

SHE FIGURES 2024

The road to gender equality in R&I

Germany

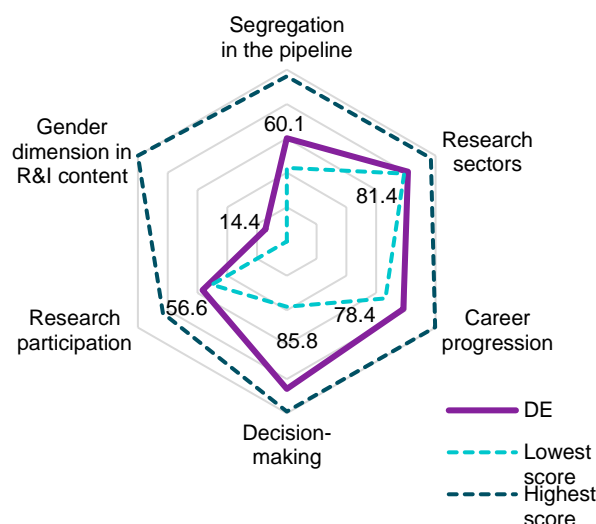
The **She Figures Index** is a tool to measure the extent to which European Union (EU) Member States have achieved gender equality in the European Research Area (ERA). It draws on She Figures indicators across six dimensions: segregation in the pipeline, research sectors, career progression, decision-making, 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, Germany ranks 25th overall, with a score of 62.8. The breakdown indicates a relatively moderate score on the dimension of decision-making (14th), and lower scores on GDRIC (23rd), research participation (24th), segregation in the pipeline (24th), research sectors (25th) and career progression (25th).

Germany
62.8

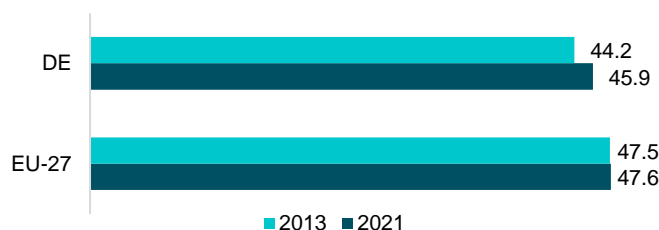
Lowest
score
60.1

Highest
score
87.6



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.

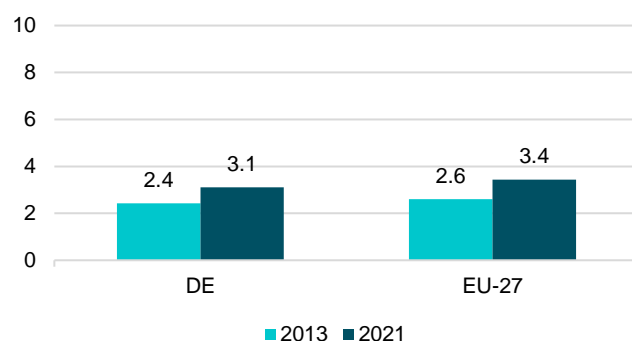
Source: Eurostat – Education Statistics (online data code: educ_uoe_grad02); Organisation for Economic Co-operation and Development (OECD) (Graduates by field).

She Figures 2024 shows that **Germany has achieved gender balance in the proportion of women among Doctoral graduates**. Women account for almost half (46 %) of Doctoral graduates, according to 2021 data, a slight increase compared to 2013 (44 %). Germany performs slightly below the EU average (48%) and ranks 21st for women Doctoral graduates among the 27 European Union Member States (EU-27).



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 DE and EU-27 data. S&Es = scientists and engineers.

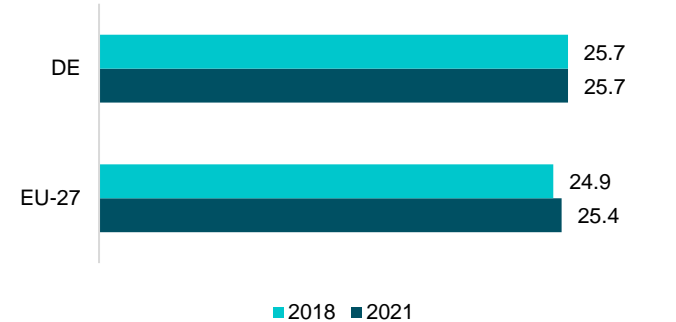
Source: Eurostat – Human resources in science and technology (online data code: hrst_st_ncat) and Eurostat – Labour Force Survey (EU-LFS) – Active population by sex, age, and citizenship (online data code: lfsa_agan).

In Germany, **women scientists and engineers (S&Es) comprise 3.1 % of the labour force**, based on 2021 data, slightly lower than the EU-27 average.

To support women scientists, the Ministry of Science, Research, and the Arts in the region of Baden-Württemberg launched ‘Scientifica’ (i). This online portal provides guidance on career opportunities for women in the sciences, especially science, technology, engineering and mathematics (STEM) fields, including funding, networks, and professional associations.

Since 2001, the *Kompetenzzentrum Technik-Diversity-Chancengleichheit* organises a ‘Girl’s Day’ for students in Year 5 and above (ii). This initiative supports girls to learn about apprenticeships and courses in information technology (IT), natural sciences and technology, as well as networking with women in leadership positions in business and politics.

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



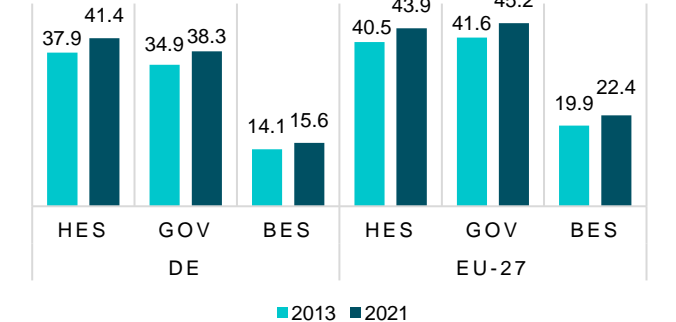
Notes: Break in time series for 2021 DE and EU-27 data. ICT = information and communications technology.
Source: EU-LFS Annual Average Quarterly data.

Women represent 26 % of self-employed S&E and information and communications technology (ICT) professionals, in both 2018 and 2021. Germany performs similarly to the EU-27 average for this indicator in both reference years. It ranks ninth for the proportion of women among self-employed professionals in these fields (out of 22 Member States).



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

She Figures 2024 shows that **women comprise 29 % of researchers in Germany**. Women represent approximately 40 % of researchers in both the higher education sector (HES) and the government sector (GOV), but just 16 % in the business enterprise sector (BES). Despite improved

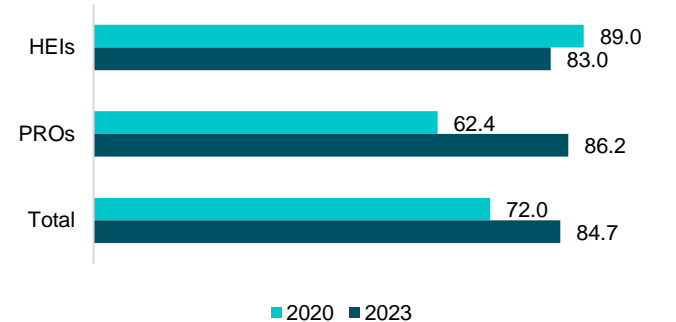
representation in all three sectors between 2013 and 2021, Germany remains below the EU-27 average for this indicator.

Since 2016, the federal and state governments have legally committed to supporting gender equality in their jointly funded research institutions and initiatives (iii). The agreement also commits them to working towards the elimination of gender-based discrimination in these institutions.



Working conditions of researchers

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



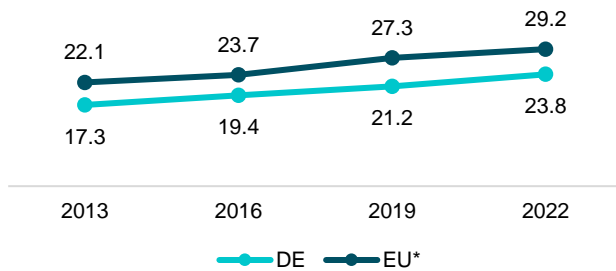
Notes: HEI = higher education institutions; PRO = public research organisations.
Source: Web-scraping of HEI and PRO websites using SerpAPI, informed by ETER, Cordis and input from the national Statistical Correspondents of EU Member States and countries associated with Horizon Europe.

Most research organisations (85 %) show information about their actions towards gender equality on their websites. Between 2020 and 2023, the proportion of research organisations carrying out these measures increased from 72 % to 85 %. The share of public research organisations (PROs) publicly displaying this information increased from 63 % to 86 % during that period, while the share of higher education institutions (HEIs) doing so decreased from 89 % to 83 %.



Career advancement and participation in decision-making

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



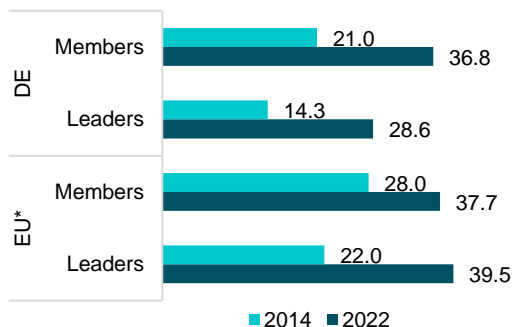
Notes: *EU-level data for 2013 and 2016 refer to the EU-28 (EU-27 plus the United Kingdom (UK)), while EU-level data for 2019 and 2022 refer to the EU-27. The 2013 and 2016 data for DE refer to Grade A academic staff, while the 2019 and 2022 data for DE refer to Grade A researchers. Data for the EU refer 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.

She Figures 2024 shows that **women hold approximately one-quarter (24 %) of Grade A positions**. While that proportion has improved since 2013 (17 %), it remains low and below the EU-27 average value across 2013-2022.

German federal and state governments have launched the Pact for Research and Innovation (2011-2015 and 2019-2030), a research funding initiative designed to provide publicly funded non-university research institutions security through continuous budget increases ^(iv). The Pact establishes targets to advance gender equality in these institutions and to increase women's opportunities for career advancement and participation in leadership.

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

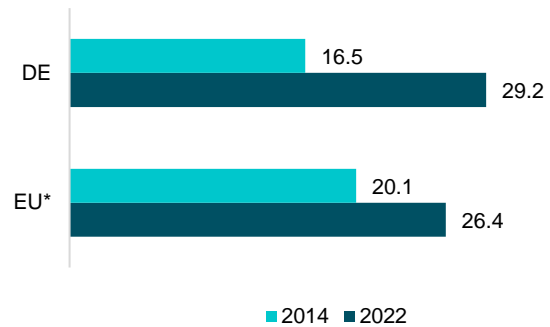


Notes: *EU-level data for 2014 refer to the EU-28, while EU-level data for 2022 refer to the EU-27.

Source: WiS database, DG Research and Innovation - T5 & T6_questionnaires.

Over the past decade, Germany has made notable progress on women's access to leadership and decision-making positions, with women representing **37 % of board members of research institutions** (2022 data) compared to 21% in 2014. This value is slightly below the EU average (38 %) for the proportion of women members on boards. However, while the proportion of women board leaders has doubled (from 14 % to 29 %), Germany has still not reached the EU average for its share of women board leaders.

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.

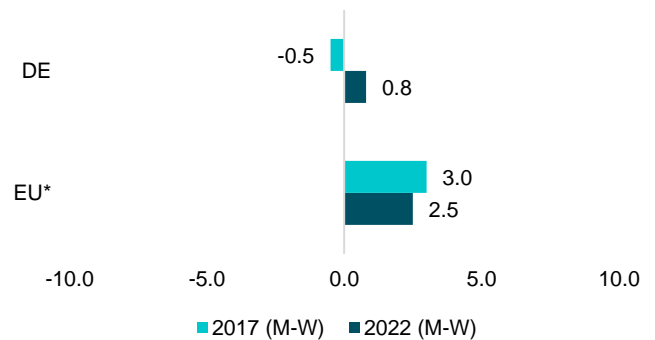
Source: WiS database, DG Research and Innovation - T7_questionnaires.

Between 2014 and 2022, **the proportion of women heads of institutions in HES increased from 17 % to 29 %**. The latest available data places Germany above the EU-27 average of 26 % in 2022.



R&I output

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

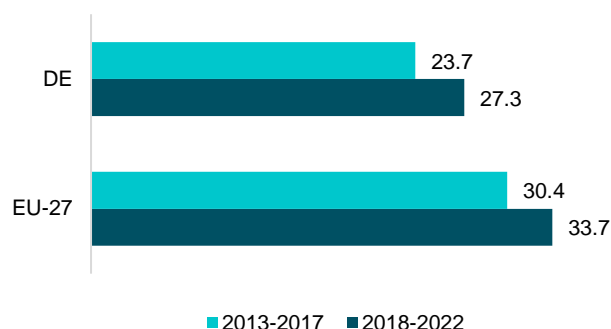


Notes: A positive difference means that men have a higher success rate. *EU-level data for 2017 refer to the EU-28, while EU-level data for 2022 refer to the EU-27. PP = percentage points.

Source: WiS database, DG Research and Innovation - T3_questionnaires.

There is little difference in the research funding success rates between women and men. Between 2017 and 2022, the difference in the research funding success rate between women and men increased from -0.5 percentage points (pp) to 0.8 pp, but the difference between women and men in Germany continues to be small, and smaller than the EU-27 average.

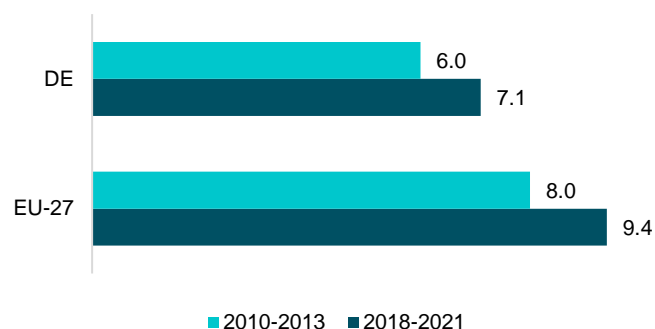
Figure 10: Average proportion (%) of women among authors on publications in all fields of R&D, 2013-2017 and 2018-2022



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

Between 2018 and 2022, the average proportion of women authors on publications in all research and development (R&D) fields was 27 %. This is lower than the EU-27 average of 34 %. Germany places 26th among the EU-27 for 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 submit just 7.1 % of patent applications in Germany, based on the latest data from 2018-2021. This is even lower than the EU-27 average of only 9.4 %. Germany ranks 24th among the EU-27 for women inventors during this period.

Overall, She Figures 2024 finds that Germany has achieved gender balance in the proportion of women among Doctoral graduates (Figure 1) and researchers in the higher education sector (HES) (Figure 4). Most research organisations display their actions towards gender equality on their websites (Figure 5). However, further efforts are needed to increase the proportion of women S&Es in the total labour force (Figure 2) and in researchers in the business enterprise sector (BES) (Figure 4), as well as women holding Grade A positions (Figure 6) and submitting patent applications (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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(i) Ministry of Science, Research, and the Arts in the region of Baden-Württemberg, Scientifica, n.d., <https://scientifica.de/en/ueber-uns/das-webportal/>

(ii) Kompetenzzentrum Technik-Diversity-Chancengleichheit, Girl's day, n.d., <https://www.girls-day.de/#>

(iii) Federal and state governments, Implementation agreement to the GWK Agreement on equality between women and men in joint research funding, 2016, https://www.gwk-bonn.de/fileadmin/Redaktion/Dokumente/Papers/AV_Glei.pdf

(iv) Federal and state governments, Pact for Research and Innovation (2011-2015 and 2019-2030), 2023, <https://www.bmbf.de/bmbf/de/forschung/das-wissenschaftssystem/pakt-fuer-forschung-und-innovation/pakt-fuer-forschung-und-innovation.html#searchFacets>