

# SHE FIGURES

## 2024

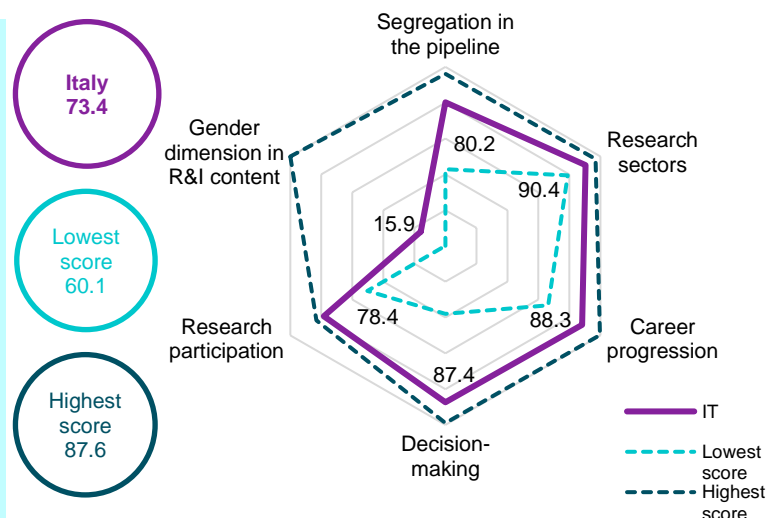
The road to gender equality in R&I

Italy

She Figures Index 2024

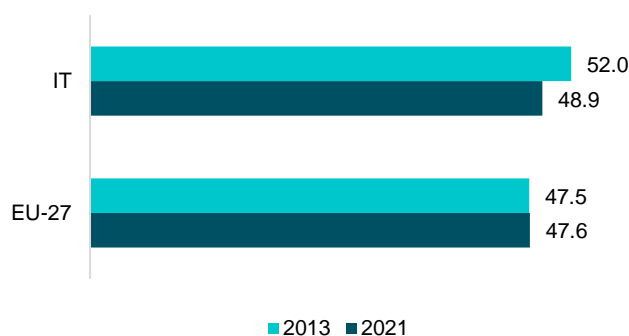
The **She Figures Index** is a tool to measure the extent to which European Union (EU) Member States have achieved gender equality in the European Research Area (ERA). It draws on She Figures indicators across six dimensions: segregation in the pipeline, research sectors, career progression, decision-making, research participation, and incorporating a gender dimension in research and innovation (R&I) content (GDRIC).

A score of between 0 and 100 is assigned to each dimension, as well as an overall score. A score of 100 denotes that gender equality has been fully achieved. Among the Member States, Italy ranks 14<sup>th</sup> overall, with a score of 73.4. The breakdown indicates relatively high scores on the dimensions of research participation (2<sup>nd</sup>) and segregation in the pipeline (9<sup>th</sup>), moderate scores on decision-making (12<sup>th</sup>), research sectors (16<sup>th</sup>) and career progression (17<sup>th</sup>), and a lower score on GDRIC (22<sup>nd</sup>).



### Pool of graduate talent

Figure 1: Proportion (%) of women among Doctoral graduates (ISCED 8), 2013 and 2021



Notes: ISCED 8 = International Standard Classification of Education, Doctoral level or equivalent.  
Source: Eurostat – Education Statistics (online data code: educ\_uoe\_grad02); Organisation for Economic Co-operation and Development (OECD) (Graduates by field).

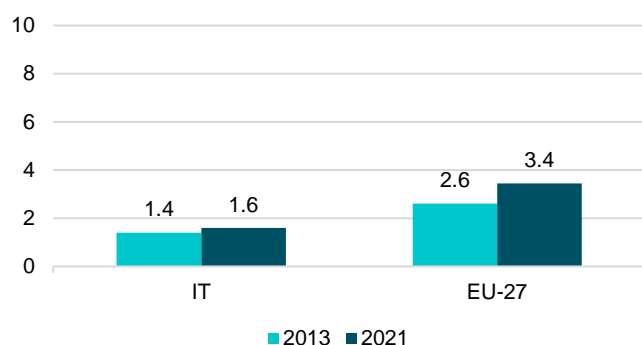
There has been a slight decrease in the proportion of women among Doctoral graduates in Italy, from 52 % in 2013 to 49 % in 2021. Italy ranks 19<sup>th</sup> among the 27 European Union Member States (EU-27) for share of women researchers, just above the EU-27 average.

The Italian National Strategy for Gender Equality 2021-2026 aims to create a clear pathway towards gender equality in education in order to increase the participation of women in science, technology, engineering and mathematics (STEM). It includes provisions to combat cultural barriers and gender stereotypes and to ensure equal gender representation in academia. It recommends compulsory training for schoolteachers on gender mainstreaming issues and gender stereotypes, especially in STEM and traditionally highly segregated subjects (<sup>1</sup>).



## Participation in science and technology occupations

Figure 2: Proportion (%) of women scientists and engineers among total labour force, 2013 and 2021

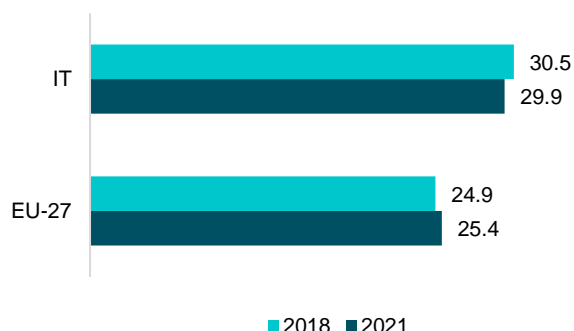


Notes: Break in time series for 2021 IT and EU-27 data. S&E = scientists and engineers.

Source: Eurostat – Human resources in science and technology (online data code: hrst\_st\_ncat) and Eurostat – Labour Force Survey (EU-LFS) – Active population by sex, age and citizenship (online data code: lfsa\_agan).

**Women scientists and engineers (S&Es) consistently account for a low proportion of the total labour force in Italy.** Despite a marginal rise (from 1.4 % in 2013 to 1.6 % in 2021), the proportion of women S&Es among the labour force is significantly lower than the EU-27 average (3.4 % in 2021).

Figure 3: Proportion (%) of women among self-employed S&Es and ICT professionals, 2018 and 2021



Notes: Break in time series for 2021 EU-27 and IT data. ICT = information and communications technology.

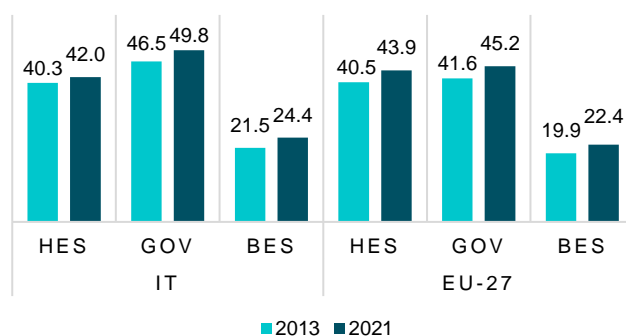
Source: EU-LFS Annual Average Quarterly data.

**A slight decrease is evident in the proportion of self-employed women among S&Es and information and communication technology (ICT) professionals,** from 31 % in 2018 to 30 % in 2021. However, Italy remains above the EU-27 average for both years, and ranks seventh of the Member States for the proportion of self-employed women among S&E and ICT professionals in 2021.



## Labour market participation as researchers

Figure 4: Proportion (%) of women among researchers, by sector of the economy, 2013 and 2021



Notes: HES = higher education sector; GOV = government sector; BES = business enterprise sector. EU-27 data for 2021 are estimated. Data for Women Researchers and Total in HES are flagged as estimated ('e') for IT in 2021.

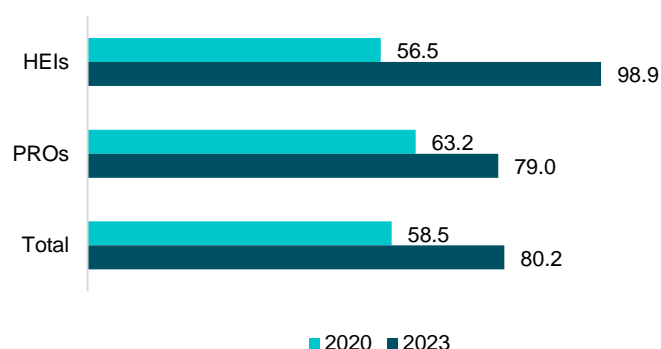
Source: Eurostat – Research and development statistics (online data code: rd\_p\_persocc) and OECD-R&D personnel by sector and function.

**There is an increase in the share of women among researchers in the government sector (GOV) since 2013.** Of the total research personnel in this sector, women researchers make up 50 %, compared to 47 % in 2013. **Women are also slightly more likely to be employed as researchers in the higher education sector (HES) in 2021** (42 %), compared to 2013 (40 %). Women represent approximately one-quarter (24 %) of research personnel in the business enterprise sector (BES) in 2021, indicating a little growth since 2013 (22 %). Italy places above the EU-27 average for GOV and BES but remains below the EU-27 average for HES in 2021.



## Working conditions of researchers

Figure 5: Proportion (%) of research organisations taking actions or measures towards gender equality, by type of organisation, 2020 and 2023



Notes: HEI = higher education institutions; PRO = public research organisations. Source: Web-scraping of HEI and PRO websites using SerpAPI, informed by ETER, Cordis and input from the national Statistical Correspondents of EU Member States and countries associated with Horizon Europe.

Notable efforts have been made to ensure that **more research organisations show their gender equality actions and measures on their websites.** The share of research organisation websites that display information about their actions towards gender equality increased from 59 % in 2020 to 80 % in 2023. Across higher education institutions (HEIs), the proportion of websites publishing

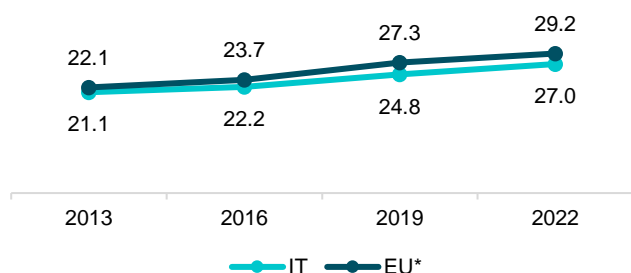
information on gender equality actions nearly doubled, from 57 % in 2020 to 99 % in 2023. The proportion of public research organisations (PROs) publishing information on their gender equality actions on their websites also increased, from 63 % in 2013 to 79 % in 2023.

Measures and actions to advance gender equality in research and innovation (R&I) in Italy are published on the website of the Italian National Research Council, overseen by the Ministry of University and Research. These include the Council's Strategy and Relaunch Plan, 2022-2024 Gender Equality Plan <sup>(ii)</sup>, initiatives and reports, and communication tools related to the promotion of gender equality in R&I <sup>(iii)</sup>. A more general measure to ensure equal opportunities is set out in the 2006 Code of Equal Opportunities. This mandates public administrations to produce three-year positive action plans that outline measures to guarantee equal opportunities <sup>(iv)</sup>.



### Career advancement and participation in decision-making

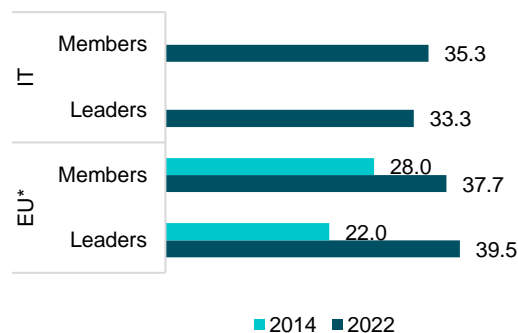
Figure 6: Proportion (%) of women among Grade A positions, 2013, 2016, 2019 and 2022



Notes: IT data for 2019 refer to reference year 2017; \*EU-level data for 2013 refer to the EU-28 (EU-27 plus the United Kingdom (UK)), while EU-level data for 2019 and 2022 refer to the EU-27. The data for IT refer to Grade A academic staff, while the data for the EU refer to Grade A researchers and academic staff. Grade A positions are the single highest grade/post at which research is normally conducted within the institutional or corporate system.  
Source: Women in Science (WiS) database, Directorate-General (DG) Research and Innovation - T1\_questionnaires.

**The proportion of women among Grade A positions have gradually increased over the past decade, despite remaining below the EU-27 average for all four years where data are available. The latest data from 2022 show that women hold 27% of Grade A academic staff positions, compared to 21 % in 2013.**

Figure 7: Proportion (%) of women on boards of research organisations (members and leaders), 2014 and 2022



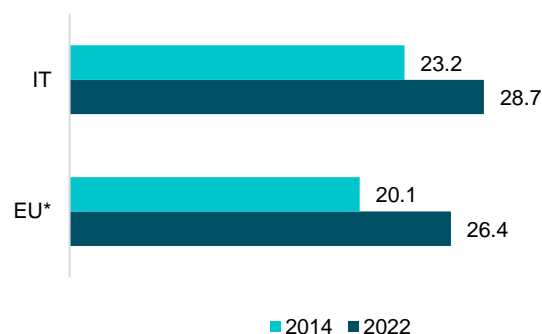
Notes: Data for 2014 for IT are not available. IT 2022 data on leaders are based on small sample. \*EU-level data for 2014 refer to the EU-28, while EU-level data for 2022 refer to the EU-27.

Source: WiS database, DG Research and Innovation - T5 & T6\_questionnaires.

**Gender balance has yet to be achieved among board members or leaders of research institutions in Italy. In 2022, the proportion of women board members or board leaders was lower than the EU-27 average, which stood at 38 % and 40 %, respectively. Women account for 35 % of members and 33 % of leaders on boards, according to the latest data.**

The Italian National Research Council participates in the 'MINDtheGEPs - Modifying Institutions by Developing Gender Equality Plans', a European-funded project to create and implement Gender Equality Plans (GEPs) in research organisations<sup>(v)</sup>. As part of the project, two Train the Trainer workshops are available for the Council's staff, with a focus on gender equality in research organisations. The workshops include the following themes: promoting equality in scientific careers; ensuring gender balance in decision-making processes and governing bodies; integrating a gender dimension in R&I content; and implementing gender equality plans (GEPs) <sup>(vi)</sup>.

Figure 8: Proportion (%) of women among heads of institutions in HES, 2014 and 2022



Notes: \*EU-level data for 2014 refer to the EU-28, while EU-level data for 2022 refer to the EU-27.

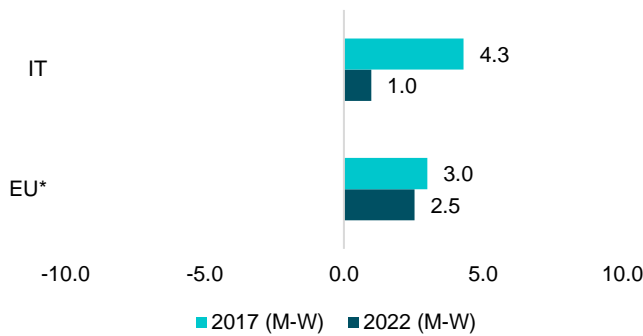
Source: WiS database, DG Research and Innovation - T7\_questionnaires.

**The proportion of women among heads of HEIs in Italy increased between 2014 and 2022. Women represented 23 % of heads of institutions in HES in 2014, growing to 29 % in 2022. This is similar to the EU-27 average for both years.**



## R&I output

Figure 9: Research funding success rate differences (pp) between women and men, 2017 and 2022

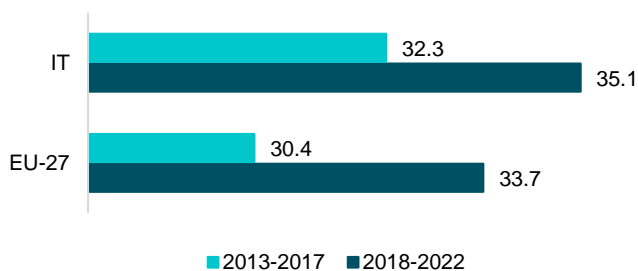


Notes: A positive difference means that men have a higher success rate. IT data for 2022 refer to 2020. \*EU-level data for 2017 refer to the EU-28, while EU-level data for 2022 refer to the EU-27. PP = percentage points.

Source: WiS DG Research and Innovation – T3\_questionnaires

The research funding success rate in Italy was slightly lower for women than for men in 2020. The difference decreased from 4.3 pp in 2017 to 1 pp in 2020. The latest data show Italy performing above the EU-27 average for this indicator.

Figure 10: Average proportion (%) of women among authors on publications in all fields of R&D, 2013-2017 and 2018-2022



Notes: R&D = research and development.  
Source: Scopus.

The share of women authors of publications in all fields of research and development (R&D) was 35 % in 2022. Italy performed slightly above the EU-27 average of 34 %, but further efforts are needed to increase the share of women as authors on publication in R&D. Italy ranks 13<sup>th</sup> among the EU-27 for proportion of women among authors of publications.

Figure 11: Proportion (%) of women among inventors, 2010-2013 and 2018-2021



Source: Computed using European patent applications (kind codes A1 and A2) in PATSTAT.

Women make up 9.4 % of inventors on patent applications in Italy, according to the latest data. On the proportion of women inventorships between 2018 and 2021, Italy performs at the EU-27 average, indicating significant underrepresentation of women across patent inventions in Italy and in the EU-27. Italy ranks 18<sup>th</sup> among the Member States for proportion of women inventors during this period.

Italy shows progress in the participation of women researchers in employment across various sectors of the economy (Figure 4). An increase is evident in the career opportunities for women to hold Grade A positions (Figure 6) and as heads of institutions in the higher education sector (Figure 8). However, women could benefit from further career advancement opportunities and more efforts are needed to increase the share of women in leadership and decision-making positions (Figure 7). Improving prospects in other occupations such as science and engineering also requires more focus (Figure 2). The promotion of gender equality actions on the websites of research organisations has improved (Figure 5), as have the success rates for women applying for research funding (Figure 9). However, further actions are needed to increase research outputs for women researchers, particularly as authors of publications (Figure 10) and patent inventors (Figure 11).

## About She Figures 2024

Gender equality – in all areas of life, and specifically within R&I – is a priority for the EU. She Figures is one of the flagship publications of DG Research and Innovation. Produced every three years, it presents comparable statistics on the state of gender equality in R&I across Europe. The publication provides data for more than 100 indicators to support the European Commission's policy initiatives promoting gender equality in R&I and the ERA. The chapters follow the 'chronological journey' of women and men, from graduating from Doctoral education to participation in the labour market and in decision-making roles. The publication also considers women's and men's relative working conditions and R&I outputs.

## Gender Equality in Research and Innovation

[Explore She Figures 2024 interactive report](#) and [Gender equality in research and innovation](#)

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#GenderEquality

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<sup>(i)</sup> Department for Equal Opportunities, National Strategy for Gender Equality 2021-2026, 2021, [https://www.pariopportunita.gov.it/media/2051/strategia\\_parita\\_genere.pdf](https://www.pariopportunita.gov.it/media/2051/strategia_parita_genere.pdf)

<sup>(ii)</sup> National Research Council, Gender Equality Plan 2022-2024, 2022, [https://www.cnr.it/sites/default/files/public/media/attivita/gender-equality/GEP\\_CNR\\_FINAL.pdf](https://www.cnr.it/sites/default/files/public/media/attivita/gender-equality/GEP_CNR_FINAL.pdf)

<sup>(iii)</sup> National Research Council, CNR for gender equality, n.d., <https://www.cnr.it/it/cnr-per-la-parita-di-genere>

<sup>(iv)</sup> Government of Italy (2006) Code of Equal Opportunities. Available at: <https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legislativo:2006-04-11:198>

<sup>(v)</sup> Mind the GEPs, Gender Equality Research, n.d., <https://www.mindthegeps.eu/>

<sup>(vi)</sup> National Research Council, 'Train the Trainer': becoming trainers on the subject of gender equality, 2022, <https://www.cnr.it/it/news/10963/train-the-trainers-diventare-formatori-e-formatrici-sul-tema-della-parita-di-genere>