]
> -----
>      _cons |    7.156414    .0029392  2434.82  0.000    7.150653
>      7.162175
> -----
> -----

```

Table N. 28, Regression with only the constant

To analyze the difference between men and women, let's include the gender dummy variable in the regression.

The survey indicates that 52.40% of employed respondents are male, whereas 47.60% are female. The regression coefficient for women is -0.24, and for men, it is 7.27. This means that women earn 24% less in salary compared to men.

```

. * inseriamo la dummy genere
. tab DONNA

      DONNA |          Freq.      Percent      Cum.
-----+-----
          0 |         11,846         52.40         52.40
          1 |         10,761         47.60        100.00
-----+-----
      Total |         22,607        100.00

. reg LN_W DONNA, robust

Linear regression                               Number of obs   =
>      22,607                                F(1, 22605)      =
>      1763.96                                Prob > F         =
>      0.0000                                R-squared       =
>      0.0738                                Root MSE       =
>      .42531

-----
> -----
>      LN_W |          Coef.      Robust      t    P>|t|    [95% Conf
> . Intervall]
> -----
>      DONNA |   -.2404154    .0057242   -42.00  0.000   -.2516353
>      -.2291955
>      _cons |    7.270852    .0034679  2096.62  0.000    7.264055
>      7.27765
> -----
> -----

```

Table N. 29, Creation and insertion of the gender dummy variable

At this point, to understand the values in euros clearly, let's use the exp function to return to absolute values and as we can see in Table N. 30 on average, men tend to earn 1532.56 euro, which is the typical amount, and the salaries of men typically deviate around 523.56 from this average. On the other hand, women tend to earn an average of 1244.5, with salaries typically varying around 500.95 from this average. From this, we can infer that women face more challenges in the workplace, as the coefficient of variation, which indicates data dispersion, is higher for women than for men. This is because in the context of wage differences between men and women, a higher coefficient of variation for women compared to men may suggest greater variability in women's salaries. In other words, it might imply that wage disparities among women are wider and more variable compared to those among men. This can be seen as an indication of increased difficulties for women in the workforce in terms of salary disparities. It reflects greater instability or heterogeneity in women's wages, potentially indicating additional challenges in ensuring pay equity in the work environment.

Having returned to absolute values using exponentials, we can verify that the average wage difference between men and women is $1532.56 - 1244.5 = 288.06$ euros that represents roughly the 24% that women earn less than men.

This comparison highlights a discrepancy between male and female salaries, with men earning higher on average and also having a higher variability in their earnings compared to women.

```
. * vediamo se il wage in livello è diverso tra generi
. bysort DONNA: sum wage
```

-> DONNA = 0				
Variable	Obs	Mean	Std. Dev.	Min
> Max				

> ----				
wage	11,846	1532.597	523.5739	251
> 3001				

-> DONNA = 1				
Variable	Obs	Mean	Std. Dev.	Min
> Max				

> ----				
wage	10,761	1244.515	500.9509	251
> 3001				

Table N. 30, Gender-based salaries for men and women

In terms of experience in labor market, on average, men have 22.44 years of experience in the labor market, whereas women have 21.87 years. Including experience in the regression, we observe that it has a coefficient of 0.0066, this means that for every unit increase in job tenure, there is an expected increase in the salary (on a logarithmic scale) of approximately 0.66%

per year. It's important to highlight that the coefficient for women decreases with the addition of experience going from a 24% lower salary than men to 23.6% less.

```
. * inseriamo l'esperienza
. bysort DONNA: sum ESP

-----
-> DONNA = 0

  Variable |      Obs      Mean   Std. Dev.   Min
-----+-----
> Max
> -----
> ESPERIENZA |    11,846    22.4458   12.49752      0
> 59

-----
-> DONNA = 1

  Variable |      Obs      Mean   Std. Dev.   Min
-----+-----
> Max
> -----
> ESPERIENZA |    10,761    21.86944   12.42442      0
> 68

. reg LN_W DONNA ESP, robust

Linear regression           Number of obs   =
> 22,607                    F(2, 22604)   =
> 1299.03                   Prob > F       =
> 0.0000                    R-squared      =
> 0.1086                    Root MSE     =
> .41726

-----
> -----
> LN_W |      Coef.   Robust   t    P>|t|   [95% Conf
> . Intervall]
> -----+-----
> DONNA |  -.2366038   .0056262  -42.05  0.000   -.2476317
> -.225576
> ESPERIENZA | .0066131   .0002454   26.94  0.000   .006132
> .0070941
> _cons |  7.122417   .006585  1081.61  0.000   7.10951
> 7.135324
> -----
```

Table N. 31, Experience inclusion in the regression

At this point, we create a set of dummies for the regions and as we can see from the table, to check territorial differentials. The majority of employed survey respondents come from Lombardy, while the fewest come from Molise. A higher coefficient, for instance in Trentino Alto-Adige (Region 4), suggests that accounting for other variables, being in that region tends to have a more significant effect on the dependent variable (salary in this case) compared to a region with a lower coefficient, such as in Sardegna (Region 20). Essentially, this implies a stronger association or impact on the outcome variable within the context of the regression model.

The software has automatically omitted the Calabria region, which has one of the lowest numbers of collected samples, so all data is interpreted in comparison to the Calabria region.

We can say that the inclusion of these dummies is significant because there are territorial wage differentials, and furthermore, the coefficient for women has slightly increased.

```

. * creaimo un set di dummy per le regioni
. tab REG, gen(reg_dum)

```

REG	Freq.	Percent	Cum.
1	2,271	10.05	10.05
2	386	1.71	11.75
3	3,727	16.49	28.24
4	1,374	6.08	34.32
5	1,724	7.63	41.94
6	1,112	4.92	46.86
7	817	3.61	50.48
8	1,829	8.09	58.57
9	1,024	4.53	63.10
10	794	3.51	66.61
11	993	4.39	71.00
12	1,737	7.68	78.68
13	396	1.75	80.44
14	255	1.13	81.56
15	691	3.06	84.62
16	466	2.06	86.68
17	560	2.48	89.16
18	264	1.17	90.33
19	1,426	6.31	96.63
20	761	3.37	100.00
Total	22,607	100.00	

Table N. 32, Creation of dummy variables for Italian regions

	LN_W	Coef.	Robust Std. Err.	t	P> t	[95% Conf Interval]
> -----						
> .						
> -----						
> DONNA		-.239445	.005588	-42.85	0.000	-.2503979
> -.228492						
> ESPERIENZA		.0065655	.0002443	26.88	0.000	.0060867
> .0070443						
> reg_dum1		.0454177	.0265831	1.71	0.088	-.006687
> .0975225						
> reg_dum2		.0984032	.0312725	3.15	0.002	.0371069
> .1596995						
> reg_dum3		.1186884	.0258977	4.58	0.000	.0679272
> .1694496						
> reg_dum4		.1338607	.0270124	4.96	0.000	.0809144
> .1868069						
> reg_dum5		.0328435	.0268844	1.22	0.222	-.0198518
> .0855388						
> reg_dum6		.0733276	.027445	2.67	0.008	.0195335
> .1271218						
> reg_dum7		.0491969	.0289933	1.70	0.090	-.0076319
> .1060258						
> reg_dum8		.0516125	.0269447	1.92	0.055	-.001201
> .1044259						
> reg_dum9		.0378574	.0282854	1.34	0.181	-.017584
> .0932988						
> reg_dum10		-.0090046	.0291228	-0.31	0.757	-.0660872
> .0480781						
> reg_dum11		.0140663	.0278646	0.50	0.614	-.0405502
> .0686828						
> reg_dum12		.0257521	.0270728	0.95	0.342	-.0273125
> .0788166						
> reg_dum13		.0219171	.0318608	0.69	0.492	-.0405323
> .0843666						
> reg_dum14		-.035893	.035363	-1.01	0.310	-.105207
> .033421						
> reg_dum15		-.0284238	.0299208	-0.95	0.342	-.0870706
> .030223						
> reg_dum16		-.0444128	.0328151	-1.35	0.176	-.1087327
> .019907						
> reg_dum17		-.0415177	.030325	-1.37	0.171	-.1009567
> .0179213						
> reg_dum18		0	(omitted)			
> reg_dum19		-.0435123	.0273688	-1.59	0.112	-.0971571
> .0101325						
> reg_dum20		-.0657548	.0302262	-2.18	0.030	-.1250003
> -.0065094						
> _cons		7.08261	.0255987	276.68	0.000	7.032435
> 7.132785						
> -----						

Table N. 33, Regression with gender dummies, regions, and experience.

Analyzing the job tenure, we notice that the coefficient representing the wage differential has increased to 24.5% and the men have an average of 12.77 years of job tenure, while women have 12.85. This suggests that although men, on average, have been in the job market slightly longer, they tend to change employers somewhat a bit more frequently than women. By including job tenure in the regression, we observe that the region with the lowest coefficient has become Sicily (region 19), while the one with the highest coefficient remains Trentino Alto-Adige (region 4) with 0.19.

If the coefficients of the regions increase, such as in Lombardy (region 3) and Trentino Alto-Adige (region 4), when the "job tenure" variable is added to the regression, it indicates that work experience has a more significant influence on how regions affect wages. An increase in coefficients could suggest that job tenure strongly impacts the wage difference between regions.

In regions where the coefficients decrease, such as in Molise (region 14) and Campania (region 15), it indicates that the effect of regions on the dependent variable (salary) is partly explained by job tenure. Therefore, adding the "job tenure" variable might diminish the region's effect on wages, suggesting that part of the initially observed variation among regions could be attributed to employees' work experience.

Work experience and job tenure are closely interconnected factors. Usually, a longer period of employment within a company aligns with an accumulation of experience, as tenure tends to be proportional to work experience.

This link between experience and job tenure might reflect people's tendency to stay longer in a company to accumulate experience, rather than frequently changing jobs to gain new skills or opportunities, especially in Italy. This pattern could limit the flexibility of the Italian labor market and influence its employment dynamics. In our case, job tenure has a greater impact on salary compared to experience; this is why we find its coefficient to be negative.

```

. * inseriamo l'anzianità nella regressione
. bysort DONNA: sum ANZIANITA

```

-> DONNA = 0				
Variable	Obs	Mean	Std. Dev.	Min
> Max				

> ANZIANITA	11,846	12.76802	11.19554	0
> 50				

-> DONNA = 1				
Variable	Obs	Mean	Std. Dev.	Min
> Max				

> ANZIANITA	10,761	12.84602	11.25448	0
> 49				

Table N. 34, The average values of tenure and its inclusion in the regression.

LN_W	Coef.	Robust Std. Err.	t	P> t	[95% Conf Interval]
DONNA	-.2452031	.0053786	-45.59	0.000	-.2557455
ESPERIENZA	-.0002026	.0003052	-0.66	0.507	-.0008007
ANZIANITA	.012593	.0003043	41.38	0.000	.0119965
reg_dum1	.0787233	.02489	3.16	0.002	.0299372
reg_dum2	.134324	.0295621	4.54	0.000	.0763802
reg_dum3	.1491861	.024195	6.17	0.000	.1017623
reg_dum4	.1898082	.0252595	7.51	0.000	.1402978
reg_dum5	.0854433	.0251372	3.40	0.001	.0361727
reg_dum6	.127436	.0256929	4.96	0.000	.0770761
reg_dum7	.0788164	.0271794	2.90	0.004	.0255429
reg_dum8	.0993511	.0252697	3.93	0.000	.0498207
reg_dum9	.0777433	.0265222	2.93	0.003	.0257581
reg_dum10	.0315483	.0272965	1.16	0.248	-.0219547
reg_dum11	.0413128	.0261084	1.58	0.114	-.0098615
reg_dum12	.0521859	.0252905	2.06	0.039	.0026148
reg_dum13	.0563609	.029704	1.90	0.058	-.001861
reg_dum14	-.0104049	.0336111	-0.31	0.757	-.0762849
reg_dum15	-.0146422	.0282391	-0.52	0.604	-.0699928
reg_dum16	-.0274708	.0306663	-0.90	0.370	-.0875788
reg_dum17	-.0236988	.0284439	-0.83	0.405	-.0794508
reg_dum18	0 (omitted)				
reg_dum19	-.0323669	.0256169	-1.26	0.206	-.0825778
reg_dum20	-.016395	.0280759	-0.58	0.559	-.0714257
_cons	7.039235	.0238913	294.64	0.000	6.992407

Table N. 35, Regression with gender dummies, regions, experience and job tenure.

Then, let's analyze the interaction between the "female" variable and "job tenure" in the regression. This implies considering how the effect of being female on the dependent variable (salary) changes with varying job tenure.

If the interaction is significant, it means that the gender effect on the dependent variable is not constant but varies based on job tenure. For example, it might indicate if the impact of gender on salary changes with accumulated work experience.

In simpler terms, the "female" and "job tenure" interaction helps understand if there are significant differences in the gender effect on the dependent variable concerning work experience.

The data from our the model suggests the following conclusions: being a male holds a positive coefficient (7.06, the expected log wage for a Calabrian man without experience and job tenure), whereas females earn significantly less (28.6%).

Region Trentino Alto-Adige holds a positive coefficient (0.19), suggesting that, in this area, there might be a wage premium with respect to Region Calabria.

Regarding the tenure, the coefficient (0.01) implies that for every unit increase in tenure, there's a slight increase in wages, same for the interaction of tenure and begin a female, the coefficient (0.003) indicates a slight positive impact on wages, showing a nuanced effect of tenure on female wages.

Experience still holds a negative coefficient (-0.0002), suggesting that job tenure has an higher impact on wages. Region Sicily also has a negative coefficient (-0.03), indicating potentially lower wages compared to Calabria.

Lastly, it is important to highlight that the effect of job tenure is stronger for women than for men.

LN_W	Coef.	Robust Std. Err.	t	P> t	[95% Conf Interval]
DONNA	-.2859948	.0089355	-32.01	0.000	-.303509
ESPERIENZA	-.0002053	.0003048	-0.67	0.501	-.0008026
ANZIANITA	.0110701	.0003501	31.62	0.000	.0103838
anz_donna	.0031854	.0004567	6.98	0.000	.0022903
reg_dum1	.0790535	.0247391	3.20	0.001	.0305632
reg_dum2	.1355041	.0294059	4.61	0.000	.0778666
reg_dum3	.1497344	.0240448	6.23	0.000	.1026049
reg_dum4	.1898707	.0251177	7.56	0.000	.1406383
reg_dum5	.0867899	.0249928	3.47	0.001	.0378022
reg_dum6	.1279846	.0255554	5.01	0.000	.0778942
reg_dum7	.0790504	.0270586	2.92	0.003	.0260138
reg_dum8	.1000208	.0251309	3.98	0.000	.0507625
reg_dum9	.0782992	.026381	2.97	0.003	.0265906
reg_dum10	.0331153	.0271306	1.22	0.222	-.0200625
reg_dum11	.0422783	.0259714	1.63	0.104	-.0086274
reg_dum12	.0526522	.0251477	2.09	0.036	.003361
reg_dum13	.0563135	.0295478	1.91	0.057	-.0016021
reg_dum14	-.008547	.0335497	-0.25	0.799	-.0743068
reg_dum15	-.0135307	.028082	-0.48	0.630	-.0685733
reg_dum16	-.0261205	.0305388	-0.86	0.392	-.0859787
reg_dum17	-.0213658	.0282983	-0.76	0.450	-.0768325
reg_dum18	0 (omitted)				
reg_dum19	-.0316194	.0254685	-1.24	0.214	-.0815395
reg_dum20	-.0151606	.0279161	-0.54	0.587	-.0698781
_cons	7.058008	.0239189	295.08	0.000	7.011126

Table N. 36, Regression with gender dummies, regions, experience, job tenure and the interaction between the female variable and job tenure.

The creation of a set of dummies for professions it's very important, and as we can see, the majority of individuals (4,152) belong to the category of "executive professions in office work," while the smallest number (274) are in "legislators, entrepreneurs, and top management."

```
. * creiamo un set di dummy per le professioni
. tab PROF1, gen(PROF1_dum)
```

PROF1	Freq.	Percent	Cum.
1	274	1.21	1.21
2	3,243	14.35	15.56
3	4,152	18.37	33.92
4	3,384	14.97	48.89
5	3,644	16.12	65.01
6	2,646	11.70	76.72
7	2,183	9.66	86.37
8	2,760	12.21	98.58
9	321	1.42	100.00
Total	22,607	100.00	

Table N. 37, creation dummies set for professions.

At this point, we include them in the regression and we can notice that the wage gap between men and women has decreased to 26.8%, this indicates a change in the gender's impact on salary after introducing dummy variables for professions, suggesting a reduction in the wage gap between men and women.

The coefficient for experience has shifted from -0.0002 to 0.002. This change suggests that after introducing dummy variables for professions, experience now has a positive impact on salary rather than being nearly neutral as before.

Even the coefficient for seniority has experienced a slight change, moving from an impact of 1.1% to 0.66%. The ratio between seniority and women also has a slightly smaller impact compared to before.

It's important to emphasize that the software has automatically excluded professions belonging to the armed forces category (PROF1_dum9), so all analyses conducted are in relation to that category. Even here being a male holds a positive coefficient (7.24, the expected log wage for a Calabrian man without experience and job tenure), whereas females earn significantly less (26.9%).

The professions that have the greatest impact on wage differences belong to the 'legislators, entrepreneurs, and top management' category, whereas those with the least impact are in the 'unqualified professions' category. The fact that professions in the 'legislators, entrepreneurs, and top management' category have a higher impact on wage disparities suggests a significant inequality in income distribution and opportunities within these high-level positions.

On the other hand, the lower impact on wage differences in the 'unqualified professions' category might reflect a kind of wage leveling within this category. However, this could also indicate a broader issue such as job undervaluation or a lack of career progression within these positions.

```

. reg LN_W DONNA ESP ANZIANITA anz_donna reg_dum* PROF1_dum*, robus
> t
note: reg_dum18 omitted because of collinearity
note: PROF1_dum9 omitted because of collinearity

Linear regression                               Number of obs   =
>      22,607                                F(31, 22575)      =
>      374.68                                Prob > F          =
>      0.0000                                R-squared         =
>      0.3832                                Root MSE         =
>      .3473

> -----
>      LN_W      Coef.      Robust      t      P>|t|      [95% Conf
>      . Interval]
> -----
>      DONNA      -.2688047   .008411   -31.96   0.000   -.2852908
>      -.2523186
>      ESPERIENZA  .0018699   .0002753    6.79   0.000   .0013302
>      .0024095
>      ANZIANITA   .0066187   .0003285   20.15   0.000   .0059747
>      .0072626
>      anz_donna   .0017453   .0004113    4.24   0.000   .0009391
>      .0025516
>      reg_dum1    .0533193   .0205254    2.60   0.009   .0130881
>      .0935505
>      reg_dum2    .1181043   .0252258    4.68   0.000   .0686599
>      .1675487

```

Table N.38, Regression with gender dummies, profession dummies, regions, experience, job tenure and the interaction between the female variable and job tenure.

reg_dum3	.1194763	.0197778	6.04	0.000	.0807105
> .1582422					
reg_dum4	.1519538	.0208539	7.29	0.000	.1110787
> .1928289					
reg_dum5	.0691472	.0206984	3.34	0.001	.0285768
> .1097176					
reg_dum6	.1016865	.0212916	4.78	0.000	.0599535
> .1434195					
reg_dum7	.0594307	.0225229	2.64	0.008	.0152843
> .103577					
reg_dum8	.073404	.0208485	3.52	0.000	.0325394
> .1142686					
reg_dum9	.0546883	.0218643	2.50	0.012	.0118328
> .0975439					
reg_dum10	.0254247	.0225272	1.13	0.259	-.0187302
> .0695796					
reg_dum11	.0365514	.0217088	1.68	0.092	-.0059993
> .0791021					
reg_dum12	.0413354	.0206591	2.00	0.045	.0008421
> .0818286					
reg_dum13	.0193059	.0250267	0.77	0.440	-.0297481
> .0683599					
reg_dum14	-.015176	.0292827	-0.52	0.604	-.0725721
> .0422202					
reg_dum15	-.0246054	.0231944	-1.06	0.289	-.070068
> .0208572					
reg_dum16	-.0247285	.0253308	-0.98	0.329	-.0743787
> .0249216					
reg_dum17	.0005925	.0239412	0.02	0.980	-.0463338
> .0475189					
reg_dum18	0	(omitted)			
reg_dum19	-.0241521	.020866	-1.16	0.247	-.0650508
> .0167467					
reg_dum20	-.0118314	.0233252	-0.51	0.612	-.0575503
> .0338876					
PROF1_dum1	.39975	.0245733	16.27	0.000	.3515847
> .4479153					
PROF1_dum2	.1238334	.0134187	9.23	0.000	.0975318
> .150135					
PROF1_dum3	.0009862	.0129321	0.08	0.939	-.0243617
> .0263341					
PROF1_dum4	-.1293304	.0133999	-9.65	0.000	-.1555952
> -.1030656					
PROF1_dum5	-.3336607	.014035	-23.77	0.000	-.3611703
> -.3061512					
PROF1_dum6	-.2190064	.0134	-16.34	0.000	-.2452712
> -.1927415					
PROF1_dum7	-.1485875	.0134315	-11.06	0.000	-.1749142
> -.1222608					
PROF1_dum8	-.4972756	.0147975	-33.61	0.000	-.5262797
> -.4682716					
PROF1_dum9	0	(omitted)			
_cons	7.23871	.0228575	316.69	0.000	7.193907
> 7.283512					

Table N.39, Regression with gender dummies, profession dummies, regions, experience, job tenure and the interaction between the female variable and job tenure.

These coefficients imply that being male, having longer job tenure and experience, being in certain regions and categories of professions could lead to higher wages, while being female has the most significant negative impact on wages. It's essential to consider these factors collectively to understand the complexity of wage disparities.

Conclusions

Until not many years ago, the image of women was significantly influenced by a male perspective. Traditionally, a woman's role was confined to the domestic sphere: taking care of the husband, children, and the household, characterized by qualities such as gentleness, sensitivity, submissiveness, and intuition. Age-old stereotypes about women still struggle to be overcome, especially in the corporate context, where qualities generally associated with men, such as strength, decisiveness, boldness, lack of sensitivity, and unwavering determination in achieving goals, seem to be required.

This was demonstrated in the first chapter of a work that addresses stereotypes and the objective difficulties faced by women, attempting to highlight the specific positive aspects of a woman working in leadership positions. However, this also highlights the slowness of a transformation process that is not only cultural but also political and social, as it requires an effective welfare system that in Italy seems not to have been fully realized yet, unlike some Nordic countries.

The second chapter conducted a more in-depth analysis of the gender wage gap, revealing a series of complexities and challenges both at the European and Italian levels. Definitions and theories on the gender wage gap provided a conceptual basis for understanding this wage disparity, highlighting its multifaceted nature. The detailed analysis of the gender wage gap in the European Union, and more specifically in Italy, underscored the persistent presence of this inequality, despite efforts to reduce it through specific measures that were examined, revealing the need for ongoing targeted actions and policies to effectively address this issue. In particular, gender disparity in pensions emerged as a particularly concerning area, as salary disparities throughout one's working life are reflected in it, creating a wage gap that individuals carry throughout their lives. This chapter also examined several studies linking female representation on boards of directors to the gender wage gap, most of which emphasized the importance of promoting gender diversity in corporate leadership to positively impact pay equality.

In the last chapter, I learned to use a new software, Stata, through which I personally analyzed, using regressions, the effects that job tenure and labor market experience, both for men and women, can have on an individual's salary. Thus, I demonstrated the wage differences in Italy and their distributions across Italian regions, confirming the disparities addressed in the second chapter between the North and South and the difficulties that women face in holding positions of prominence.

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