
GENDER-NET Plus

Gender equality in research funding

A study of 11 European countries, Israel, and Canada

Deliverable 6.3



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Executive summary

The GENDER-NET Plus collaboration is an ERA-NET Co-Fund in Horizon 2020, consisting of 16 Research Funding Organisations (RFOs) from 13 countries: Austria, Belgium, Canada, Cyprus, Czech Republic, Estonia, France, Ireland, Israel, Italy, Norway, Spain, and Sweden.

This report examines the gender equality situation in European research funding, with the Canadian situation as a perspective. In-depth studies of the 13 GENDER-NET Plus countries are complemented by the analysis of aggregated data from the Gender Gap Index, and, for the European countries, data from Eurostat and She Figures. The European Commission report *The Gender Challenge in Research Funding* from 2009 serves as a base line for the analysis. The first section of the present report is a review of the literature on gender in research funding published since 2009.

The in-depth studies in this report show notable differences between the funding landscapes of the 13 studied countries. There are differences in the way funding is organised, in how funding is executed by the RFOs, and in the specific funding instruments used. Some countries have separate RFOs for certain sectors or fields of research. Notably, for Belgium there is also a regional divide.

Gender equality has improved in many ways in the international and European Higher Education and Research & Innovation landscapes in the 12 years since 2009. Accordingly, gender equality is higher on the agenda today for the RFOs. The in-depth studies report a number of gender equality measures and initiatives undertaken by RFOs in the GENDER-NET Plus countries.

The in-depth studies show also that most of the RFOs monitor the gender balance of the selection committees and the evaluation panels. Moreover, most of the RFOs monitor the success rates of women and men, and publish the results. Some RFOs monitor also the average amount of funding for women and men. However, less than half of the RFOs analyse the difference in application behaviour; i.e., compares the share of women among applicants with the share of women in the pool of potential applicants. Naturally, there are also differences between RFOs in the choice of data monitored and in how the information is used.

Peer review with external experts is the common way of evaluating research applications. The representation of women among gate-keepers of research funding – decision-making bodies, assessment panels and reviewers – has improved since 2009. Unfortunately, in many cases, the improvement is from very low levels, and gender balance is still far from achieved. Among the 11 European countries studied in this report, 4 countries had less than 20 percent women in research funding boards in 2017, according to She Figures 2018. However, the in-depth studies in the present report show diversity in the gender balance between different boards and panels within the countries.

The gender balance in the pool of applicants – the HEI researchers with a doctorate – is a fundamental factor for gender equality in research funding. In the European countries studied in this report, the share of women among HEI researchers was at least 40 percent in all scientific fields, except in Natural sciences and Engineering.

However, the study shows that women HEI researchers are less likely to apply for funding than men are. In 2/3 of the cases studied (country; research field), women HEI researchers applied for funding less often than men did, in 1/6 of the cases women were equally likely to apply, and in 1/6 of the cases women applied for funding more often than men did. In the “median case”, men were 1.36 times more

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likely to apply for funding than women were. Under the assumption that GENDER-NET Plus countries are more than average interested in gender equality work, the median difference in application behaviour may be at least as big if all European countries were included.

In the countries studied, the gender difference in success rates varied with research field and country. Some countries and fields had bigger differences than other did. These differences are assumed to be monitored and analysed by the respective RFOs.

However, no clear systematic success rate trend for all countries and fields emerged. There were a few more of the cases studied (country; research field) where men had higher success rates, than cases studied where women did. Nevertheless, in the “median case”, the success rates were about equal. However, under the assumption that the GENDER-NET Plus countries are more than average interested in gender equality work, there may appear systematic differences in favour of men if all European countries were studied.

The final section of the report consists of a number of recommendations for improving gender equality in research funding, sorted under the following six headings.

1. Government instructions
2. RFO Gender Equality Plan
3. Gender balance in decision-making bodies and evaluation panels
4. Monitor gender data and publish the results
5. Increase funding applications from women researchers
6. Generally improve transparency in research funding

Introduction

Gender equality has been a priority for the European Union for a long time. The first four sentences in the document *A Union of Equality: Gender Equality Strategy 2020-2025* are:

“The promotion of equality between women and men is a task for the Union, in all its activities, required by the Treaties. Gender equality is a core value of the EU, a fundamental right and key principle of the European Pillar of Social Rights. It is a reflection of who we are. It is also an essential condition for an innovative, competitive and thriving European economy.”

A part of this task is to continue and strengthen the work for gender equality in all parts of the European Research Area, ERA. One of many gender equality projects, supported by the EU Framework Programmes, is the GENDER-NET Plus collaboration, an ERA-NET Co-Fund in Horizon 2020. A main objective of GENDER-NET Plus is to contribute to gender equality in European research funding.

The GENDER-NET Plus collaboration

GENDER-NET Plus is an ERA-NET Cofund under Horizon 2020. It consists of sixteen research funders from 13 countries (see <http://gender-net-plus.eu/>). The origin of this Cofund initiative is the former ERA-NET GENDER-NET, which was finished in 2016 and involved most of the current partners in GENDER-NET Plus. GENDER-NET Plus contributes to facing persistent challenges in achieving gender equality and gender mainstreaming in research and innovation through the promotion of a joint transnational research call, and through the development of additional activities to help aligning political agendas among Research Funding Organizations regarding gender equality.

Objective of the report

The main objective of this report is to study the situation on gender equality in research funding in Europe, and to describe the Canadian situation to give a perspective. This is done by following up the findings from the 2009 report *The Gender Challenge in Research Funding*, which are summarized in the next sub-section¹. Aggregated data for the European countries, data from the *She Figures* and Eurostat, including Canada when using the Gender Gap Index were analysed. In-depth studies of the 13 countries, represented in the GENDER-NET Plus consortium, used information from the GENDER-NET Plus partners submitted in the template, which is included in annex 2. It should be noted that the focus of the report is on gender equality², while gender in research contents is the subject of the report GENDER-NET Plus Deliverable 6.2, see www.gender-net-plus.eu.

¹ NB: within the time limits of the present study, it was not possible to follow up every aspect of the 2009 report.

² In this report, the term “gender”, e.g., in “gender equality”, “number of researchers of each gender”, “gender balance in committees”, refers to the (binary) biological sexes, except when explicitly stated, e.g., “gender in research contents”, “gender research”,

Gender equality in research funding – the 2009 situation

The main conclusions from the 2009³ report *The Gender Challenge in Research Funding* is summarized in this section. The report concluded that the European countries showed a large variation in terms of national and organisational policies related to gender equality in research funding, linked to more general societal gender contexts rather than to the proportion of women in research. The countries had different approaches towards gender equality activities ranging from long term to very recent approaches and from advanced policies and measures to no activities at all.

The key national funding organisations also had a variety of approaches to gender equality issues. Several national research councils had a very proactive role, with more or less permanent infrastructures to monitor and promote gender equality in research funding, gender equality action plans with targets for gender balanced representation, specific measures to promote women in research, and were also conducting in-depth studies and monitoring activities from a gender perspective. Specific measures included encouraging women to apply in the funding calls, targets for the proportion of women funded, positive action in case of candidates with equal merits, career-phase targeted measures to support women researchers, measures promoting work-life balance, and measures promoting institutional reforms addressing gender inequality.

The 2009 report found that the transparency of the funding systems needed improvement in many funding organisations, even though there were a number of examples of good practices in most countries covered. Decision-making and other forms of gatekeeping of research funding, such as evaluation and peer review, continue to be dominated by men.

Peer review was used practically everywhere in evaluating applications, but how the peers were recruited often remained opaque. International evaluators were increasingly called upon. Evaluation processes and evaluation and funding criteria were frequently explained on the websites of the funding organisations. Evaluation criteria consisted of scientific quality criteria for the researchers and the projects, pertinence criteria concerning the funding scheme and often national and social relevance criteria. Gender was only rarely mentioned.

Only in a handful of countries gender monitoring of major funding organisations was regularly conducted and the monitoring results published. Data availability by gender is the first cornerstone of gender monitoring. Most countries did not have available, systematic time series by discipline and funding instrument, which are necessary for analyses of long-term patterns.

Most funding organisations did not monitor the pool of potential applicants by gender. However, the proportion of women applicants was lower than the proportion of potential applicants in practically all funding systems and most disciplines, where this was studied. In many countries, very strong gender imbalances were noted among the awardees of highly prestigious grants, positions or prizes.

³ The 2009 report describes the situation 2007, and earlier, but for simplicity “the 2009 situation” is used here as an abbreviation for “the situation described in the 2009 report”.

Methodology

In the 2009 report, there was a discussion about the research systems in Europe in general, and from a gender equality perspective in particular. The 2009 report discussion gives a starting point, and the present report discusses what measures have been taken in the research funding system and organizations since 2009.

In the aggregated comparisons and analyses all the countries from the 2009 report are included, but when looking at the more specific cases, only the 13 countries represented in GENDER-NET Plus consortium are included.

The basis for the specific cases is a template (see annex 2) sent to the members of the GENDER-NET Plus consortium, asking for information about the main funding organizations in the respective country, structured according to the headlines below and to the proposed structure in the roadmap for GENDER-Net Plus.

- *Grant awarding procedures or research funding systems*
- *Transparency and opaqueness in procedures and systems*
- *Barriers to accountability of procedures*
- *Differences between disciplines*
- *Selection of committees*
- *Success rates by sex*

The information from the country reports is used as material for a descriptive analysis, aimed at giving an overview of the situation and the development since 2009. The collected information is presented in detail in the separate document *Gender Equality in Research Funding - Country reports*, where the template questions are rearranged into headlines for each area.

The 13 countries represented in GENDER-NET Plus, and covered in this study, are: Austria, Belgium, Canada, Cyprus, Czech Republic, Estonia, France, Ireland, Israel, Italy, Norway, Spain, and Sweden. It should be noted that this differs from the 2009 report, which covered 33 European countries.

Earlier research on Gender and Research funding

The report *The gender challenge in research funding*⁴ from 2009, included a review of the literature on gender and research funding. The review showed results from the earlier studies in the field that indicated mostly only low levels of gender bias in the distribution of research grants and in the evaluations of applications, with some exceptions, notably the Vennerås & Wold study from 1997⁵.

The studies showing only low levels of gender imbalance began to be questioned in some of the later studies included in the 2009 report. One meta-analysis, showed that men had globally greater odds of being funded than women by about 7 percent.⁶

The gender difference was more apparent in the application behaviour, where several studies pointed out the under-representation of women among applicants. Instead of studying the outcome in form of distributions among granted projects, a number of the referred studies focused on the differences in application behaviour between men and women. Some important findings pointed out factors as employment status, with more women in lower academic positions, in part-time positions, and taking career-breaks, thus becoming less likely to be eligible to submit applications. Some studies also showed that women applied for smaller amounts than men, which may in part explain differences in obtained funding.

Following the report from 2009, the present report gives a brief overview of literature from 2009 until 2020, focusing on gender perspectives of the research funding system. The overview, which does not claim to be complete, includes research on gender in academia, such as career opportunities, since it has an influence of the possibilities to apply for funding, and chances to get funding. The research also has some important policy implications, and reports over the subject often give recommendations directed to governments or agencies to act on gender issues, which are also touched upon in this overview.

Studies on gender and research funding published after 2009

A report by Bondestam and Grip from 2015⁷ is a review of research in the evaluation and selection processes in research funding organisations, and how gender is constructed and expressed in these processes. The report suggests that the research in the field can be structured under three main themes: 1) Outcomes after evaluations, 2) Peer review processes, and 3) Recommendations from the research to decision bodies and evaluation processes in research funding organisations.

The report also finds that publications in the research field can be divided into three main categories: 1) peer reviewed publications, 2) reports published by national funding organisations, the EU and other international research organisations; 3) the remainder is published as peer reviewed conference presentations and governmental evaluations and reports written by researchers.

One of the main findings of the overview, concerning the outcome of the evaluation and selection processes, is that 43 of the 65 reviewed publications (66 percent) show that the granting process

⁴ This report was a result of the work of a EU expert group set up by the European Commission, and was carried out within the first GENDER-NET initiative.

⁵ Vennerås, C. and Wold, A., 1997, pages 341-343.

⁶ Bornmann, Mutz and Daniel, 2007, pages 226-238.

⁷ Bondestam and Grip, 2015.

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favours men while only one out of 65 (2 percent) shows an outcome in favour of women. The remainder, 21 (32 percent), do not show any noteworthy differences between the outcomes between women and men.⁸

Commissioned by the Swedish Energy Agency, the Swedish Secretariat for Gender Research at the University of Gothenburg has produced a report that reviews research on energy issues in relation to gender equality.⁹ The report provides a broad picture, and one of the aspects described is research funding. In the energy area, the Swedish Energy Agency is an important player and the report describes how the funding of research in the energy area follows the patterns that exists in the labour market and education in the energy area, which are mainly dominated by men.

Within the study *Meta-analysis of gender and science research*, a project of the 7th RTD Framework programme of the European Union, a report was produced in 2010 (Meulders *et al.*) about the gender pay gap in science and gender differences in applying for and obtaining research funding.¹⁰ The report stresses the diversity of national research landscapes in Europe. This variation concerns many aspects: the overall size of the research sector; the relative research intensity measured by R&D investment; the proportion of researchers in the total labour force; the relative size of government budget allocations to R&D; the relative size of different research sectors; the degree of centralisation and governance of funding systems; the organisation and funding of research careers (e.g. tenure); and the role and proportion of competitive research funding in research careers. The funding situation in a country is to a great extent linked to research policies at the national, sub-national and/or European levels.

Overall, the studies show that women apply at a lower rate than men do, that success rates are not systematically lower for women than for men, and that the gender gap in applications and access for funding varies across disciplines. In general, it is harder for women [than for men] to obtain high prestige awards. Access to a long-term position is also more difficult for women than for men.

A study made by the Swedish Agency for Public Management (Statskontoret) analyses how higher education institutions in Sweden distribute their direct, basic research funding from a gender equality perspective. The study indicates that women have access to the universities' direct, basic research funding to a lesser extent than men at the surveyed higher education institutions. This applies both in absolute terms and in relation to the proportion of women and men in the research staff. The study shows several explanations for the fact that research funding benefits women to a lesser extent than men. The composition of the research staff is one explanation. Professors normally receive more research funding and a majority of the professors are men. There are also differences between how much research funding is available in different fields of science, which in part explains the outcome at university level.¹¹

In a study on gender differences at the National Science Foundation (NSF), it was found that that women are as likely to be funded as men, but the percentage of women submitting proposals was less than expected in every field but engineering. Women are as likely as men to be employed at the most research active institutions, but women are less likely than men to self-report research as their primary

⁸ Bondestam and Grip, 2015, page 25.

⁹ Ann-Sofi Kall, 2019.

¹⁰ Danièle Meulders *et al.*, 2010.

¹¹ Statskontoret, 2014.

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work activity in almost all fields but engineering. This work imbalance ultimately limits the plurality of ideas in basic research in science and engineering.¹²

Marina Ranga, Namrata Gupta and Henry Etzkowitz presented in 2012 a report (Marina Ranga *et al*, 2012) in which they systematically explored specific mechanisms that may generate a gender bias in academic funding. Their analysis of literature evidence on gender disparities in research funding suggests that the phenomenon is a consequence of the long-standing and persisting gender divide in science. This is further combined with (and complicated by) social and psychological factors that determine a different propensity of men and women scientists to apply for funding, as well as the organisational culture of funding agencies. While the first of these three levels of analysis – the gender divide in science – is extensively addressed in the literature, the other two are much less substantive, which makes the integration of findings across levels a challenging exercise. Their conclusion is that the two most important steps that could be taken to reduce gender disparity in re-search funding are: 1) Increase women’s presence in the upper levels of the academic hierarchy. When women are equally present at all levels of academic science, they will also have the leverage to resolve remaining cultural and social issues emanating from the historic ‘male model’ of science. 2) Introduce an additional element to the research funding process providing funding to young researchers and to junior academics to improve their chances of success. This measure is thought to have an especially positive effect for women, mitigating the bias towards male researchers. This would provide a boost to younger women, as well as younger men, enhancing their chances of staying in academia and competing for peer-reviewed funds.¹³

Career opportunities and Research Funding

One of the main aspects that Bondestam and Grip find in the 22 publications showing no difference based on sex (21) or a difference in favour of women (1) in the outcome is that in these publications the academic position is seen as a main explanatory factor for the outcome, not sex. In 17 publications of these 22, the explanatory impact of sex disappears when academic position is introduced as an explanatory variable.¹⁴ The authors of the overview comment on this fact as a lack of understanding how the gendered career system in academia is working in favour of men, resulting in a gender bias in the academic position variable.¹⁵

When it comes to career opportunities and its relevance for gender in research funding it has been found that women to a lesser extent reach the professor positions. Women also publish to a lesser extent, and to a lesser extent get the positions where they can be eligible for applications or have the right merits for being selected and finally granted. They also seem to choose to leave the academic career for other reasons than men do, and somewhat more often, the phenomenon referred to as the “leaky pipe-line”. This is also important when discussing the research funding organisations and the academia as an interlinked system. Excellence is seen as an important funding criterion by most public funding organisations, and at the same time it is something that is fostered within the academic system, and highly dependent on the implicit structures of how gender is constructed and made within this system.

¹² Rissler, Hale, Joffe and Caruso, 2020, Pages 814–820.

¹³ Marina Ranga, Namrata Gupta and Henry Etzkowitz, 2012.

¹⁴ Bondestam and Grip, 2015, p26-28.

¹⁵ *Ibid.*, p27.

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Another issue related to career opportunities is the pay gap in science. The report by Meulder *et al*¹⁶ shows that there is a persistent gender pay gap in all countries in the labour market in general and also in scientific and research occupations. The report states that there is no reliable evidence that the pay gap is closing. The increase in the level of women's qualifications observed over the last decades has not led to a proportional reduction of the pay gap. The report argue that gender pay gap among scientists can be seen in part as a consequence of gender segregation. Vertical segregation has a direct impact on the gender pay gap because of the fact that women are underrepresented in leadership positions. Horizontal segregation also has an impact on the gender pay gap since women are underrepresented in the most prestigious and the most highly-paid occupations and sectors. However, differences in the working time arrangements of men and women, differences in terms of extra pay and bonuses, problems with the conciliation of work and private life, and (direct or indirect) discrimination also lead to pay differences.

Felizitas Sagebiel and Susana Vázquez-Cupeiro present in the report *Stereotypes and identity* a meta-analysis of gender and science research a study about gender and science research. Among the topics studied are the barriers for women to reach top scientific positions ("glass ceiling" or "sticky floor"), mentoring/tutoring initiatives, etc. The study indicates that within-gender differences are greater than between-gender differences. Gender gaps do not seem to be wide enough to explain the differences between males and females in science education and SET trajectories. The report also discusses the underlying causes and effects of these aspects, including work-life balance issues, pay gap, mobility-related obstacles, dual careers, evidence of discrimination, working culture, stereotypes, gender bias in research contents, and point at social determinants of performance and decisions about gender segregated careers as well as to the methodologies with which research results are produced. The report claims that even though cognitive abilities are a prerequisite for a successful career in any field, they are not the whole story and the report states that "critical filter" hypothesis together with the "pipeline model" can be rejected. The study was carried out between 2008 and 2010.¹⁷

Marc J. Lerchenmueller and Olav Sorenson¹⁸ in 2018 examined the extent to which and why early career transitions have led to women being underrepresented among faculty in the life sciences. They had followed the careers of 6 336 scientists from the post-doctoral fellowship stage to becoming a principal investigator (PI), which they point out as a critical transition in the academic life sciences. They found that a large portion of the overall gender gap in the life sciences emerges at this transition. Women become PIs at a 20 percent lower rate than men do. Differences in "productivity" (publication records) can explain about 60 percent of this differential. The remaining portion appears to stem from gender differences in the returns to similar publication records, with women receiving less credit for their citations.¹⁹

Policies and implications for research funding

In an article from 2010²⁰, Liisa Husu and Paula Koskinen presents an analysis made in the EU-funded 13-country study PROMETEA (2005-2007). The study explores gender patterns in technological and engineering research careers. Drawing from that study, the article analyses the gendering of key arenas

¹⁶ Meulder et al. 2010.

¹⁷ Felizitas Sagebiel and Susana Vázquez-Cupeiro, 2010.

¹⁸ Marc J. Lerchenmueller and Olav Sorenson, 2018, pages 1007–1017.

¹⁹ Marc J. Lerchenmueller and Olav Sorenson, 2018, 1007–1017.

²⁰ Liisa Husu and Paula Koskinen, 2010.

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of excellence in technological and engineering research from a comparative international perspective, with a focus on research funding, publishing, scientific prizes and awards, and patents. A central challenge for gender-sensitive science and research policy is how to combine the promotion of scientific excellence with the promotion of gender equality.

The conclusion of their analysis is the recommendation to increase transparency and accountability of all stakeholder organizations or areas of excellence from a gender perspective by significantly improving their gender monitoring. That should be a concern for research funding bodies, journals and publishers, conference organizers, award and prize committees and patent authorities. Gender data on key actors in these stakeholder organizations should not only be collected, monitored and available at request, but also made pro-actively and publicly accessible on a regular basis, for example, using websites of these organizations where other information of similar kind is regularly made accessible.

The article also results in a policy recommendation concerning the composition of different gate-keeper bodies of technology and engineering stakeholder organizations. Husu and Koskinen states that all-male committees defining and deciding on excellence should not be accepted as legitimate, because even if the field of engineering and technology is heavily male-dominated, there are women involved at all levels and most areas. As a solution to increase the proportion of women among gate-keepers they suggest to broadening the search outside the professoriate to the industry, business and public sector, where there are plenty of competent engineering and technology research experts, both women and men.

On May 30-31, 2017, a Workshop on *Implicit Gender Biases during Evaluations: How to Raise Awareness and Change Attitudes?* was organized by the Gender Sector of the European Commission's Directorate-General Research and Innovation. The workshop aimed at gaining a deeper understanding of what implicit/unconscious gender biases are, how they intervene in evaluative processes, and how they can be addressed within Horizon 2020. The workshop gathered participants from the Horizon 2020 Advisory Group on Gender, Horizon 2020 funded Gender Equality Plans projects, the European Research Area Stakeholder Platform and national funding agencies, as well as from EC services engaged in Horizon 2020 evaluations. The material and practices collected during the workshop was summarized in a workshop report²¹, contributing to the adaptation of the Horizon 2020 evaluation processes aimed at mitigating the impact of implicit gender biases.

The Swedish Research Council has seven times since 2008 undertaken gender equality observations in the review panels in order to investigate whether there was further room for improvement in terms of procedures, instructions and other aspects that promote gender-neutral assessment of grant applications. The studies end up in recommendations about how to improve Swedish Research Council's process for allocating research grants. In the latest study²² an interesting change was noted compared to previous gender equality observations: Before, panel members sometimes brought up anecdotal information about the applicants during the assessment of grant applications. These could be on subjects such as an applicant's private relationships, rumours about a workplace, or speculations about an application. The gender equality observers now noted that all such discussions were always interrupted by the Swedish Research Council personnel and/or the chair of the review panel. The issue

²¹Artiles Viera, Marta, Maija Locane, Anne Pépin and Viviane Willis-Mazzichi, 2017.

²²Swedish Research Council, 2020.

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of whether the researcher is independent had previously been raised more often in discussions about women applicants. Now, no such gender difference was noted.

This can be compared to a study made by Swedish Agency for Economic and Regional Growth, which aimed to highlight the structures in the public system for supporting business innovation and shed light on what happens behind closed doors when the potential of applicants is assessed and the funding decision are made. The study found that stereotypical perceptions affect assessments and decisions and influence access to funding. Women applicants were generally regarded as more cautious, needing less funding, and working in the “wrong” industries, less “financeable” with less growth potential. Men applicants were regarded as willing to take on new ventures, needing more funding, and working in the “right” industries with more growth potential. When the 213 enterprises were compared, no differences could be found in terms of success or failures of women’s and men’s enterprises. The report highlights the need for a norm-critical approach when public financiers assess what is fundable and likely to contribute to economic growth.²³

The topic of "women in research and innovation" has been on the agenda for decades and numerous measures have been implemented at both national and international level to improve the equality of women in the research and innovation systems. A paper from the H2020 funded project EFFORTI raises the question which measures are most effective, and under which conditions. Not much research has been carried out into the effects of better representation of women in terms of (responsible) research and innovation results. The paper presents an evaluation approach which uses case studies to show how the implementation of the evaluation model in practice takes place. The results of the case studies show how national gender equality measures addressing Higher Education Institutions as well as Research Performing Organizations not only do achieve a better representation of women within these organizations but do also contribute to scientific excellence.²⁴

A report from 2013 based on a survey among Members of the Helsinki Group on Gender in Research and Innovation, points out that a significant change has taken place in the previous five years before 2013 with regard to the implementation of quotas and quantitative targets in research and innovation. Most often, the existing means of setting quotas and targets apply to decision-making and less often to staff recruitment or fellowship awarding.²⁵ The report states that compared to 2008, the number of countries with some type of target or quota regulation, cascade model or flexible quota has increased from 8 to 18 countries. The report also emphasizes that besides the use of quotas and targets, in a total of 19 countries, policies are in place to establish clear rules for the composition of selection panels, including roles and gender balance.²⁶

The GENDER-NET analysis report *Award schemes, gender equality and structural change* summarizes research undertaken to understand the impact of national and regional award schemes aimed at creating greater gender equality, and their ability to stimulate gender equality and enact structural change with regard to gender equality in research institutions. The focus of the report is award schemes that recognize individual higher education/research institutions and/or departments, and

²³ Swedish Agency for Economic and Regional Growth, 2015.

²⁴ Susanne Bühner, Evanthia K. Schmidt, Sybille Reidl, Rachel Palmen, Dora Groo, 2019.

²⁵ Cf. EC (1999), Women and Science. In 1999 the European Commission already set a 40 % target for all committees and advisory boards, as well as Marie Curie-Skłodowska Fellowships.

²⁶ Anke Lipinsky, 2013.

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which can be expected to have some impact in their aim to affect the institutional environment for academic researchers with respect to the representation and retention of women. The report considers whether the gender equality award schemes deliver structural change, and identifies elements of successful gender equality award schemes that could form part of a transnational award scheme.²⁷

²⁷ GENDER-NET, 2015.

The European and Canadian situation: gender and diversity in research landscapes

When looking broadly on the funding landscape in Europe and Canada, a great variation among the countries can be observed. This variation is in the way funding is organised nationally, in how it is executed by the funding organisations and in the specific funding instruments. There is also a divide by sectors and scientific fields where some countries have several different funding organisations for different sectors or fields of research. For some countries, notably Belgium, there is also a regional divide.

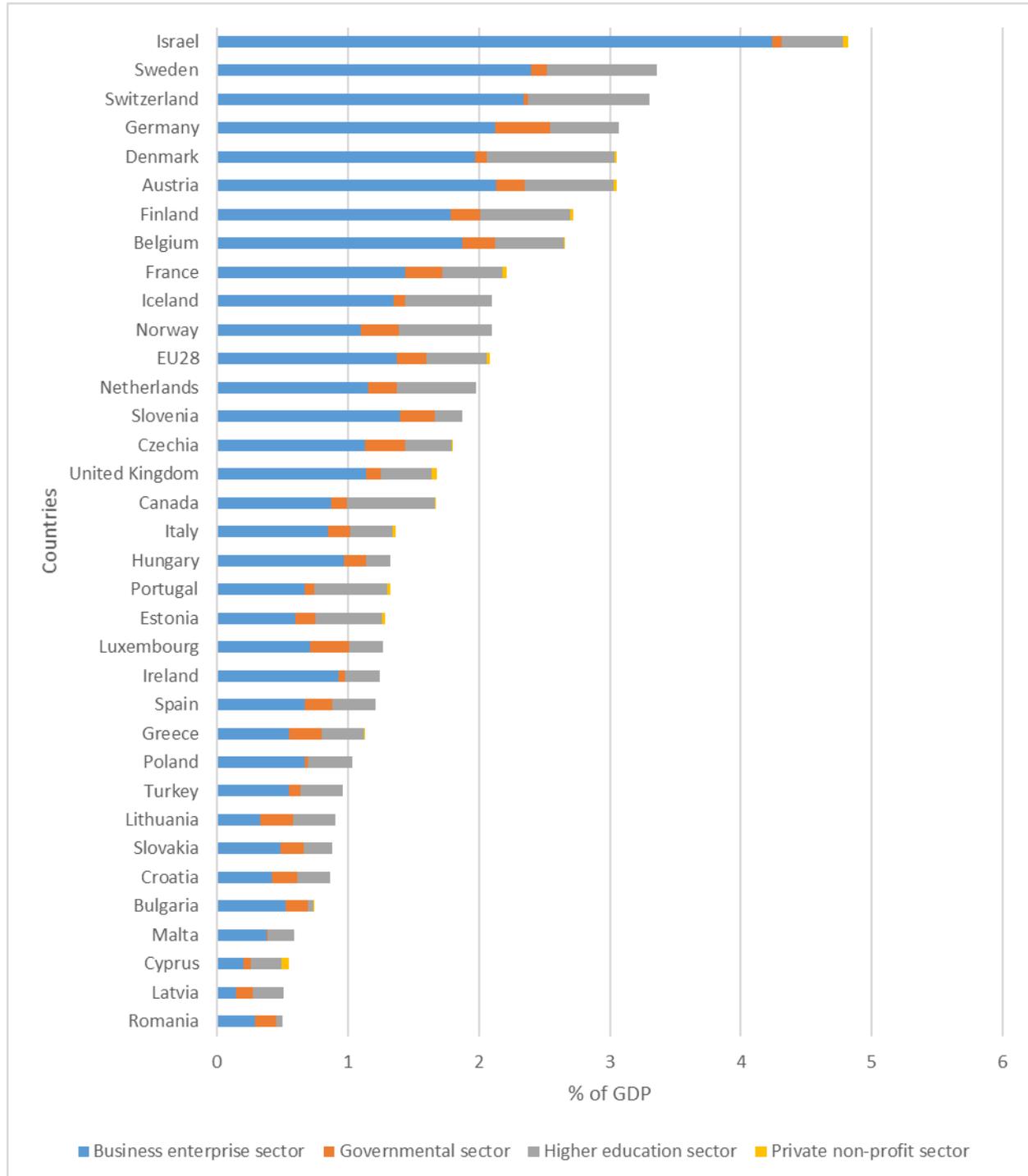
National expenditures on R&D in Europe, Canada and Israel

The total expenditures on R&D in 2017, as share of GDP, vary a lot between the European countries, Canada and Israel. Israel is at the top with a share of 4.8 percent of GDP, followed by Sweden with a share of 3.4 percent and Switzerland with 3.3 percent. There is a group of eight other countries with a share above the EU28 average of 2.1 percent, while the remaining 23 countries are below the EU average.

When looking at the share within separate sectors, there are also great differences between countries, where Israel and Sweden has a larger share of research and development in the business enterprise sector, while the governmental sector has a smaller share than in most countries; in this sector, Germany has the largest share. When it comes to the higher education sector, Denmark has the largest share (0.98 percent), followed by Switzerland (0.93 percent) and Sweden (0.84 percent). The private non-profit sector is small and data is missing for several countries, and therefore no country comparisons is presented for this sector.

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Figure 1. Total expenditures on R&D in Europe, Canada and Israel 2017 (share of GNP), by country and sector



Source: Eurostat, Table Research and development expenditure, by sectors of performance, percent of GDP, online data code: TSC00001 last update: 24/09/2020 23:00, OECD-data for Canada and Israel

Gender gaps and women in research

In the 2009 report, the countries were divided into four main categories. The categories were defined by the overall gender gap in the society²⁸ and the share of women among HE researchers. The first dimension described if the countries had a smaller or larger gender gap than the EU median. The second dimension described if the countries had a higher or lower share of women among HE researchers than the EU average. The data for the 2009 report was based on data from the *Global Gender Gap Report 2008* and the *She Figures 2006*. In the present report, data from the *Global Gender Gap Report 2018* and the *She Figures 2018* is used, with data covering the year 2015.

Table 1. Number of countries in the four main country categories in 2009 and 2015

Category	2009	2015
Small gender gap and more women in research	11	11
Small gender gap and fewer women in research	6	7
Large gender gap and more women in research	9	7
Large gender gap and fewer women in research	6	9
Total	32	34

Source: World Economic Forum, *Global Gender Gap Report 2008 and 2018*, *She Figures 2006 and 2018*

In Table 1, the numbers for 2009 and 2015 are very similar.²⁹ Two countries, Canada and Croatia, has been added in 2015; in the 2009 report there were no data for Croatia, and Canada was not included. However, looking at the countries beneath the numbers, no less than 10 out of 32 countries have changed position from 2009 to 2015. This is illustrated in Figure 2.

The countries that have changed position are in red circles, and red arrows show the direction from the position 2009 to the position 2015. The countries in the blue circles have remained in the same position. Canada and Croatia are added to their respective quadrant from the outside.

There is no *She Figures* data for Canada. However, Canada has a gender gap index slightly above the EU median, and the share of women researchers in Canada is slightly below the EU average, and so Canada is added to the lower right quadrant in Figure 2.

The GENDER-NET Plus countries are written in red and are underscored. As can be seen in Figure 2, eight of the GENDER-NET Plus countries stayed in the same position while four countries, plus Canada, changed position.

It should be pointed out that a country’s movement between categories is sensitive to the increase of the EU-median Gender Gap Index, and the EU average share of women among HEI researchers in *She Figures*, respectively. The data behind Table 1 and Figure 2 can be found in Annex 1.

²⁸ See Annex 1 for more information on the Gender Gap Index and *She Figures*.

²⁹ This is not unexpected, considering the four categories are defined using “above/below average/median”.

Figure 2. Country categories by Global Gender Gap and Share of Women HEI researchers. Situation described in 2009 and compared to 2015 (arrows denote movements from 2009 to 2015)³⁰

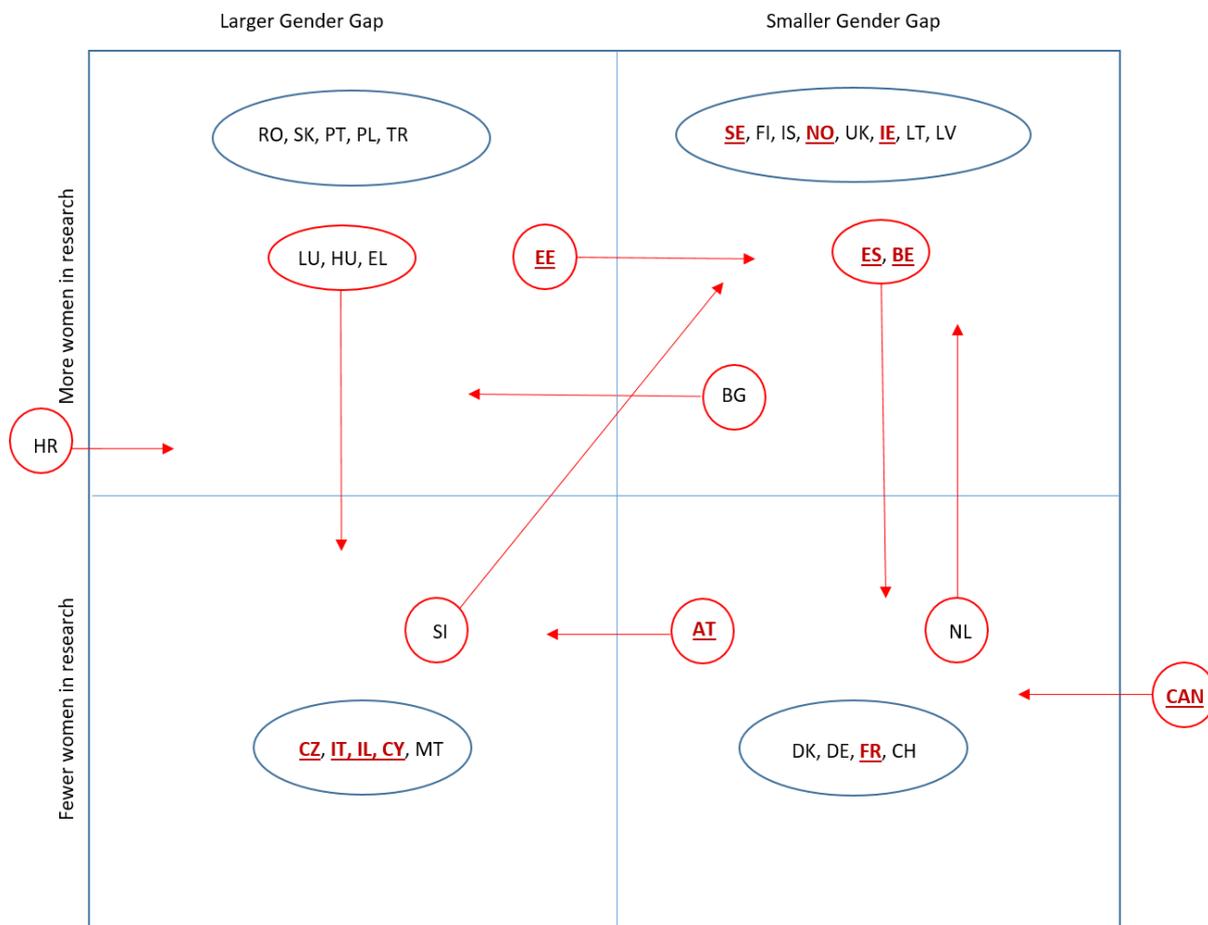


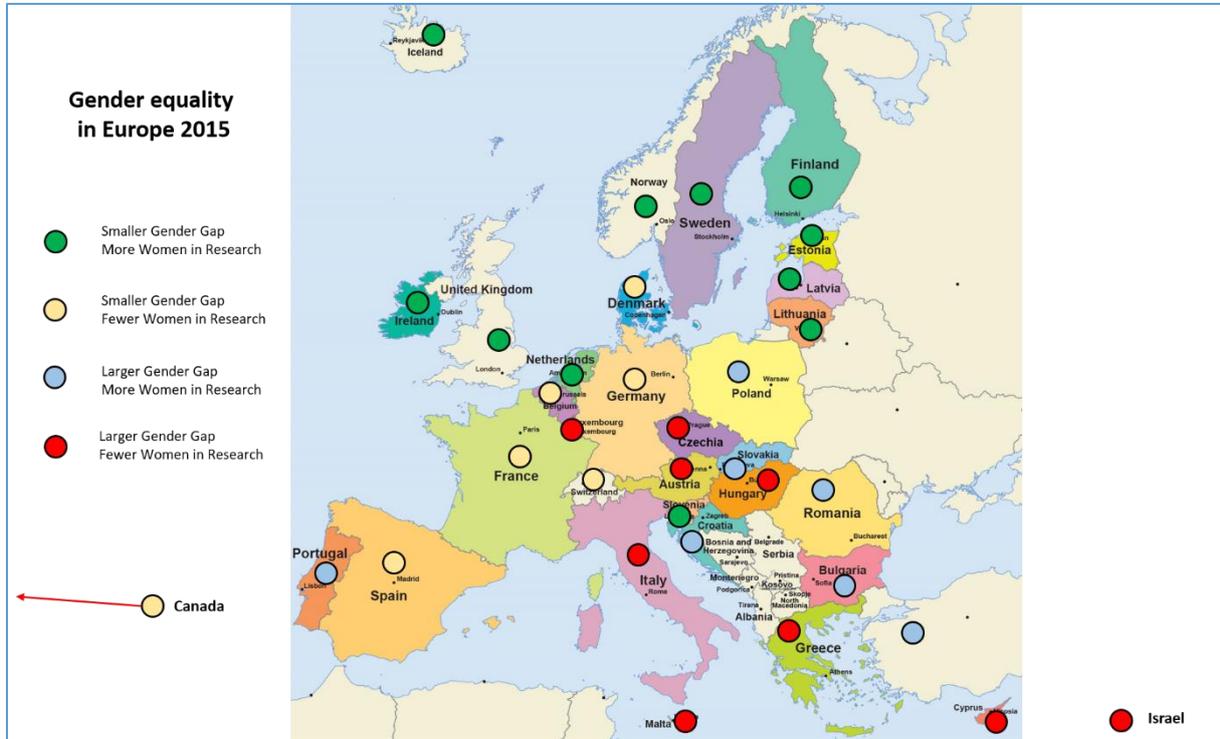
Table A1 in Annex 1 shows the Gender Gap Index values and ranking in 2006 and 2015 for the countries in Figure 2. Two countries, Estonia and Slovenia, have improved from larger to smaller Gender Gap than EU median. On the other hand, Austria and Bulgaria, have changed from smaller to larger Gender Gap. Both have a higher Gender Gap Index value in 2015 than in 2006, but the EU median has increased even more, and so Austria and Bulgaria are a bit below the EU median in 2015.

Table A2 in Annex 1 shows *She Figures* data for the share of women among researchers in 2003 and 2015. The EU average increased from 35% to 42% in this period. The Netherlands and Slovenia increased their share even more, and both have improved from lower shares than EU average (fewer women in research) to higher shares than EU average (more women in research). Five countries have gone from more to fewer women in research than the EU average. For Luxembourg, the share of women among researchers has decreased, while Greece, Spain, Hungary and Belgium all have increased shares, but with smaller increases than the EU average.

The four country categories give the following “European Gender Equality Map” for 2015.

³⁰ The country abbreviations are from *She Figures* 2018, see Annex 1.

Figure 3. A European Gender Equality Map 2015, with regard to the Global Gender Gap Index and to the share of women among HEI researchers



National research landscapes

The following country descriptions are taken mainly from the templates received from the GENDER-NET Plus partners, and are presented here briefly in separate sub-sections. Further details for each country can be found in the separate document *Gender equality in research funding - Country reports*.

Austria

In Austria, research is either funded through the universities and research institutions, or granted through the key funding agencies for research, technology and innovation at the level of the Federal Government and the Federated states, respectively. The universities and research institutions provide infrastructure, expertise and an environment conducive to science. Along with this national research funding, there is also international research funding – above all, the funding granted through the EU Framework Programmes for Research and Technological Development (Horizon 2020, Horizon Europe). Research can also be funded by business enterprises and other private funders.

The major funding agencies are the Austrian Science Fund (FWF), the Austrian Research Promotion Agency (FFG) and the Austria Wirtschaftsservice (AWS). Some funding is handled by these agencies on behalf of the Federal Government. The FWF finances basic research while the FFG focuses on funding applied research associated with industry. The AWS is the federal development bank in Austria for business-related economic development.

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Other research funding institutions are the Austrian Academy of Sciences (ÖAW), the Ludwig Boltzmann Gesellschaft (LBG) in medicine, the life sciences as well as the humanities, the social sciences and cultural sciences. The Christian Doppler Research Association (CDG) funds collaborations between science and business and the Austrian Exchange Service (OeAD) is the main service centre for European and international mobility and cooperation programmes in education, science and research.

Belgium

In Belgium, the system for supporting scientific research is shared by the Federal State, the Regions and the Communities. The regions are in charge of funding applied research while Communities fund basic research. Belgian Federal state also supports research mainly through tax cuts on salaries of researchers (under certain conditions) but also through the federal science policy (BELSPO). Research funding is decentralised to the regional governments in Flanders and Wallonia (Fédération Wallonie-Bruxelles).

There are two funding agencies for basic research in Belgium: FWO (Research Foundation Flanders) for the Flemish-speaking part of Belgium and F.R.S.-FNRS (Fonds de la Recherche Scientifique – FNRS) for the French-speaking part. For Flanders, there is also Vlaanderen Agentschap, Innoveren & Ondernemen (VLAIO), which funds mainly later stage medical research and other applied research in academia and industry.

In the French-speaking community of Belgium (Federation Wallonia-Brussels), basic research is mainly carried out within the six French-speaking Belgian universities and the University hospitals linked to them.

Since 2017, F.R.S.-FNRS is involved jointly with the FWO in the management of the EOS (Excellence of Science) call. EOS provides funding for joint fundamental research projects between French- and Flemish-speaking researchers in all disciplines.

Canada

Canadian federal investments in research are primarily divided into intramural research performed by the federal government's 13 science-based departments and agencies, and extramural research performed in the higher education sector. Research funding for universities and colleges is allocated on a competitive basis mainly through the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes of Health Research (CIHR) and the Social Sciences and Humanities Research Council of Canada (SSHRC). Federal research funding is also allocated through two other organisations: the Canada Foundation for Innovation (CFI) and Genome Canada. In addition to this, there are a number of provincial organizations that support academic research.

Cyprus

In Cyprus, Research and Innovation activities fall under the mandate of the newly established Deputy Ministry for Research, Innovation and Digital Policy. The R&I Governance system includes institutions and bodies, such as the National Board for Research and Innovation, The Chief Scientist for Research and Innovation and the Research and Innovation Foundation.

The Research and Innovation Foundation is a non-profit private foundation with public mandate, to serve as the national agency for the promotion of scientific and technological research. It is the only national R&I funding agency, funded by the Government and by European Structural and Investment

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Funds (ESIF). The funding is allocated mainly through competitive funding, but the Government also allocates funds directly to the three public universities. The foundation designs, launches, funds, and monitors competitive national research programmes. It also promotes the participation of Cypriot researchers in European research programmes and international organisations and is responsible for the implementation of bilateral agreements on research and development signed by the Government.

Czech Republic

In the Czech Republic, the main providers of research funding are the governmental agencies the Czech Science Foundation (GACR), the Technological Agency of the Czech Republic (TACR) and also individual ministries.

GACR is the only institution in the Czech Republic, which provides public funding exclusively for basic research projects. It supports research throughout all scientific fields on the basis of calls for proposals. GACR also finances projects implemented via bilateral and European international programmes.

TACR finances applied research, experimental development and innovation. It manages and implements funding programmes with the focus on all key areas such as new technologies, materials, energy, environment, transportation, ICT, creative and digital economy, societal challenges of the 21st century and many others. Some programmes are aimed at international cooperation in applied research.

Estonia

In Estonia, the main funding instruments from the state budget are institutional baseline funding and research grants. Since the past couple of years, almost equal (in 2019) and equal amounts (in 2020) of the state funding have gone to research grants and baseline funding, whereas until 2018, most of the funding was based on competitive grants.³¹ EU structural funds, which contribute a substantial share of the public R&D funding, are deemed a part of the state budget. The share of foreign funding (e.g. the Horizon programme) in public R&D funding was 18 per cent in 2019 (13 percent of public and private R&D funding taken together).

While the Estonian Ministry of Education and Research manages baseline funding³², competitions for national research grants are organised by the Estonian Research Council (ETAg) which also receives its budget from the Ministry of Education and Research.³³ The largest type of national research grants is Personal Research Funding, allocated for the research activities of individuals or research groups.

ETAg is thus the main public research funding organisation (governmental agency) in Estonia. It was created in 2012 as the successor of the previous main research funding agency, the Estonian Research Foundation (ETF). Apart from funding research in all areas, ETAg's main aims include promoting cooperation between the government, businesses and research institutions, contributing to the

³¹ <https://www.etag.ee/en/activities/analysis/statistics-rd-funding-estonia/>

³² <https://www.hm.ee/en/activities/research-and-development/base-funding-and-centres-excellence>

³³ On the research funding system, see more in https://www.etag.ee/wp-content/uploads/2019/04/Estonian_Research_2019_veeb.pdf, pp. 6-7, and pp. 9-19. See also <https://www.hm.ee/en/activities/research-and-development>

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internationalisation of research and international research cooperation, as well as research communication.³⁴

France

The French Ministry of Higher Education, Research and Innovation is providing 74 percent of the budget of universities and 64 percent of the research organisations, mainly to cover the costs of the permanent personnel.

The total funding of research contracts is 5 billion Euro, including 3 billion Euro by public funders out of which French National Research Agency (ANR) is the most important (1 billion Euro) for public research performing organisations, especially in basic research.

ANR, founded in 2005, is a public administrative institution under the authority of the French Ministry of Higher Education, Research and Innovation. The agency funds project-based research carried out by public operators cooperating with each other or with private companies.

Ireland

In Ireland, there are three predominant funding organisations where researchers apply for government research funding. The Irish Research Council (IRC) supports excellence in research talent, knowledge and engagement across all disciplines, including all areas of STEM (science, technology, engineering and mathematics) and AHSS (Arts, Humanities and Social Sciences). The Health Research Board (HRB) is a state agency that supports excellent research that underpins health policy and healthcare practice. It funds health research in patient oriented research, population health sciences, and health services research. Science Foundation Ireland (SFI) invests in academic researchers and research teams who are most likely to generate new knowledge, leading-edge technologies and competitive enterprises in the fields of science, technology, engineering and maths (STEM).

Several charities and charity groups also provide funding through fundraising schemes. The core grant made by the Higher Education Authority to all publicly funded Higher Education Institutions in Ireland provides a foundation-level investment to research in Ireland. Universities provide direct funding for small awards, infrastructure, travel, conferences etc. A number of field-specific agencies provide funding for targeted research: for example, Teagasc funds agriculture and food research, the Marine Institute (MI) funds marine research, technology, development and innovation.

Israel

In Israel, the Ministry of Science and Technology funds scholarships annually to promote science and technology. The scholarships are awarded to male and female students for all degrees by type, and part of these are granted to minorities and women. The Israel Science Foundation (ISF) support basic research in Israel and the majority of the ISF funding is provided by the Council of Higher Education, through its sub-committee, the Planning and Budgeting Committee. The ISF supports research in sciences and technology, life sciences and medicine, humanities and social sciences, for researchers within the institutions of higher education, research institutes and hospitals in Israel.

³⁴ <https://www.etag.ee/en/introduction/>

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There are also a number of binational science foundations like the U.S.-Israel Binational Science Foundation (BSF) that promotes scientific relations between the U.S. and Israel by supporting collaborative research projects in a wide range of basic and applied scientific fields. Grants are awarded on a competitive, peer reviewed basis, juried by leading scientists from the U.S., Israel and around the world. The German-Israeli Foundation for Scientific Research and Development (GIF) supports cooperative research projects of mutual interest to the Federal Republic of Germany and the State of Israel with both basic and applied research projects in all areas.

BARD funds research in agriculture jointly conducted by American and Israeli scientists, mostly focusing on increasing agricultural productivity, particularly in hot and dry climates, and emphasizing plant and animal health, food quality and safety, and environmental issues.

The Ministry of Health Israel Chief Scientist research funding supports and promotes medical and biomedical research in Israel and awards funding to research in those fields to applicants who are scientists and/or medical doctors in research institutions and hospitals, and research that have direct contact to illness and human health.³⁵

Italy

In Italy the funding system has a diversity of funding bodies like The Ministry of Education – Ministry of University and Research (MUR), the Ministry of Health (MoH) – Directorate General for Research and Innovation in Healthcare (DGRH) and the Ministry of Foreign Affairs and International Cooperation (MAECI).

Under MUR it is The National Research Program (NRP) that guides research policy in Italy. The NRP identifies twelve areas of specialisation of skills around which to structure effective and significant national and regional policies and instruments from the point of view of the impact on the country's social and economic development. The resources made available by the NRP are allocated on a competitive basis in six programs focusing on Internationalisation, Human Capital, Research Infrastructures, Public-Private, Southern Italy, and finally Spending Efficiency and Quality.

The Ministry of Health (MoH) is the major public organisation funding health research in Italy. The MoH promotes and sustains research in the structures of the National Health Service (NHS). The MoH finances health research through two separate funding instruments: Current Research and Targeted Research.

The Ministry of Foreign Affairs and International Cooperation (MAECI) promotes the internationalisation of Italian research and scientific diplomacy as tools for developing cooperation between Italy and the rest of the world. In collaboration with other Ministries, MAECI finances the Italian team-costs in bilateral projects selected in the research areas agreed with the counterpart. The projects are collected through a public call and selected by the network of experts of the MAECI. Moreover, the MAECI is involved in the organization and financing of international scientific events.

Norway

In Norway, the Research Council invest NOK 10 billion in research and innovation annually on behalf of the Norwegian government. Over 2 000 international peer reviewers assess and rank the grant proposals submitted. Funding decisions are taken by portfolio boards, which are comprised of board

³⁵ <https://www.health.gov.il/Subjects/research/Pages/Research-Foundation.aspx>

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members from across all sectors. RCN is also the key advisory body to the government on research policy issues and carries out tasks commissioned by 15 ministries.

There are a variety of funding schemes for research-based innovation and knowledge-building, and also funding that promotes renewal and innovation in the public sector through a number of schemes. Research organisations may apply for funding within all relevant thematic areas and subject fields. International cooperation is encouraged with participation in EU research and innovation programmes. Another objective is Science communication and to reach out to the public and to promote scientific thinking among the general public.

Spain

In Spain, the research funding system is composed of three national funding agencies, the State Research Agency (AEI, Agencia Estatal de Investigación), the Center for Industrial Technological Development (CDTI, Centro para el Desarrollo Tecnológico Industrial) and the Health Institute “Carlos III” (ISCIII, Instituto de Salud Carlos III), all three under the Ministry of Science and Innovation.

AEI is promoting research in all areas of knowledge through an assignment of public resources and the monitoring of funded programs and their impact. Moreover, the AEI gives advice on the programming of the activities on Research and Development policies of the State General Administration. CDTI promotes innovation and technological development of Spanish companies, and ISCIII, under the Ministry of Science and Innovation, provides scientific reference technical services aimed at the National Health System and the promotion and execution of research in Health and Life Sciences.

Sweden

The largest part of Swedish R&D is funded by and performed within the business and enterprise sector. Most of these activities can, however, be characterized as development rather than research. It is instead the 31 HEIs (incl. the 15 universities but excl. the arts university colleges) that are the main performers of research. The institute sector is comparatively small.

Direct government appropriations constitute 46 percent of the total research funding of the HEIs. The remaining 54 percent are funded by research councils (13 percent), government agencies (11 percent), research foundations that were originally set up by the government (4 percent), private foundations (8 percent), private companies (5 percent) and foreign sources (7 percent). Of the foreign sources, the main part (4 percent) is EU funding.

There are three research councils (Swedish Research Council, Formas and Forte) and one agency for innovation systems (Vinnova). Many other government agencies fund research at HEIs. Also, there are some 8 public research foundations, originally funded with state funds, and a number of private research foundations. All public funding bodies abide by the Swedish law of public access to information, and so any decision must be made available to any citizen on request.

Swedish Research Council funds basic research in all scientific fields and funds research infrastructures. Formas funds research about the environment, agricultural sciences and spatial planning. Formas also funds innovation which is assessed on the basis of both scientific quality and societal relevance. Forte funds research in the areas of health, working life and welfare.

Research funding systems and gender equality

In this chapter, research funding systems in the GENDER-NET plus countries are described in order to get an overview of the situation 2019. The GENDER-NET Plus partners were asked to respond to questions in a template (see Annex 2). The questions in the template were formulated in correspondence to the questions asked in the 2009 report, and the answers should therefore be able to reflect the changes since then. The questions cover topics such as policies, actions, monitoring and transparency.

National and organisational policies

Austria

In Austria, over 50 percent of university graduates are women, but women are still under-represented in many areas of research, especially at higher levels, in industrial research, in many natural sciences, and in most engineering sciences. The Austrian Research, Technology and Innovation strategy therefore included the goal of gender balance amongst those involved in research work. Measures were proposed in a number of areas and are implemented at various levels, such as the federal budget level, in the federal funding agencies, in the research institutes and their governance, and at the individual level of female researchers. A whole series of specific measures has been developed and implemented, using both approaches, gender mainstreaming as well as the promotion of women.

The FWF has some principles on excellence and competition, independence, internationality, equal treatment of all disciplines, transparency and fairness, gender mainstreaming, equal opportunities and ethical standards. The gender mainstreaming is ensuring the equal treatment of all researchers, regardless of gender. It is a priority for the FWF, which it pursues through specific programmes and by practising gender mainstreaming in all areas of its work.

The FFG has gender criteria as an integral part of all funding schemes and help to ensure equal opportunities. The criteria are on gender aspect in the project content, gender-specific balance in the project team and gender aspects with regard to commercialization. Internal gender quality trainings and an internal gender-working group make sure, that the organizational awareness and knowledge on gender equality is high.

Belgium

Belgium has a diverse research funding system and thereby several policies. The FWO has a gender and diversity policy that extends across the entire organisation, from application and evaluation procedures to the human resource policy for fellows and researchers appointed to projects. The FWO also allows budgetary flexibility to cover costs for medical and social conditions, and have replaced the absolute age limits for applying for a personal mandate with (relative) scientific seniority to accommodate researchers with a career break due to pregnancy and parental leave. Since 2017, the gender choice in applications has been extended with the option "X" as a third choice, next to "M" (male) and "V" (female).

Gender equality is also important for F.R.S.-FNRS. The odds to be funded depending on gender of applicants (among other variables) in the frame of its different funding schemes, is monitored to identify potential biases in order to prevent them in the future.

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For evaluation processes at F.R.S.-FNRS., the effort is to ensure a good gender balance among expert panel members. F.R.S.-FNRS does also participate in the funding of Academia-Net, a website hosting a portal of excellent women academics.

Canada

In Canada the commitment to gender equity is demonstrated through the integration of Gender-Based Analysis Plus (GBA+) across all federal departments and agencies, including research granting agencies. GBA+ is an analytical process used to assess how diverse groups of women, men and gender-diverse people may experience policies, programs and initiatives. GBA+ goes beyond biological (sex) and socio-cultural (gender) differences and considers many other identity factors, like race, ethnicity, religion, age, and mental or physical disability. Each agency reports on GBA+ activities through the GBA+ annex within the annual Departmental Results Report.

Canada has created the Research Coordinating Committee (CRCC) to improve the coordination efforts of the national granting agencies and one of the five priorities is strengthening equity, diversity and inclusion (EDI) in research. In 2018, the CRCC led Canada-wide consultations with the research community to discuss barriers experienced by underrepresented groups, and mechanisms for providing fairer access to research funds and opportunities. A harmonized approach to EDI across granting agencies has been undertaken, including a statement on EDI and an EDI Action Plan.

Cyprus

In Cyprus, the Research and Innovation Foundation (RIF) has introduced measures aiming at promoting gender balance in the funding system. RIF has been representing Cyprus in several groups and networks as the Standing Working Group on Gender in Research and Innovation (former Helsinki Group on Gender in Research and Innovation), the Management Committee of the COST Action TN1201 “GenderSTE Science, Technology and Environment” (a network of policy makers and experts committed to promote a fairer representation of women and better integration of gender dimension in research). It has also been engaged in projects as GENDER-NET, GENDERACTION, TARGET and GENDER-NET Plus.

Czech Republic

The Czech Republic has the Governmental strategy, for equality of men and women for the period 2014 – 2020 (an updated version covering for the years 2021-2030 is to be published soon). The basic role of the Strategy is to formulate a framework for measures of public administration, which would contribute to achieve gender equality in the Czech Republic. The strategy raises the issue of gender inequality in the Czech Republic in general, and points out that the representation of women in science is one of the lowest in Europe. In the Code of Ethics for Evaluators and the Code of Ethics for Investigators of the main funding bodies, equal treatment and non-discrimination is listed as one of the basic pillars.

Estonia

In Estonia, the awareness of the gender dimension has increased in ETAg and in the Estonian research scene in general since the report 2009. Since recently, ETAg has included gender among the criteria (as the third in the list) of ranking ex aequo proposals. Gender balance is also mentioned among the criteria of evaluating research teams. These principles are fixed in the guidelines for the evaluation of Personal Research Grant Applications, i.e. the applications for the main research funding instrument

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of ETAg. Similar principles are also present in the procedures of other funding instruments that follow the example of Personal Research Grant procedures as far as possible (considering the specifics of the particular instrument). A gender balance principle is also among criteria that influence the forming of ETAg's Evaluation Committee, as it is stated that the representative of the less represented gender will be preferred in case of equal candidates. This is expected to have an influence on the gender of candidates nominated by research institutions.³⁶

Gender mainstreaming has become an increasingly important topic also inside the Estonian Research Council which is implementing its first Gender Equality Plan as part of ETAg's participation in the Horizon 2020 Project GEARING-Roles (2019-2022). The gender equality plan was adopted in September 2020.

France

The French National Research Agency (ANR) is the biggest funding organisation, and 47 percent of the ANR funds go to universities. Other public and private contract funders are mainly specialized in one thematic field, e.g. energy, cancer, AIDS, etc.

Along with research stakeholders, the ANR is contributing to the development of a policy that aims to reduce gender inequality in higher education and research. It seeks and encourages parity in Scientific Evaluation Panels. It also encourages scientific communities to systematically consider sex and/or gender aspects in research projects in all fields and in review processes.

The ANR's commitments to gender equality and consideration of sex and/or gender aspects are included in its Gender Equality Plan (2020-2023) and its Code of Ethics and Scientific Integrity.

Ireland

In Ireland, there have been some significant developments in relation to gender equality in higher education. A report commissioned by the Higher Education Authority (HEA) in 2016 revealed stark inequalities in Irish higher education institutions and put forward a series of recommendations regarding gender equality and implementation of the Athena Swan Charter. A Gender Action Plan 2018-2020 was developed to accelerate the rate of progress towards gender equality in Irish Higher Education Institutions. One of the major outputs of the action plan was linking eligibility for state funding for research to a higher education institution's receipt of a Bronze Award in Athena Swan by Jan 1st, 2019.

Italy

Italy has adopted legislative measures for promoting gender balance in the recruitment, retention and advancement of researchers, including leading positions such as a Code of Equal Opportunities between men and women and measures to implement equality and equal opportunities between men and women in public administration.

³⁶ <https://www.etag.ee/teadusagentuur/hindamismoukogu/hindamismoukogu-moodustamise-kord-ja-tookord/>

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Norway

The Norwegian Equality and Anti-discrimination Act shall promote gender equality and aims in particular at improving the position of women and minorities.

The Research Council of Norway has a *Policy for gender balance and gender perspectives in research* and a 10-year programme (2012-2022) aiming at promoting gender balance in top positions and research management (BALANSE). The policy sets out how the Research Council will:

- be a national and international driving force to promote gender balance and knowledge about gender perspectives in research and innovation;
- systematically assess the gender dimension in the Research Council's investments in research and innovation;
- strengthen and expand the knowledge base on gender balance and gender perspectives for research and innovation policy.

To promote gender equality in the higher education sector, the Norwegian Ministry of Education and Research has appointed a Committee for Gender Balance and Diversity in Research (KIF). The Committee supports and gives recommendations regarding measures that promote the integration of gender balance and diversity activities at universities, university colleges and research institutes, thus helping to increase diversity among the staff and in research.

Spain

The Spanish Strategy of Science, Technology and Innovation (STI) 2013-2020 included the gender perspective in STI policies as one of the five basic principles. The new Spanish Strategy of STI 2021-2027 insists on the need to integrate the gender perspective in order to guarantee the principle of gender equality through the whole STI system, being one of the four basic principles of the Strategy. The promotion of gender balance in attracting and retaining talent will be also part of the actions. The aim is to avoid the loss of human capital in the public and private sector due to gender imbalances and to enrich the creative process and research results through the integration of a gender perspective in the research and innovation content.

One of the objectives of the *Law 14/2011 on Science, Technology and Innovation* is to promote the inclusion of the gender perspective as a transversal category as well as the gender balance in every field of the Spanish STI system. The composition of the committees and bodies of the STI system requires a gender balance 40-60 percent of both genders represented. The principles of non-discrimination and gender balance are considered also in the regulation of the research staff. Researchers have the right to develop their functions and research career according to the principle of gender equality as well as the right to benefit from the work-life balance programs of their respective research organizations. The law establishes that the selection process should take measures to ensure that career breaks do not affect negatively the evaluation of curricula. The promotion of the gender perspective as a transversal category, also promotes research on gender studies.

The Royal Decree 1067/2015 on the creation of the State Research Agency (AEI) reiterates the principle of gender equality and the promotion of the gender perspective in the research content and the gender balance in the composition of bodies and committees of the RFO. The State Research Agency has planned to approve its Gender Equality Plan for the funding activities at the beginning of 2021.

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Other funding agents in Spain such as CDTI and ISCIII, have both gender equality plans in place and gender equality commissions. The Women and Science Unit of the Ministry on Science and Innovation monitors and coordinates the development of these gender equality policies.

Sweden

Gender mainstreaming has long been (1994) a central feature and a main strategy of Swedish gender policies, meaning that decisions in all policy areas and at all levels are to be permeated by a gender equality perspective. Gender mainstreaming is to be implemented at central, regional and local level. The 2014 Declaration of government focused again on gender mainstreaming, defining it as a core concern together with ‘gender budgeting’, which was introduced as a new technique when formulating the State budget. Moreover, both issues are referred to in a recent government declaration on priority policies, which also sketches the mainstreaming actions that will be undertaken within the government and state authorities.

The three research councils and the innovation agency have the Government’s mission to promote gender equality in its funding activities, including gender balance in boards, committees and peer review panels.

The Swedish Research Council has since 2003 a gender equality strategy for its funding activities. An operative goal of the strategy is to achieve equal success rates for women and men, with respect to type of funding and scientific field. The gender equality work includes gender equality training for evaluators, scientific boards and staff.

Forte promotes gender balance in research funding, ensures gender balance in review panels, and promotes a gender perspective in research when applicable. A strategy for gender mainstreaming is in place. All employees at Forte are informed of the strategy and so are the review panels and evaluators in relation to their role.

Formas has no specific programs or targeted instruments for promoting gender balance. The measures are included in each call, i.e. evaluation criteria, recruitment of evaluators, etc. Formas is, as all other public Swedish agencies, commissioned by the government to integrate gender equality into its entire operations.

Specific actions

In addition to gender equality plans and aims for equal representation of women and men in decision-making bodies, funding organisations can promote gender equality by various positive action measures. As in 2009 these can be described as measures to encourage women to apply in call text, for proportion of funded women, women researchers in different career phases, for academic work-life balance in research, gender in research content and some other measures.

Encouraging women to apply

In Austria the FWF has published its gender equality monitoring in 2015 with a regular update on a yearly basis. The analysis of the review process revealed that the success rates for male and female applicants was almost equal but about 65.6 percent of all applications received by FWF were from male researchers. FWF aims therefore for initiatives to increase the number of applications received from female researchers.

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In Cyprus the Research and Innovation Foundation (RIF) has endorsed measures that promote gender balance in research proposals.

In France, the ANR supports women wishing to engage in scientific careers and encourages the young generations to join all fields of research.

In Ireland, Science Foundation Ireland (SFI) and the Health Research Board have introduced a narrative CV to the application process. Allowing applicants to be assessed for their contribution to academic teaching and mentorship as well as public engagement activities. They have also reduced emphasis on H-index and journal impact and focused more on the applicants' broader impactful achievements. SFI and the HRB have also made gender a criterion in the application selection process. When ranking applications, in the event of applications receiving the same final score, priority can be given to applications from female candidates.

Targets for proportion of women funded

In Austria, the FWF further emphasises gender awareness by having a funding decision criteria on a balanced participation of female and male researchers in three of their programmes. The FFG-programme Research partnerships - Industrial PhD has its focus on funding industrial PhD projects to improve qualifications of research and innovation staff in companies and non-university research institutions with 50 percent of funding dedicated for female researchers.

In the Czech Republic there is a measure in place that may contribute to gender balance among beneficiaries. In some of its programmes: TACR awards extra points to institutions with an advanced human resources management and gender equality measures in place.

In Sweden the Gender Equality Strategy of the Swedish Research Council has as one of its operative goals that the success rates and average amount of funding should be equal for women and men, with respect to scientific field and type of funding.

Measures targeting women researchers in different career phases

In Austria, the following initiatives have been put in place to target women: the FWF has started the ESPRIT Programme ("Early Stage Programme: Research, Innovation and Training"). It is addressed to highly qualified postdocs from all disciplines at the beginning of their academic career who wish to carry out an independent research project at an Austrian research institute. In addition, with the Elise Richter Programme the FWF is offering funding opportunities to more advanced female scientists who are working towards a career in universities.

The FFG also have a number of funding programmes with focus on gender equality and career opportunities. The program **Talents** supports people in research and development throughout their whole career. There are three main targets: Encouraging young people to start a career in research and development, connecting researchers with businesses and ensuring equal opportunities for all. The program w-fORTE promotes women in scientific research and technology and encourages discussions with the goal of achieving greater equal opportunity in research and career development. It offers free training and discussions tailored to the career needs of researchers, networking, peer-to-peer learning and information based on the latest studies for managers in cooperative research.

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The Austrian Academy of Sciences offers funding for doctoral candidates and young postdocs in nine fellowship programmes. One of these programmes is targeted only to women (L'ORÉAL Austria).

In Belgium, the FWO have taken specific measures to reduce the drop-out of young female researchers after their PhD, which is called “the leaky pipeline” in the research literature. This includes the possibility to adjust the scientific seniority limits with one year per pregnancy and to extend an ongoing fellowship (both doctoral and postdoctoral) with one year per pregnancy. The same also applies to F.R.S.-FNRS: there is an extension of one year of the eligibility period per delivery or adoption for women to apply to F.R.S.-FNRS instruments. A fixed-term F.R.S.-FNRS mandate interrupted due to a maternity/paternity/adoption leave can also be extended for a duration equivalent to the duration of the interruption.

In Canada, the Tri-Agency EDI Action Plan has initiatives that are intended to improve access to, and participation in, the research system for women and gender-diverse people. Some of these initiatives are self-identification data collection, addressing systemic barriers in post-secondary institutions, integrating EDI practices into agency programs, policies, and training in bias awareness.

The EDI Action Plan at the Tri-agency Institutional Programs Secretariat (TIPS) has been developed specifically for the Canada Research Chairs Program. The plan focuses on improving the program's governance, transparency, and monitoring of its measures and in addressing its EDI challenges, such as setting of targets for nominations of women (along with Indigenous peoples, persons with disabilities and members of visible minorities) to be awarded Research Chairs.

The Dimensions program publicly recognizes post-secondary institutions that identify and address systemic barriers experienced by members of underrepresented or disadvantaged groups including women, Indigenous Peoples, persons with disabilities, members of visible minorities/racialized groups, and members of LGBTQ2+ communities. The EDI Institutional Capacity-Building Grant program was launched to foster EDI in the Canadian post-secondary research ecosystem through a focus on the identification and elimination of systemic barriers that impede the career advancement, recruitment and retention of underrepresented or disadvantaged groups.

In the Czech Republic, TACR has a specific funding programme ZÉTA focusing on junior researchers, whose explicit aim is also to support equal opportunities for men and women in development of their research paths. Extra points are awarded to the teams that are gender balanced and/or led by a female principal investigator. Gender balance in research teams is also considered in part in the evaluation of the team in the ÉTA programme focusing on social sciences and humanities and the aim is to transfer this measure to other programmes in the future.

In Ireland, the Minister of State for Higher Education announced a new gender-targeted Senior Academic Leadership Initiative (SALI) in 2019. The initiative will promote gender balance at senior academic levels in the HEIs by funding senior academic leadership posts in HEIs across Ireland over the next three years. The initiative is specifically aimed at attracting outstanding female applicants both from within the sector in Ireland and internationally. SFI has launched the Frontiers for the Future Programme, with a full complement of gender initiatives to support the SFI Gender Strategy, including using an expert in gender to review call documentation. These measures allow applicants with a non-linear career path to compete with more established researchers.

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In Norway, the RCN has a ten-year programme called BALANSE aiming at promoting gender balance in top positions and research management. The Programme on *Gender Balance in Senior Positions and Research Management* (BALANSE) is a policy-oriented programme at the Research Council with a ten-year programme period (2012–2022). The main objective of the programme is to promote gender equality and gender balance in Norwegian research. The programme will help to bring about structural and cultural change in the research system through new knowledge, learning and innovative measures.

Measures facilitating work-life balance in research

In the Czech Republic, GACR is considering the introduction of a completely new group of grant projects where the main goal would be to support women and men in science returning from maternity and parental leave. The tender documentation for all groups of grant projects of the GACR stably regulates the situation where the beneficiary may request the interruption of the project implementation for the whole calendar year due to the principal investigator's departure on maternity or parental leave.

Gender perspective in the contents of the research

In Austria, all applicants of FWF programmes have been required to reflect explicitly on the gender dimension of their project's research approach. These statements are also taken into consideration when evaluating the project. The FFG includes gender criteria as integral part of all funding schemes in terms of gender aspect in the project content.

In Canada, CIHR expects that all research applicants will integrate gender and sex into their research designs, methods and analyses and interpretation and/or dissemination of findings when appropriate.³⁷ NSERC has also recently integrated EDI considerations in the research design³⁸.

In Cyprus, RFI promotes gender in research content by including a gender-sensitive statement in all Call for Proposals launched by the Foundation as well as other related document. Research Teams are prompted to describe if and how gender issues are relevant to their proposals. Researchers submitting proposals are encouraged to set up research teams that are as gender-balanced as possible.

In the Czech Republic, TACR has introduced a new evaluation criterion "gender dimension in the research content" in two of its programmes (ZÉTA and ÉTA) and developed guidelines on this topic for applicants and evaluators. The aim is to transfer the new criterion to other programmes in the future.

In Ireland, the Irish Research Council requires all applicants to demonstrate that they have given full consideration to whether there is a potential sex and/or gender dimension in their proposed research. Where none exists they must justify why not.

In Spain, a specific additional provision to the Law 14/2011 on Science, Technology and Innovation defines the main objectives on gender equality for the Spanish STI system. Some of these objectives promotes the gender perspective as category in the research and gender studies.

In Sweden, the three research councils and the innovation agency have, since 2018, in its Government instruction the task to promote the inclusion of sex and gender perspectives in the research funded, where applicable. As a consequence, in all calls at Forte, and in several calls at Swedish Research Council, the applicants are asked to indicate and motivate if a gender perspective is relevant. At

³⁷ See <https://cihr-irsc.gc.ca/e/50836.html>

³⁸ See https://www.nserc-crsng.gc.ca/_doc/EDI/Guide_for_Applicants_EN.pdf

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Formas, in terms of the evaluation of societal relevance, all applicants must state in their application the ways in which the project results can be relevant to different groups in society, including men and women.

Other actions

In Canada, the federal granting agencies (CFI, CIHR, NSERC, SSHRC) each have developed and implemented agency-specific initiatives to meet the Government of Canada GBA+ commitments. The integrating of EDI practices into agency programs and policies address the issue of all-male events. The agency presidents are personally committed to refusing to participate on panels or in events that are not inclusive and do not reflect the diversity of the Canadian population. The agencies have purposefully incorporated EDI requirements and assessment criteria in agency funding opportunities, such as the New Frontiers in Research Fund and provide EDI guidance for applicants. As part of granting agencies' EDI Action Plan, peer reviewers at CFI, CIHR, NSERC and SSHRC are required to complete training on bias in peer review before adjudicating funding applications.

In Cyprus, informative videos for the evaluators were uploaded to the Research and Innovation Foundation's website. Moreover, a reference in the Guide for Evaluators was inserted, with the aim to improve evaluators' awareness about gender issues and gender integration in the proposals. Measures have also been incorporated in RIF's Gender Action Plan that are longer-term and directly linked to a number of internal policies and decisions.

In the Czech Republic, GACR constantly tries to increase the representation of women in evaluation panels and discipline committees, including motivating organizations that submit nominations for members of evaluation panels.

In France, ANR has analysed the issue of unconscious gender bias in review processes and has thus set up a training and awareness process for committee chairpersons focusing on the issue of parity within committees and consortia and on the question of gender in selection bias.

In Ireland, the Irish Research Council (IRC) has taken several actions under its Gender Strategy for funding research. The introduction of gender-blind assessment for the Council's calls has resulted in an improvement in the representation of female researchers across disciplines. The Council has introduced a gender balance requirement in assessment panels for Council awards with a maximum 60:40 gender breakdown. All funded researchers involved in the organisation of conferences, networking or dissemination panels connected with their research project must give due regard to gender balance within any such events. They must all consider the language and audience in any surveys conducted as part of their funded research.

The Health Research Board (HRB) has undertaken a number of activities in the area of gender, including an independent observation to identify the potential for unconscious bias in the peer-review processes, and the organisations is now implementing the recommendations arising from this process.

The SFI Centres for Research Training Programme call was launched in 2018 in order to raise the percentage of female team members and is requiring applicants to submit gender targets for different levels of their research teams.

To ensure that the agency's review process remains unbiased, all SFI staff, including the executive committee and the SFI board, received sector-specific, data driven unconscious bias training by an

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external provider. Feedback and learnings from the session have been fed into process improvements within the organisation and have resulted in expanded briefing to peer reviewers and a reconsideration of the information provided to review panels.

In Norway, based on experience from the Research Council's BALANCE program 12 recommendations and measures have been developed that have documented a positive effect for better gender balance at Norwegian research institutions.³⁹

In Spain, the Law 14/2011 on Science, Technology and Innovation defines also aims at mechanisms to eliminate gender bias in the selection and evaluation procedures and adoption of gender equality policies in the eight Spanish Research Public Organisms.

In Sweden, the Swedish Research Council conducts gender equality observations of selected peer-review panels every 2-3 years. The results are published and are used e.g., in the training of staff, decision-making bodies and peer-review panels.

³⁹ See RCN brochure Recommendations & measures to improve gender balance in academia.

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Monitoring and transparency – an overview

To get an overview of the transparency in the organisations, the template had questions about the openness on the input side and on the output side. Tables 3 and 4 show the aggregated answers from 22 funding organisations in the 13 countries. Table 3 shows the input side.

Table 3. Transparency of evaluation process

Question	Yes	No	Partly	No answer/ Not applicab le
<i>Monitors composition of selection committees</i>	23	1		3
<i>Monitors composition of evaluation panels</i>	24	1		2
<i>Uses (national and) international evaluators</i>	25	2		
<i>Publishes evaluation criteria</i>	27			
<i>Has ethical guidelines preventing nepotism, etc.</i>	27			
<i>Publishes ethical guidelines (preventing nepotism, etc.)</i>	21	5		2
<i>Applicants can find out evaluators' names during the evaluation process</i>	3	22	2	
<i>Evaluators know applicants' names or sex</i>	24	1	1	1
<i>There is a right of reply or a complaint procedure</i>	18	8		2
Total	192	40	3	8

In the same way, the organisations were asked about the transparency and openness of the output of the application process. The answers are presented in Table 4.

Table 4. Transparency of outcome

Question	Yes	No	Partly	No answer/ Not applica ble
<i>Calculates gendered success rates</i>	23	4		
<i>Publishes gendered success rates</i>	21	6		
<i>Compares applicants to pool of potential applicants</i>	7	20		
<i>Monitors amounts of funding awarded per sex</i>	18	7	2	
<i>Other quality checks (eg. nepotism)</i>	22	3	1	1
<i>Gives information on granted projects (title, researchers, abstract, etc.)</i>	25	2		
<i>Applicants can find out evaluators' names after the evaluation process</i>	11	13	3	
Total	127	55	6	1

Monitoring and monitoring systems

Availability of data

Since most of the organisations today are able to deliver gender-disaggregated data on request, to *She Figures 2018* and to the template, the situation seems to have improved since 2009.

Specific monitoring exercises

According to the answers on monitoring in the template, the overall impression is that most organisations use some kind of monitoring of selection committees and evaluation panels. Most of the organisations monitor the success rates by gender and publish the results. Some also monitors the average amount of funding by gender. Less than half of the organisations compare the the gender balance among applicants with the gender balance in the pool of potential applicants. The reason for this might be more lack of access to relevant and reliable data, than lack of interest. However, there are also differences in the more specific approaches to what data to monitor and how to use the information.

In Austria, the monitoring of equal opportunities, have made the FWF able to present all the relevant data, updated on an annual basis, and thus illustrate the current situation of the FWF's structures, programmes, and processes. The ÖAW does not publish information on gender specific success rates, but success rates are monitored and evaluated. Measures are being considered since women seem to be less successful when applying for funding.

The ÖAW calculates gendered success rates for their programmes and publishes gendered success rates in the annual report, but does not compare applicants to pool of potential applicants.

In Belgium, F.R.S.-FNRS monitors if the odds to be funded depend on gender of applicants in its different funding schemes, to identify potential biases in order to prevent them in the future. The composition of panels is monitored to make sure there is no bias in the processes. The Fund publishes annually a “report on the state of gender equality” that is available on its website in French. The report contains indicators and explanations about the situation in terms of gender equality and what is done to tackle the potential issues.

In Canada, each agency publishes with a varying level of detail outcomes of the evaluation process through statistical packages or dashboards. All three agencies have improved on their reporting and are increasingly incorporating gender-based success rates but also monitoring other groups such as participation and success of visible minorities, person with disabilities and Indigenous populations.

For the Czech Republic both GACR and TACR continuously monitor the composition of all its managing and evaluation bodies and regularly publish this information. They also monitor the success rates of male and female applicants, and the results are published in annual reports or in other ways. Information on funded projects is also available to the public.

In Estonia, gender specific data, as part of other data and analyses, are published and regularly updated on ETAg's website. ETAg compares applicants to the pool of potential applicants, the data are available and used for internal purposes.⁴⁰ Grant amounts are fixed for different grant types, so there

⁴⁰ For submitted applications, numbers of applications are published by the main six fields, though not by sub-disciplines, themes or PI's gender.

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is no need to monitor specific amounts applied for, and awarded to, men and women. Monitoring takes place in terms of how many of these fixed-rate grants are awarded to PIs from each gender.

In Sweden, the three research councils monitor and analyse the outcome of the funding decisions. The gender balance of the boards and of the peer review panels are monitored as well. The results are published, e.g., in the respective Annual Report to the Government.

Transparency of the funding systems

Transparency is a way to ensure openness in the research system that allows for access to information on the evaluation processes and criteria that lies behind the funding decisions. In this section, some aspects that were identified in the report from 2009 are highlighted based on information in the templates which include openness of recruitment of evaluators and reviewers, pre-application information, anonymity in evaluation, feedback to applicants, right to complain and codes of conduct. These are illustrated with some examples from the organisations.

Recruitment of evaluators and reviewers

In Austria and at the FWF only international scholars and scientists are nominated by the FWF board members on the basis of the individual application. These researchers confirm no conflict of interest with the applicant. These reviewers remain anonymous during this evaluation process. The outcome of the evaluation will be transferred to the applicants by means of the full content of the review which will be sent to the applicant anonymized.

At the ÖAW, a committee of scholars and scientists is nominated by the Presiding Committee of the Austrian Academy of Science, usually for a certain period. They should be scholars and scientists working in Austria. The names of the members of the fellowship committees are published on the ÖAW website; but applicants cannot find out names of international reviewers. The reviews are anonymized before being sent to the applicants.

In Belgium, F.R.S.-FNRS monitors the composition of its panels and make sure there is no bias in the processes. It also takes into account the gender balance in internal procedures for the selection of remote reviewers.

In Canada, all three agencies have put in place a number of policies or guidelines with regards to the recruitment of evaluators and reviewers. For example, to ensure effective management of conflict of interest and confidentiality in the review process members recruited must abide to the Conflict of Interest and Confidentiality Policy of the Federal Research Funding Organizations (COIC)⁴¹. In addition, committee membership as a whole considers one or more of the following aspects: the need to cover the full range of research areas, relevant methodologies and experience for which the committee is responsible; the necessity for reviewing capability in both English and French so that applications in either official language can be evaluated by the committee; and, the need for gender and regional representation. In the future, the agencies plan to also ensure there is increased representation on selection committees from members of racialized groups, Indigenous Peoples and persons with disabilities (targets to be identified). The agencies publish on their websites lists of committee members.

⁴¹ http://www.science.gc.ca/eic/site/063.nsf/eng/h_90108244.html?OpenDocument

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In the Czech Republic, GACR's panel members are recruited based on nominations by legal and natural persons engaged in research in the Czech Republic. The selection of members for individual panels is then carried out by working groups composed of a representative of the RVVI (Council for Research, Development and Innovation), a member of the GACR presidium and a representative of the GACR scientific advisory board. Both GACR and TACR monitor on a regular basis the composition of their boards, committees and panels. In search for new panel members, GACR communicates in the call that they are (also) interested in suggested female members. In the past, they actively increased gender balance in their committees through appointing new female members.

In Estonia, ETAg implements a three-stage evaluation procedure. First, external peer reviewers are recruited by ETAg's research funding officers. Employing mainly foreigners as peer reviewers is a way to prevent nepotism. Second, field-specific Expert Panels negotiate field-specific ranking lists based on the external reviews. Third, the Evaluation Committee (i.e. a general evaluation panel consisting of experts from different fields) determines a final list of the proposals that are to be granted funding. Due to the country's smallness and tight competition and relatively low success rates, it may be difficult to eliminate all possible conflicts of interest when making the final funding decisions by the Evaluation Committee, even if their final decisions are based on the external peer reviews.

Members of the Evaluation Committee are nominated by the main research organisations in Estonia and appointed by the Ministry of Education and Research. Their names are published immediately after their appointment.⁴² The Evaluation Committee aims at disciplinary and institutional balance. Gender balance is considered through preferring the representative of the less represented gender in case of equal candidates: since a few past years, the institutions submitting the candidates have been informed that in the case of equal candidates, the candidate of the underrepresented gender will be preferred.⁴³

In Italy, the following procedures for the recruitment of the evaluators and reviewers are applied. As for the MUR, the National Committee of Research Guarantors (CNGR) appoints the selection committees and coordinates their activities, supervises the Register of Expert Peer Reviewers for Italian Scientific Evaluation (REPRISE). REPRISE is a register of Italian and foreign independent scientific experts (<https://reprise.cineca.it/en>).

The evaluation process for the MoH is based on the coordinated action of the subjects listed below:

- I. Office 3 (IRCCS Network and Current Research) and Office 4 (Research Planning and Calls for Targeted Research) of the DGHRI;
- II. the international auditors (referees);
- III. a group of independent supervisors (editors), identified by the MoH-DGHRI, with the task of verifying the consistency of the peer review assessments with the assessment guidelines and to report any anomalies to the final scientific evaluation panel;
- IV. specific final scientific evaluation panel, composed by eight (8) experts ($\leq 50\%$ residents in Italy), appointed by the MoH, after consulting the Technical Health Committee (THC);
- V. two (2) independent experts appointed by the THC to act as observers during the final scientific evaluation panel and speakers to the THC on the progress of the work;

⁴² <https://www.etag.ee/en/estonian-research-council/evaluation-committee/>

⁴³ <https://www.etag.ee/teadusagentuur/hindamismoukogu/hindamismoukogu-moodustamise-kord-ja-tookord/>

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VI. the THC through the audit.

As for the MAECI, the evaluation criteria of the projects collected through a bilateral call are agreed with the counterpart. For the Italian party, the projects evaluation is performed by the network of MAECI's scientific experts. Projects first are evaluated at the national level according to the agreed criteria. Following completion of the independent national assessment processes, the Bilateral joint commission, comprising representatives from the two countries, identifies the final list of successful applications.

In Sweden, the three research councils have in their Government instructions the directive to have gender balance in the review panels. At the three councils, the chairs of the panels are also given training in gender equality, and all members of the panels are given information on the question of gender bias in research evaluation. In the Swedish Research Council, the gender balance among chairpersons of the (about 90) peer review panels is considered also.

Pre-application information

In Austria, at the FWF and at the ÖAW website, applicants can find criteria to assess the applications (applicant's academic qualification and ability to undertake the project, scientific quality of the research project, including originality, research questions and methodology) and information about the selection process.

In Belgium, F.R.S.-FNRS publishes the names of panel members. The eligibility and evaluation criteria are also publicly available, in the Guide for applicants and in the evaluation guide of the call. It solicits international experts to perform remote evaluations. In the FWO all evaluation procedures are listed in the "Regulations of the Research Foundation – Flanders governing the internal and external peer review" that are available on the website.

In the Czech Republic, the evaluation process and criteria are published, as is the code of ethics, which is separate for evaluators, applicants and office staff.

In Estonia, pre-application information on both the requirements and evaluation procedure is provided to the applicants both in Estonian and in English on the ETAg web page. Live info days are also organised, and applicants are encouraged to submit queries by phone or via email.⁴⁴ Committee members and field-specific expert panel members are public, as mentioned above.

In Italy, information on the application requirements and procedure as well as on the evaluation criteria and procedure are published on the websites of the ministries considered in the present report at the time of the launch of the respective calls.

In Sweden, the evaluation criteria and other information on the evaluation process can be found on the web pages of the respective research council.

Anonymity in evaluation

In Austria, at the FWF the names of the evaluators are kept confidential to applicants. Names of the standing selection committee members are however generally published on the FWF website before the review process is completed.

⁴⁴ E.g. for the last call <https://www.etag.ee/en/funding/research-funding/personal-research-funding/call-2020/>

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In Canada, the names of the evaluators and external reviewers on a given application are kept confidential. The names of selection committee members are however generally published on each of the agencies' websites either before or after the review process is completed. CIHR, for example, posts Peer Review Committee membership lists approximately 60 days after funding decisions have been published on the CIHR website.

In Belgium, the panel members' names are available on the website of the F.R.S.-FNRS. Remote peer reviewers always remain anonymous. Names of panel members are listed on the website of FWO, unless a panel member objects to this.

In the Czech Republic, applicants do not know the name of the evaluator during the evaluation process, but they know the names of all members in the panel.

In Estonia, the applications are evaluated first by external peer reviewers who remain anonymous for the applicants (single-blind peer review, as the applications are not anonymous), secondly by field-specific expert panels, and thirdly by the Evaluation Committee. The names of the peer reviewers remain anonymous even after the evaluation process. The names of the Evaluation Committee and expert panel members are always public.

In France, names of committee members are published at the end of the evaluation process. However, names of external reviewers are not published.

In Ireland, applicants can see a list of reviewers that SFI uses, but not specific to their application.

In Italy, the name of the evaluators cannot be published by the ministries considered in the present report, due to data protection. In all cases, information is publically released on granted projects (title, researchers, abstract, etc.). The PIs need to develop a data management plan and disseminate their own results.

In Spain, the evaluation system is peer-reviewed, so it is the scientific community itself who evaluates the proposals. Applicants do not know the names of the – at least - four external experts that review every proposal at a first stage. The signature on absence of conflict of interest is required for the evaluators. In a second stage, a scientific-technical commission made up of the AEI's scientific panels integrates all the evaluation reports. Members of the scientific evaluation panels are published in the AEI website.

In Sweden, the applicants at Formas can find out the names of the whole evaluation panel, but not the name of individual evaluators per application, after the call is closed and a decision has been reached.

Feedback to the applicants

In Austria, at the FWF the final decision is taken by the FWF board. The decision is communicated to the applicants with the anonymized complete written reviews. At the ÖAW, the final decision is made by the committee and is communicated to the applicants with the complete written review (which has been anonymized).

In Belgium, the selected projects are listed on the website at the end of each evaluation procedure. Furthermore, F.R.S.-FNRS informs the applicant about the funding decision for its proposal and

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transfers to the applicant the final evaluation report (given by the Scientific Commission/panel members), and the evaluation reports by the remote reviewers on an anonymous basis.

In Canada, all applications submitted to the three agencies are evaluated by reviewers who provide an overall assessment of the application. This assessment is performed using the application requirements and review criteria established for each individual competition, as seen in the relevant funding opportunity. In addition, the program staff captures the discussion during the peer review deliberations. All external reviewer reports as well as feedback on the application, as applicable, are shared with applicants. The agencies publish the selection committee membership lists,⁴⁵ and information of all successful applications by competition through their Funding Decisions Databases.⁴⁶ The project information posted in the database includes, the project title, names of the applicants, the funding amount and a short abstract.

In the Czech Republic, specifically in TACR, the applicants receive the materials or written summaries of each step of the evaluation process (peer reviewers, rapporteur, evaluation panel, board of TACR). The names of evaluators are anonymized.

In Italy, information is publically released on granted projects (title, researchers, abstract, etc.). As for the MoH, the entire evaluation procedure is monitored by the competent Offices 3 and 4 of the MoH-DGRIH, who report any anomalies to the Technical Health Committee. For each meeting of the final scientific evaluation panel, minutes are drawn up and any determination leading to changes, albeit partial, to the score assigned by the auditors is reported. The minutes are sent to the THC for the audit phase and made public on the MoH's website, together with the publication of the final ranking.

In Estonia, both the peer reviews (text and scores) and final statement by the field-specific expert panels and the Evaluation Committee are made available to the applicants.

Right to complain

In Austria, at the FWF one may complain to the FWF executive board if the applicant believes that FWF has made a formal mistake or any new information has been accomplished. In addition, there is a process to resubmit an application. At the ÖAW, there is no defined right of reply or a complaint procedure but there is a standardized process for revising and re-submitting an application after rejection, which is published on the ÖAW website. At the FFG, the right of reply or a complaint procedure is not a general rule, only if the process was not applied properly.

In Canada, the three agencies have appeals processes in place that allow applicant to reply or complain about the evaluation process. For the most part, only procedural errors are taken into consideration.

In the Czech Republic, applicants have the right to file a complaint about the evaluation process or other errors made during the evaluation process.

In Estonia, a right to complain is in place.⁴⁷

⁴⁵ <https://cihr-irsc.gc.ca/e/39399.html>

⁴⁶ <http://webapps.cihr-irsc.gc.ca/decisions/p/main.html?lang=en>

⁴⁷ There had been no major revisions of evaluation results over the past years, but in 2020 an applicant used the option to turn to the court, not being satisfied with the outcome of their complaint. The court approved ETAg's evaluation procedure but found that ETAg's reply to the specific complaint had not been argued sufficiently well. ETAg agreed to review the evaluation result.

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In Spain, applicants could argue for procedural or discrimination issues, but there is no rebuttal phase in the current system of evaluation.

Codes of conduct

Naturally, most research funders have systems for dealing with conflicts of interest for evaluators. However, in the answers to the template, there were specific information from a few countries and organisations only.

In Austria, at the FWF and at the ÖAW, all reviewers receive guidelines for avoiding conflicts of interest and are asked to inform about any doubts they might have. The FWF is committed to ensure that the rules of sound research practice and internationally recognised ethical standards are observed.

In Belgium, each panel member at the FWO has to indicate whether he/she has a conflict of interest for each application assigned to a panel, all according to the organisations rules for conflicts of interest and how to deal with them. To attain a maximum of impartiality, the FWF strives to avoid conflicts of interest, to build in checks and balances at all stages of its procedures and to communicate clearly its practices and decision-making processes.

On the F.R.S.-FNRS side, each expert selected to evaluate a funding proposal receives a letter of appointment that constitutes an agreement between the F.R.S.-FNRS and the expert. It specifies the precise terms and conditions for the expert: it imposes respect of a code of conduct and lays down essential regulations in terms of confidentiality. Upon information provided by the experts, F.R.S.-FNRS has put in place a mechanism that ensures they do not face any conflict of interest regarding the proposals they are invited to evaluate. To that end, experts must sign a declaration stating that there is no conflict of interest at the time of the appointment and that they commit to informing the F.R.S.-FNRS in case such a conflict would arise during the fulfilment of their tasks. All the potential conflicts of interest that may raise questions about the impartiality of the expert's evaluation (i.e. rules to prevent potential conflicts of interests) are described in the evaluation guide available online.

In Estonia, the external peer reviewers sign a Declaration Confirming Confidentiality and the Absence of Any Conflict of Interest based on a list of specified criteria such as close personal relationship and scientific cooperation. This obligation is part of their agreement with the Estonian Research Council. Members of the Evaluation Committee and its field-specific expert panels also sign a Declaration of Impartiality and Confidentiality by which they commit to carrying out their work with complete independence. They declare all proposals with which they have a conflict of interest and refrain from discussion and assessment of those proposals.

In Italy, all reviewers receive guidelines for avoiding conflicts of interest and are asked to inform about any existing conflicts of interest.

In Spain, the signature on absence of conflict of interest is required for the evaluators at the AEI.

In Sweden, each panel member at Swedish Research Council has to indicate whether he/she has a conflict of interest for each application assigned to a panel, all according to SRC's rules concerning conflicts of interest.

Gatekeepers and gatekeeping of research funding

This section discusses the gender composition and recruitment of gatekeepers of research funding in different national settings, and highlights various gate-keeping processes related to research funding, such as evaluation processes, criteria, and eligibility.

As pointed out by Husu (2004)⁴⁸, the lack of gender balance among gatekeepers of research has consequences for many reasons. It may have an impact on the contents of decisions, on the image of the organisation, on gender awareness or lack thereof in the organisation but also on academic careers of women and men. Gatekeepers are in a key position to influence the definition, evaluation and development of scientific excellence. Gatekeeping processes can control or influence the entry or access to an arena, allocation of resources and information flows, setting of standards, development of the field or the agenda, or the external image of that arena. The double role of gatekeeping is noteworthy: gatekeeping can function as exclusion and control, on the one hand, but also facilitate and provide opportunities, on the other.

In the 2009 report, research funding decision-making was seen as including numerous gatekeepers at macro, meso and micro level. A gatekeeper was defined as a person who controls access to something or somebody and referring to Robert K. Merton (1973) gatekeeping was seen as the ‘fourth major role’ of a scientist, in addition to that of researcher, teacher and administrator, affecting contemporary science in every aspect. Gatekeepers of research funding include members of national science and technology councils, funding organisation directors and managers, funding organisation board members, research council and sub-council members, staff members of funding organisations, individuals involved in evaluation committees and panels, and reviewers. Much of this still holds for the situation today.

Gatekeepers of research funding

In 2009, the under-representation of women among academic gatekeepers and leading positions in science and science policy organisations was large according to the *She Figures 2006* data on scientific boards, concerning the year 2004. Women were under-represented in the scientific boards in most EU countries. Only in Finland, Sweden and Norway did women constitute more than 40 percent of the boards and only in the UK, Bulgaria and Denmark above 30 percent.

In 2017, women made up 27 percent of boards in the EU according to *She Figures 2018*. The respective proportion at the national level ranged from 12 percent in Croatia to 54 percent in Norway. In nine out of the 32 countries with available data (NO, LU, SE, RO, BG, IS, FI, IE and SI) women constituted at least 40 percent of board members, a picture similar to what was reported in 2014.

Among the leaders of boards, gender equality was far from achieved. Women represented 20 percent of board leaders in the EU in 2017. At the national level, the proportion of women among board leaders ranged from 0 percent (CZ, FR, HR, CY, MT, PT, RO and SK) up to 73 percent in Bulgaria and 80 percent in Spain. Eight countries in total (AT, SE, IS, NL, LV, IE, BG and ES) had more than 40 percent women

⁴⁸ Husu, Liisa (2004), Gate-keeping, gender equality and scientific excellence, pp 69-76 in European Commission: *Gender and Excellence in the Making*, Luxembourg: OPOCE

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among board leaders. However, the fact that 15 countries either had no women or less than 20 percent women among board leaders shows that the pace of progress towards gender equality remains slow.

In the template for the present report, the organisations were asked to describe the processes of recruiting to their boards as well as the compositions of the boards. The recruiting processes are, as in the 2009 report, very varied between countries and sometimes differs between organisations within countries. Appointments to boards, panels or committees can be made based on proposals from other boards, which can be internal to the organisations, or from external experts. On the other hand, there are also processes with open calls for panel members or votes for members before appointments are made.

Austria

The FWF has set out a gender policy, which includes Gender Mainstreaming and equal opportunities. For this reason, the nomination of international experts the organisations reporters aim for at least 30 percent participation of female researchers within the reviewer pools as well as within different jury and boards (40 percent or more).

In the AWS, a specific selecting committee is appointed for each funding program with procedures developed to best suit the program at hand.

In the ÖAW a committee of scholars and scientists is nominated by the Presiding Committee of the Austrian Academy of Science, usually for a certain period. They should be scholars and scientists working in Austria. These committee members assess the applications and nominate reviewers, predominantly from abroad. Women and men should be represented equally in all research areas.

Belgium

In Belgium, at F.R.S.-FNRS panel members are appointed by the Board of Trustees of the Fund based on proposals made by a panel named the “Comité d’Accompagnement”. This panel is regularly informed about the gender equality among panel members and are also reminded about the importance of reaching gender balance among panel members.

At the FWO the procedure for selecting committee members for the expert panels in the basic research projects uses an open call for new panel members with a specific encouragement for women to apply. All applications are screened on the basis of scientific excellence regardless of gender, social circumstances, etc. New panel members are formally appointed by the FWO Board of Trustees on the advice of the Domain Boards, which are made up of the scientific chairs of the panels in one domain. At least one third of the international scientific chairs are women. These bodies follow the FWO regulations that stipulate that *“no more than two-thirds of the appointed members across all panels of the same application programme, should be of the same gender.”*

In the EOS-programme projects, the committee members are selected from a pool of experts, with senior scientific profiles, different scientific backgrounds, employment sector, gender and nationality, as a starting point to form the expert panels.

Canada

In Canada, committee members are selected from both the Canadian and International research community, from academic institutions but also from industry, non-profit organizations and

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governmental research organizations. The recruitment is done by staff of the agencies, based on the required expertise. Selection committees are voluntarily participating in the review process.

Cyprus

In Cyprus, evaluation includes remote evaluation, where evaluators are selected for each project based on their expertise. Evaluations can also be performed by a Scientific Evaluation Committee, where the choice of evaluators is based on their expertise, however effort is occasionally made to have a fair representation of both sexes. Internal evaluation is performed by the Scientific Officers of the Foundation. In this case, the assignment of projects to the Officers does not take into account any gender-related criteria.

Czech Republic

In the Czech Republic and the GACR the evaluation panels are selected in the following way. Based on the invitation of the GACR presidium, legal and natural persons engaged in research in the Czech Republic submit nominations for panel members. Calls for nominations of candidates for the evaluation panels of the GACR contain recommendations to take into account the representation of women when submitting proposals. The selection of members for individual panels is then carried out by working groups composed of a representative of the Council for Research, Development and Innovation (RVVI), a member of the GACR presidium and a representative of the GACR scientific advisory board.

The discipline committees of the GACR are a professional advisory body evaluating grant project proposals, consisting of 10 to 20 members. Discipline committees consist of chairmen and vice-chairmen of evaluation panels. The chairman and vice-chairman of the discipline committee are appointed by the presidency for a two-year term of office from among the persons elected as candidates for the positions by secret ballot in the relevant discipline committee.

In TACR, the members of evaluation panels are selected by the Scientific Board of TACR and appointed by TACR's presidium. According to the formal rules governing this process, gender balance should be taken into account when appointing panel members. However, most evaluation panels remain unbalanced.

Estonia

Estonia has a small number of major research institutions and most applications are submitted by three or four main universities. ETAg's Evaluation Committee and field-specific expert panel members mainly come from these same universities. ETAg's Evaluation Committee decides the final ranking of the applications and it is composed of the representatives of the same few research institutions whose researchers are applying for funding. To reduce the potential influence of personal contacts or other types of conflict of interest, finding foreign peer reviewers is attempted, only using peer reviewers from Estonia as the last resort.

France

The ANR seeks and encourages parity in Scientific Evaluation Panels and also encourages scientific communities to systematically consider sex and/or gender aspects in research projects in all fields and in review processes.

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Ireland

In Ireland the IRC, SFI and the HRB all strive to achieve at least 40 percent representation of male or female panels across any given panel domain. Panels are selected from a pool of international peer reviewers by staff within the agencies based on field specific requirements.

Norway

In Norway, the RCN restructured its boards 2018-2019, reducing from three to two levels of boards and reducing the total number of selecting committees or portfolio boards from approximately 45 to 15. The selecting committees were appointed by the RCN Governing Board in a structured process, including nomination from research organisations, civil organisations and other private and public organisations. Based on the nominations RCN administration suggested the composition of each selecting committee/portfolio board, balancing for each committee and the total several criteria, among them representation from different parts of the research and innovation institutions, research discipline, geography, age, gender, competence in research and innovation policy, etc.

Spain

In Spain, the AEI conducts a selection process for the presidency of the scientific evaluation panels among researchers of well-known reputation. Presidents of the scientific panels select their collaborators, in close cooperation with the AEI. The AEI promotes a balanced composition of these committees, or at least an equivalent representation to that of the discipline.

Sweden

In Sweden, most members of the three research council's boards, and the scientific councils of the Swedish Research Council, are chosen by the HEI researchers through an election process every three years. The Government Ordinance for the election process ensures a gender balance. A few board members are appointed directly by the Government.

Gatekeepers by gender in different national settings

In 2009, the countries were grouped according to the proportion of women among gatekeepers based on the *She Figures 2006* data for the 19 countries represented with data. The interval for the groups where more than 30 percent (Bulgaria, Finland, Norway, Sweden and UK), between 20 and 30 percent (Estonia, France, Hungary, Latvia, Netherlands, Slovenia and Switzerland) and less than 20 percent (Belgium only the Flemish Community, Cyprus, Czech Republic, Germany, Italy, Poland and Slovak Republic). All countries were not represented in the *She Figures 2006* data: Austria, Greece, Israel, Luxembourg, Malta, Portugal, Romania, Spain and Turkey were missing.

The data from *She Figures 2018* shows a quite different situation. There was a total of 32 countries with data, and the number of countries with more than 30 percent women in scientific boards has increased from five countries to 17 (Austria, Bulgaria, Denmark, Finland, France, Iceland, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Romania, Slovenia, Spain and Sweden). The number of countries with 20 to 30 percent has increased from seven to nine (Bosnia Herzegovina, Germany, Hungary, Israel, Italy, Poland, Portugal, Slovakia, and Switzerland). Finally, the number of countries with less than 20 percent women in boards has decreased from seven to six (Belgium, Croatia, Cyprus, Czech Republic, Estonia and Greece). Data was not available for United Kingdom, Albania, North Macedonia, Montenegro, Serbia, Turkey, Moldavia, Faroe Islands, Ukraine, Tunisia, Georgia or Armenia.

Since Canada is not included in the *She Figures 2018* data, a short description of the situation is given here, based on the information from the template. As mentioned before, the agencies in Canada are undertaking a collaborative approach to EDI via implementation of the Tri-Agency EDI Action Plan. Peer reviewers in some funding programs are required to complete education and training on bias in peer review before adjudicating funding applications. The agencies are also working on putting in place mechanisms to capture self-identification data about their selection committee members. Until this is in place, the agencies have established guidelines to increase diversity including gender representation. Canada's 2017 Fundamental Science Review Panel recommended that the Tri-Agencies do more to develop recruitment strategies that help build peer review panels that are more reflective of the diverse composition of the Canadian research community. Since then, the agencies have articulated their commitments and have undertaken a collaborative approach to identify, recruit, and retain reviewers through a Tri-agency EDI Action Plan.

The countries in the GENDER-NET Plus consortium are grouped according to the data in *She Figures 2018* as described above, However, the data from the template makes it possible to take a closer look at the GENDER-NET Plus countries, than it is with the aggregated *She Figures 2018* data.

The data from the template describes the situation in the separate funding organisations. The information is also on different kinds of boards or committees, which differs a lot between the countries. The information gives a more diverse picture, since the proportions differ between boards in different organisations within the countries and between the panels for different scientific fields.

An overall conclusion can be that the countries that have a share of women in scientific boards over 30 percent, tend to have high shares in the more detailed information. In the countries with less than 30 percent the variation is high, and for some of the reported panels or boards the share of women is higher than in the *She Figures* data.

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Countries with over 30 percent representation of women in scientific boards in *She Figures 2018*

Austria

In Austria, the FWF has reached equality within its strategic bodies such as the executive and supervisory board. The participation within board of reporters still has to reach equality.

In the FFG, the share of proposal evaluations carried out by female experts is monitored. It increased from ca 20 percent in 2015 to 30 percent in 2019.

Austria - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee 2019	# Women	# Men
FWF – Austrian Science Fund	Executive Board	3	2
FWF – Austrian Science Fund	Supervisory Board	7	3
FWF – Austrian Science Fund	Strategic Advisory Board	4	4
FWF – Austrian Science Fund	Board (Reporters of the FWF)	19	37
FWF – Austrian Science Fund	Jury START Programme/ Wittgenstein-Award	5	7
FWF – Austrian Science Fund	Jury Programme for Arts-based Research (PEEK)	3	3
FWF – Austrian Science Fund	Jury Science Communication Programme	3	3
FWF – Austrian Science Fund	Jury Doc.Funds	4	7
FWF – Austrian Science Fund	Jury Young Independent Researcher Groups	7	6
ÖAW	Fellowship committees	40	54
FFG	Selection committee	30%	70%

France

France - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
ANR	Executive Committee	2	4
ANR	Board	8	11
ANR	Scientific Steering Committee	4	3

The proportion of women within the scientific evaluation committees of the ANR represents a third, which can be compared with the proportion of women among research staffs of the European Union and several countries members of the OCDE, which also represents a third. Data relating to proportion of women in evaluation committees according to scientific disciplines, or their status within committee (chairperson or member) are not available in a format that could be used for a more precise analysis. This statistics must be integrated to the action plan.

Ireland

In Ireland, the Selection Committees are appointed for each new award to be reviewed and the breakdown is typically 50:50 men: women. If this cannot be achieved the split is no more than 60:40.

The IRC Council (Board) also has an even split in gender with appointees being chosen by the Minister for Higher Education. The HRB board is split 40:60 men:women and SFI's board is split 40:60 women:men.

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Norway

In Norway the total number of appointees (163) to all committees, 83 were women (51 percent). For each selection committee the gender balance was maintained within a 60-40 limit, which is in line with national legislation.

Norway - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
Research Council of Norway	Selection committees (15 in total)	83	81

Spain

In Spain, the AEI promotes a balanced composition of the committees, or at least an equivalent representation to that of the discipline. The system of evaluation committees was different at the General State Administration level in 2009. Since 2016, the structure of scientific panels and the scientific-technical commission is the rule for all the funding instruments of the AEI.

Spain - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
AEI	Scientific panels (President)	7	12
AEI	Panels composition	118	141
CDTI	Board	8	4
ISCIII	R&D Biomedicine	140	153

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Sweden

In Sweden, the four main research funders have boards, and scientific councils, with a mix of elected and appointed members.

Sweden - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
Vinnova	Board	5	3
Formas	Board	8	5
Forte	Board	7	6
Swedish Research Council	Board	4	5
Swedish Research Council	Scientific Council for Medicine and Health	6	5
Swedish Research Council	Scientific Council for Natural and Engineering Sciences	4	5
Swedish Research Council	Committee for Educational Sciences	6	5
Swedish Research Council	Council for Research Infrastructures	5	8
Swedish Research Council	Committee of Clinical Therapy Research	5	8
Swedish Research Council	Committee for Development Research	5	4

Countries with 20 to 30 percent representation of women in scientific boards in *She Figures 2018*

Israel

For Israel, the report *The Current State of Gender Equality in Research Funds 2017-2018* reveals that in every field except for Agriculture there is a majority of men in the role of committee chairperson, however the gender gap varies between fields. Women constitute 42 percent of the chairpersons in interdisciplinary science and 46 percent in social sciences. The largest gaps are found in computer sciences (0 percent women), physical Sciences (13 percent) and Chemical sciences (17 percent). In other fields women comprise 23-38 percent of all committee heads, except in Agriculture where women are in majority (67 percent). In most field rates of committee heads, correspond to the rates of women in academic staff. Women are underrepresented as committee members in all fields however this inequality can be a result from underrepresentation of women among academic staff. The inequality of women in certain areas of the academic world is copied into the funding committee composition. Computer science is the only field in which there is major underrepresentation of women in committees compared to their proportion of academic staff (Ratzon and Herzog, 2020).

Italy

Italy have different kinds of committees and in the different organisations, and the gender balance varies between them, having the most balanced committees in humanities, social and medical sciences at MoH. However, in medical sciences at MUR the balance is almost as uneven as in the technical and natural sciences.

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Italy - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
MAECI - DGSP-IX*	Scientific Network	6	25
MUR**	Natural Sciences	13	32
MUR**	Eng. And Technology	4	19
MUR**	Medical Sciences	8	21
MUR**	Agricultural Sciences	1	5
MUR**	Social Sciences	9	12
MUR**	Humanities	7	5
MoH***	Medical Sciences	4	6

Countries with less than 20 percent representation of women in scientific boards in *She Figures 2018*
Belgium

In Belgium, the F.R.S.-FNRS reformed all panels in 2010 and are in a process of continuously increasing the proportion of women. For FWO the country specific Annex of the 2009 reports states that “FWO publishes the members of the review panels and seem to be able to meet the quota, although differences occur between disciplines. Before the quota the committees had only 11 percent female members. Over the past few years this increased to 25 percent.” For 2020, 36,6 percent of all expert panel members at FWO (38,3 percent in biological sciences, 40,5 percent in humanities, 39,8 percent in social sciences, 37,5 percent in interdisciplinary research, 33,7 percent in medical sciences and 34,9 percent in science and technology) are female, indicating an upward trend compared to the 2009 report and meeting the government quota of a maximum two thirds of one sex.

Belgium - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
F.R.S.-FNRS	Regular panels	50	145
FWO	Overall panel composition	274	474

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Cyprus

Cyprus - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
Research and Innovation Foundation	Evaluators Used	453	2147

Czech Republic

In the Czech Republic, the GACR in 2019 had a total of 415 experts in 39 panels, of which 332 were men and 83 were women. The overall representation of women in the panels was 20 percent.

A total of 532 scientists were nominated, of which 122 were women (22.9 percent). Of the total number of new panel members of 190 scientists, a total of 35 were women, the share of women in the number of panel members was 18.4 percent. Of the total number of nominated women, 28.7 percent were appointed to advisory bodies. Considering that the share of women scientists in the Czech Republic is around 26 percent, the success rate of selected women panellists out of the nominations is above average.

Czech Republic - Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
GACR	Panel members	83	332
GACR	Presidium	2	3
GACR	Supervisory Board	2	8
GACR	Scientific Advisory Board	1	10
TACR	Panel members	93*	347*
TACR	Presidium	1	4
TACR	Supervisory Board	3	7
TACR	Scientific Advisory Board	0	11

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Estonia

According to the 2009 report (p. 41), women in Estonia were "heavily under-represented among gatekeepers" - a situation that is still true, especially for those bodies where various institutions are represented by one member. The situation has changed for ETAg's Evaluation Committee and expert panels, as R&D institutions who nominate them are explicitly asked to prefer the less represented gender in case of equal candidates.⁴⁹

Estonia - Number of men and women in selection/funding committees in research funding organisations. May 2020⁵⁰, and in the previous round (in brackets)⁵¹

Name of organisation		Type of committee	# Women	# Men
Estonian Council	Research	Evaluation Committee (main panel)	7	14
			(8)	(14)
Estonian Council	Research	Natural sciences expert panel	12	31
			(15)	(30)
Estonian Council	Research	Engineering and technology expert panel	3	7
			(0)	(8)
Estonian Council	Research	Medical and health sciences expert panel	2	6
			(7)	(4)
Estonian Council	Research	Agricultural and veterinary sciences expert panel	4	5
			(3)	(3)
Estonian Council	Research	Social sciences expert panel	1	7
			(3)	(6)
Estonian Council	Research	Humanities and the Arts expert panel	7	3
			(9)	(2)

The Evaluation Committee members are appointed by the main research organisations in Estonia, and their names are published immediately after their appointment. The Committee consists of the main panel and field-specific Expert Panels.⁵² The main panel consists of a selection of expert panel members, aiming at disciplinary and institutional balance. Gender balance is considered through preferring the representative of the less represented gender in case of equal candidates.

⁴⁹ E.g. for Research and Development Council of the Estonian Government:
<https://novaator.err.ee/655507/professor-tahab-teadus-ja-arendusnougogusse-sookvoote>

⁵⁰ <https://www.etag.ee/en/estonian-research-council/evaluation-committee/expert-panels-2/>

⁵¹ The lists often change as those who are applying in that particular round cannot participate.

⁵² <https://www.etag.ee/en/estonian-research-council/evaluation-committee/>

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ETAg recruits committee member candidates from positively evaluated R&D institutions. Since a few past years, the institutions submitting the candidates have been informed that in the case of equal candidates, the candidate of the underrepresented gender will be preferred.⁵³ New members are appointed by the Ministry of Education and Research. An expert panel is formed for each of the six research fields as depicted in the following table.

Among the current main institutions of the Estonian Research and Development System there is also a Research Policy Committee that advises the Ministry of Education and Research.⁵⁴ In May 2020, there were 14 men and 9 women (including the minister herself) in the Committee. The Council of ETAg (the supervisory body which plans the activities of ETAg, organises its management and carries out supervision; members are appointed and removed by the minister for education and research) included five men and one woman.⁵⁵

Evaluation processes and criteria

The use of peer review with external experts is the common way of evaluating the scientific quality and contents of research projects. The differences between funders are more on the steps in the selection processes and in the use of different criteria to sort out projects on the way to final decisions. In some cases the gender balance of the research team can be among the criteria. Gender balance is also highlighted in the recruitment of evaluators, see the section *Gatekeepers of research funding* above.

Austria

In the FWF gender awareness, a balanced participation of female and male researchers is a funding decision-making criterion in three programmes (Young Independent Researcher Groups, Special Research Programmes, and Research Groups). Since the beginning of 2019, all applicants have been required to reflect explicitly on the gender dimension of their project's research approach. These statements are also taken into consideration when evaluating the project.

In the FFG gender criteria are an integral part of all funding schemes and help to ensure equal opportunities:

- Gender aspect in the project content
- Gender-specific balance in the project team
- Gender aspects with regard to commercialization

Internal gender quality trainings and an internal gender working group, as well as membership in international programmes like CoP FORGEN, ensure that the organizational awareness and knowledge on gender equality is high.

In the ÖAW, the evaluation process is organised as a peer review. For each program, a committee of scholars and scientists, nominated by the Presiding Committee of the Austrian Academy of Sciences, create a shortlist of applications to be reviewed by experts from abroad. The final decision is made by

⁵³ <https://www.etag.ee/teadusagentuur/hindamismoukogu/hindamismoukogu-moodustamise-kord-ja-tookord/>

⁵⁴ <https://www.hm.ee/et/teaduspoliitika-komisjon>

⁵⁵ <https://www.etag.ee/en/estonian-research-council/board-of-estonian-research-council/>

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the committee and is communicated to the applicants with the complete written review, after it has been anonymized.

Belgium

In Belgium, all F.R.S.-FNRS evaluation processes have been updated since 2010 in accordance with international standards. There are rules to prevent potential conflicts of interests, the names of panel members are published, as are the evaluation criteria. The names of remote peer reviewers are not published however. For FWO all evaluation procedures are listed in the “Regulations of the Research Foundation – Flanders governing the internal and external peer review” which is available on the website.

Canada

In Canada, the three agencies have put in place a number of policies or guidelines to ensure transparent evaluation processes. These include but are not limited to Guidelines governing membership of selection committees and panels, Conflict of Interest and Confidentiality Agreement for Review Committee Members, External Reviewers, and Observers, and Published evaluation criteria. Agencies also publish on their websites lists of committee members and have mechanisms in place to allow applicant to reply or complain about the evaluation process.

The three agencies have recognized a number of barriers that can affect the transparency or accountability of funding procedures and perpetuate inequities. As part of the Canada Research Chairs (CRC) program, the evaluation of the program in 2016 revealed consistently low success rates for women. To ensure greater equity, the agencies have instituted measures requiring universities to abide by the program’s accountability and transparency requirements and clearly publish on their websites information related to the management of their chair allocations.

Cyprus

In Cyprus, the evaluations performed by the RIF use the following steps. A preliminary check is performed partly by the electronic system of the organisation and partly by a Scientific Officer of RIF and includes criteria such as the language used, the duration, requested funding etc. The evaluation procedure can take the form of remote evaluation, scientific evaluation or internal evaluation.

Evaluators for the remote evaluation are selected for each project based on expertise. The sex of the evaluator is not a factor for his/her selection. For the Scientific Evaluation Committee, the evaluators are not only chosen based on expertise but occasionally an effort is made on having a fair representation of both sexes. Internal evaluation is performed by the Scientific Officers of RIF; the allocation of the proposals to the Officers does not take into account gender.

Czech Republic

In the Czech Republic, the GACR has removed barriers that would affect the transparency of the evaluation processes. The only restrictions that may appear to be negative in connection with transparency is that applicant does not know the names of the specific evaluators of his or her project, only the names of all the panellists in the panel (regulated by Act 130/2002 Coll). At TACR, each project is evaluated by 2–3 remote peer reviewers and one rapporteur, who is a member of an expert evaluation committee or a board of the programme. The final decisions are taken by the presidium of TACR.

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Estonia

In Estonia, the grant applications are evaluated first by external peer reviewers who remain anonymous for the applicants (single-blind peer review, as the applications are not anonymous), and then by ETAg's field-specific Expert Panels and the Evaluation Committee of the Estonian Research Council. Both the external peer reviewers as well as the Evaluation Committee and its field-specific expert panel members are selected based on merit. As mentioned above, in case of the Evaluation Committee, representatives of the under-represented gender are preferred in case of equal candidates.

The field-specific expert panels rely on the reviews of the external evaluators and the Evaluation Committee relies both on the reviews of the external evaluators and the expert panels. The Estonian Research Council's Evaluation Committee makes the final decision on the applications' scores and confirms the ranking lists. A principle is that in case of the applications of equal standing, the Evaluation Committee is asked to prefer the applications whose principal investigator represents the under-represented gender in that area. For team grants the gender balance within the research team is among the applications' evaluation criteria.

Ireland

Evaluation in Ireland is conducted by international peer review. The names of the reviewers are not published but the criteria for the evaluation are available on the website along with the process map. In SFI the applicants are given the opportunity to respond to comments received from the first stage of peer review, though the identity of the reviewer is not revealed. In the IRC, the evaluation process includes the anonymization of the applicants personal details regarding gender, and applicants and referees are encouraged to use non-gendered pronouns.

Italy

For Italy, none of the funding organisations is considered to have barriers affecting transparency or accountability. Taking into consideration the overall evaluation procedures, anonymity of reviewers is not considered a barrier to achieve transparency.

At the MoH financing of the Current Research takes place annually after the verification, based on competitive parameters of the scientific research, assistance, and collaboration activities with other bodies at national and international level carried out in the previous year. The Targeted Research implements the priority biomedical and health objectives of the NHRP, through the funding of research projects approved in the context of competitive yearly calls for proposals. Targeted research, funded through yearly calls for proposals, is one of the main tools for achieving the objectives of the NHS policies.

Norway

In Norway, the applicants must submit all information in the applications in English. Most grant applications submitted to the RCN are assessed by referees who are experts in the relevant thematic area and subject field. The RCN recruits experts from internationally leading research and innovation circles.

Referees assess each grant application in relation to the assessment criteria and priorities set out in the call for proposals. Proposals are assessed by panels comprising multiple referees. All referees are reviewed for impartiality before they are cleared to assess grant applications. The external referees

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assign marks for each of the three assessment criteria and may be asked to rank the individual applications in relation to one another. Applications that are assessed in relation to the assessment criterion will receive a separate mark for this.

The RCNs scientific advisors will draw up a recommended ranking of the submitted grant proposals. Recommendations are based on the referee assessments and may incorporate an assessment of relevance and an overall assessment of all the applications submitted in response to the call.

The final decision regarding the approval or rejection of grant proposals is normally taken by one of the portfolio boards (selecting committees). The portfolio boards are responsible for ensuring that the funded proposals as a whole will lead to optimal achievement of the board's objectives.

All applicants receive the grounds for the funding decision. After application processing has been concluded, applicants will receive the referee panel's assessment. A list of all referees used to review grant applications is published on the website and a list of all projects granted funding is also published there.

Spain

In Spain, the evaluation system has evolved since 2009 and today the State Research Agency is in charge of the evaluation processes. The evaluation and funding procedures are aimed at being in line with the criteria linked to good practice established at international level, and will use scientific or technical merit as an evaluation criterion for the allocation of resources. The evaluation criteria will take into account the technical or market merit and the socio-economic impact of the projects.

The evaluation system is peer-reviewed, and it is the scientific community itself who evaluates the proposals. Applicants do not know the names of the external experts that review every proposal at a first stage. The signature on absence of conflict of interest is required for the evaluators. In a second stage, a scientific-technical commission made up of the AEIs scientific panels integrates all the evaluation reports. Members of the scientific evaluation panels are published in the AEI website.

Sweden

In the three research councils, the evaluations are made by peer review panels, and the funding decisions are then made by the respective board/scientific council. There should be gender balance in both peer review panels and boards/scientific councils.

At Formas, the research is assessed on the basis of both quality and relevance, and the Scientific Council thus consists of representatives from academia as well as from other societal stakeholders.

Eligibility

One important gatekeeping practice is related to eligibility and who is defined as eligible to apply for funding. What are the criteria used to define eligibility and are any of these criteria linked to gender and how? Are career breaks due to childcare leave or similar reasons taken into account when defining eligibility?

In the 2009 report, the conclusion was that eligibility requirements were very diverse across Europe. A particularly penalizing element for women was requiring applicants to have a permanent position or forbidding them to fund their own salary out of the research grant. Another delicate point was the age

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limits; in more favourable systems, academic or career age was used, instead of biological age, and parental leave (for both mother and father) extended the limits.

In 2020, some of these barriers have been removed and some of the problems identified in 2009 have been resolved.

In Austria at the FWF and the ÖAW, there is no age limit when applying for individual programmes and time taken off for childcare is considered in terms of prerequisites for the application. For fellowship recipients at the ÖAW, in case of childcare duties, the fellowship can be taken up as part-time fellowship. In this case, the fellowship's duration can be lengthened by up to half the time granted. Researchers in the natural, medical and agricultural sciences, engineering and technology need to submit their applications in English; researchers in humanities, social and cultural sciences are offered a choice between German and English.

In Belgium, eligibility rules are adapted in order to give as much as possible fair chances to all applicants. In F.R.S.-FNRS, eligibility durations to apply to doctoral, postdoctoral or permanent researcher positions are extended by one year per childbirth or adoption for women. For each pregnancy or adoption, it is also possible to extend an ongoing fixed-term F.R.S.-FNRS mandate (both doctoral and postdoctoral) for the duration of the maternity/paternity/adoption leave.

The FWO have taken specific measures to reduce the drop-out of young female researchers after their PhD. This includes the possibility to adjust the scientific seniority limits per pregnancy with one year and to extend an ongoing fellowship (both doctoral and postdoctoral) with one year per pregnancy.

In Estonia, time spent both on maternity leave and parental leave is taken into account when determining the eligibility for postdoctoral and start-up grants, and when considering the bibliometric data of the applicant. The respective period of eligibility, will be extended by the corresponding period in full months and rounded up to the higher number of months.

A potential barrier is that the applications have to be submitted in English, since a large share of peer reviewers are foreigners. This can make the procedure more difficult for applicants with limited English skills. On the other hand, using foreign peer reviewers reduces the potential problem of nepotism in the small country.

In Ireland, the IRC, HRB and SFI chose to amend their eligibility criteria by making Athena Swan accreditation a requirement for funding. From 2019 an institute that had not achieved a Bronze Award was removed from the eligibility list. The Higher Education Authority has responsibility for determining whether a HEI is deemed eligible or ineligible for an Athena Swan award and updates all the research-funding agencies on award status after each assessment round. The IRC also allows for career breaks for up to 5 years when assessing the timeframe for eligibility to awards. Eligible breaks include maternity leave, paternity leave, adoptive leave, parental leave, prolonged sick leave, carer's leave

In Spain, the law establishes that the selection process should take measures to ensure that career breaks do not affect negatively the evaluation of curricula.

In Sweden, age limits are given by career age, and time on parental leave is deducted. Also, time on parental leave is considered when evaluating an applicants' merits.

Women, men and success in funding

Number of HEI researchers, application behaviour, and success rates

In this section, data from the GENDER-NET Plus partners, reported in the template, is used to get a relatively up-to-date statistical picture of the state of gender equality in research funding in a part of Europe.⁵⁶ However, with the assumption that the countries participating in GENDER-NET Plus are more than average interested in gender equality work, it may be the case that the total picture of gender equality in European research funding is a bit further from gender equality than in the partial picture.

Table 11, at the end of this main section, shows the data reported in the template from the countries participating in GENDER-NET Plus: the number of applications, the success rates, and the number of HEI researchers, divided by gender, country and field of science.

A few country reports used other divisions into fields of science than specified in the template; these cases are described briefly in sub-sections *Additional data* below and in more detail in Annex 3. Moreover, a few countries did not report data on the number of HEI researchers.

Gender differences in the number of Higher Education Institution researchers

The gender balance among researchers (with a doctorate), able to apply for research funding, is of course a fundamental factor in the gender distribution of research funding. The main “pool of potential applicants” for Research Funding Organisations is the researchers in the Higher Education Institutions. Hence, even if some applications to RFOs certainly come from outside the HEI system, the HEI researchers (with a doctorate) is used as a reasonable estimate for the “potential applicants”.

The following picture shows the gender balance among HEI researchers in the countries that submitted such template data.

Table 5 Share of women among HEI researchers, by research field and country

	Natural Sc	Engineering	Medicine	Agriculture	Social Sc	Humanities
Austria	30%	23%	47%	55%	50%	57%
Cyprus	43%	31%	45%	42%	47%	49%
Estonia	33%	24%	63%	49%	56%	54%
Ireland	38%	28%	64%	52%	52%	51%
Italy	50%	34%	50%	47%	44%	49%
Norway	28%	23%	57%	46%	45%	43%
Sweden	27%	24%	52%	44%	49%	49%

To illustrate the distribution, a colour scheme is used, where green is the usual gender equality interval of at least 40 percent women. To simplify, there is no separate colour for the two cells, Medicine in Estonia and Ireland, where the share of men is slightly less than 40 percent. Table 5 contains the following number of cells of different colours.

⁵⁶ The focus of this study is gender equality in research funding. Of course, the excellent She Figures publication gives a much broader perspective on gender equality in European research and innovation.

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Women HEI res.	Colour	# cells
Share<20%		0
20%<Share<30%		7
30%<Share<40%		5
40%<Share<50%		17
50%<Share		13

Thus, the familiar low share of women researchers in natural sciences and even lower share in engineering appears. In these fields, there are only 2 green cells out of 14, while the other research fields are all green (including the 2 cells with less than 40 percent men).

Summing up, there are less than 40 percent women in 12 cells only, out of 42. There are no red cells, with less than 20 percent women. In the section below, this picture is compared with the gender balance among applicants to research funders.

Additional data to Table 5

Canada reported HEI researcher data using a completely different division into research fields, see the Canada section in Annex 3. In total, for all fields, there are 39006 researchers representing 41 percent.

Canada, share of women among HEI researchers, total for all fields 41%

Israel reported HEI researcher data using a somewhat different division into research fields, giving the following incomplete row.

	Natural Sc	Engineering	Medicine	Agriculture	Social Sc	Humanities
Israel		22%	42%	20%	44%	37%

The Israel section in Annex 3, shows separately the share of women for Mathematics, Computer science, Physics, Chemistry, and Biology, but does not show the share of women for Natural sciences.

France reported data also with a different division into research fields.

	Biology	Engineering	Medicine	Earth&Environm	Social Sc	Humanities
France	48%	19%	34%	29%	45%	63%

Gender differences in the number of applicants to research funding

Do women researchers apply for funding equally often as men researchers do? In order to answer this question, gender differences in the number of applications submitted to the research funders, that are reported in our study, is analysed.

Table 6 Share of women among applicants to research funding, by research field and country

	Natural Sc	Engineering	Medicine	Agriculture	Social Sc	Humanities
Austria	27%	22%	41%	43%	47%	45%
Belgium	25%	11%	40%	29%	43%	41%
Cyprus	26%	14%	34%	(4%)	46%	40%
Czech Republic	12%	15%	32%	29%	33%	31%
Estonia	29%	(10%)	49%	(38%)	52%	52%
Israel	15%	14%	33%	25%	46%	34%
Italy	27%	18%	37%	28%	32%	37%
Norway	32%	26%	48%	29%	48%	51%
Spain	38%	35%	57%	50%	48%	49%
Sweden	30%	26%	47%	44%	59%	49%

Belgium⁵⁷, Czech Republic, Israel and Spain appear only in Table 6, while Ireland appears only in Table 5. In Table 6 above, there are the following numbers of cells of different colours.

Women applicants	Colour	# cells
Share<20%		9
20%<Share<30%		13
30%<Share<40%		14
40%<Share<50%		19
50%<Share		5

The picture in Table 6⁵⁸ is quite different from Table 5. The green cells, with gender balance, are in a minority, 24 out of 60, and no less than 9 cells are red, with less than 20 percent women.

Additional data to Table 6

France reported application data using a different division into research fields; different also from the division used by France in *Additional data to Table 5* above. The total number of applications submitted 2015-2019 was 23 478 applications from men and 10 579 from women, and so

France, share of women applicants, total for all fields: 31%

Gender differences in the share of HEI researchers applying for funding

When comparing Table 5 and Table 6 above, a clear tendency can be observed that women HEI researchers apply less often for funding. In the following, only the countries that appear in both Table 5 and Table 6 are included. To address the question whether women HEI researchers apply less often for funding than men do, the share of women HEI researchers that apply for funding must be compared

⁵⁷ French-speaking part only, data from FNS-FRNS.

⁵⁸ NB.: the number of women applicants was less than 10 for Cyprus, Agriculture, for Estonia, Engineering and Agriculture. The values in these three cells must be interpreted with caution.

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with the share of men HEI researchers that apply. The calculations are simplified by the use of an approximation:

share of HEI researchers that apply for funding = (number of funding applications)/(number of HEI researchers).

Of course, some funding applications may come from researchers outside the HEIs. However, under the assumption that the gender balance among applicants outside the HEIs is similar to among applicants from the HEIs, the approximation does not affect the comparison between the share of women and men HEI researchers that apply for funding⁵⁹ (see table 8).

Table 7 Share of HEI researchers that apply for research funding, by country, research field and gender

	Natural sc		Engineering		Medicine		Agriculture		Social sc		Humanities		Total	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Austria	16%	13%	3%	3%	7%	5%	4%	2%	5%	4%	14%	9%	9%	7%
Cyprus	34%	16%	43%	16%	102%	63%	41%	2%	17%	17%	26%	18%	37%	19%
Estonia	22%	18%	22%	8%	21%	12%	17%	11%	15%	12%	21%	20%	21%	15%
Italy	10%	4%	7%	3%	10%	6%	10%	4%	5%	3%	7%	4%	8%	4%
Norway	50%	60%	28%	33%	24%	17%	34%	16%	20%	23%	12%	17%	27%	24%
Sweden	36%	42%	20%	21%	21%	18%	45%	45%	38%	55%	17%	17%	29%	33%

For each country and scientific field in Table 7, the value for women must be compared with the value for men. To make the comparison easier, the quotient is formed of the value for women by the value for men. Thus, when the quotient is 1 women apply equally often as men do, when the quotient is < 1 women apply less often, and when the quotient is > 1 women apply more often than men do. The quotients are shown in the following table.

Table 8 Comparison of share of women and men HEI researchers that apply for research funding, by country and research field; i.e., quotient (share of women that apply)/(share of men that apply)

Quotient W/M	Natural sc	Engineering	Medicine	Agriculture	Social sc	Humanities	Total
Austria	0,85	0,97	0,76	0,61	0,88	0,63	0,78
Cyprus	0,47	0,36	0,62	0,05	0,99	0,71	0,50
Estonia	0,83	0,36	0,57	0,65	0,84	0,92	0,72
Italy	0,37	0,45	0,59	0,45	0,60	0,62	0,52
Norway	1,22	1,17	0,71	0,48	1,13	1,41	0,92
Sweden	1,17	1,06	0,82	1,01	1,47	1,00	1,15
Median	0,84	0,71	0,67	0,54	0,93	0,82	

⁵⁹ Also, if there are few applicants only from outside the HEIs, the comparison is affected only marginally.

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Table 8 contains the following number of cells of different colours.

Quotient W/M	Colour	# cells
$W/M < 0,67$	Red	16
$0,67 < W/M < 0,91$	Pink	8
$0,91 < W/M < 1,1$	Yellow	6
$1,1 < W/M < 1,5$	Pale Green	6
$1,5 < W/M$	Bright Green	0

Median	0,74
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Red cells denote that women apply for funding less than 2/3 as often as men do, or in other words, that men apply for funding more than 1.5 times as often as women do. Of the 36 cells in total, there are no less than 16 red cells. There are 8 pink cells, where men apply for funding more than 1.1 (but less than 1.5) times as often as women do. The red and pink cells dominate the table with 2/3 of the cells (24 out of 36).

Yellow cells denote that women and men apply for funding roughly equally often; i.e., neither gender apply for funding more than 1.1 times as often as the other gender. There are 6 yellow cells.

In the green cells, women apply for funding more than 1.1 times as often as men do. There are 6 pale green cells, but the table contains no bright green cells, which denote that women apply for funding more than 1.5 times as often as men do.

The entire row for Italy is red, with a value of 0.52 for all fields taken together. The lowest value, 0.37, is in Natural sciences, where men apply for funding more than 2.7 times as often as women do. Moreover, Cyprus has 4 red cells, 1 pink cell and 1 yellow cell, with a red value, 0.50, for all fields taken together. A very low value, 0.36, is in Engineering, where men apply for funding more than 2.7 times as often as women do.

The median value is given for each research field in Table 8, as an easy comparison. However, it should be noted that no compensation is made for the sizes of the countries. Hence, and for other reasons, the median value should be interpreted with caution. Moreover, the total value, all fields, for each country must be interpreted with some caution.

The median value for the entire Table 8 is 0.74 (pink colour). This means that, in a “median” country and scientific field, **women HEI researchers apply for funding only 0.74 times as often as men HEI researchers do**. Equivalently, in the median case **men HEI researchers apply for funding 1.36 times as often as women HEI researchers do**.

The research funders should consider this inequality: are women HEI researchers, who in average have lower positions, less encouraged to apply for research funding than men are?; can the funding calls in some subtle way be more directed towards men researchers than towards women researchers?... See the section *Recommendations*, below, the last two bullet-points under heading 4 and the first two bullet-points under heading 5.

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This inequality should be considered by the HEIs as well: are women HEI researchers given more teaching and administrative duties and less research duties than men are?...

In the next sub-section the success rates of the men and women that apply for research funding are studied; i.e., what proportion is funded out of the men and women that do apply.

Additional data to Table 8

Israel reported the share of women HEI researchers and the share of women applicants using a different division into research fields. Combining these data it is possible to compute the quotient (Share W that apply)/(share M that apply), except for Natural sciences. An incomplete row for Israel is presented below, where the total value is for all fields, including Natural sciences. See Annex 3 for details.

Share applying

Quotient W/M	Natural sc	Engineering	Medicine	Agriculture	Social sc	Humanities	Total
Israel		0,48	0,37	1,48	0,72	0,76	0,58

Gender differences in success rates for research funding

Most of the reported data from the template in this study can be found in the summing-up Table 11 below. Using this data, Table 9 shows the success rates by country, research field, and gender.

Table 9 Success rates in research funding, by country, research field, and gender⁶⁰

	Natural sc		Engineering		Medicine		Agriculture		Social sc		Humanities	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Austria	31%	30%	19%	21%	20%	22%	25%	27%	19%	19%	30%	34%
Belgium ⁶¹	46%	41%	41%	43%	43%	50%	58%	40%	29%	41%	37%	54%
Cyprus	18%	23%	26%	13%	25%	17%	18%	(50%)	15%	23%	30%	24%
Czech Rep	33%	41%	35%	19%	38%	26%	34%	34%	31%	21%	26%	34%
Estonia	29%	25%	30%	(29%)	30%	32%	31%	(0%)	13%	9%	11%	18%
Israel	35%	32%	19%	15%	29%	27%	17%	30%	26%	23%	37%	40%
Italy	14%	14%	14%	9%	12%	15%	12%	7%	17%	13%	19%	16%
Norway	11%	12%	9%	7%	11%	11%	22%	15%	15%	15%	11%	17%
Spain	38%	33%	38%	34%	35%	27%	34%	31%	38%	33%	36%	36%
Sweden	20%	20%	17%	25%	24%	23%	17%	27%	13%	14%	12%	12%

To address the question whether women applicants are less successful than men applicants are, the success rate of women applicants must be compared with the success rate of men applicants. In other words, for each country and scientific field, the value for women is compared with the value for men. To make this comparison easy, the quotient of the value for women by the value for men is formed. Hence, when the quotient is 1, women applicants are equally likely to be funded as men applicants

⁶⁰ The number of applications from women was less than 10 for Cyprus, Agriculture (2 applications, 1 funded), and for Estonia, Engineering (7 applications, 2 funded) and Agriculture (8 applications, none funded). The values in these three cells must be interpreted with caution.

⁶¹ French-speaking part only, data from FNS-FNRS.

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are. When the quotient is < 1 , women applicants are less likely to be funded, and when the quotient is > 1 , women applicants are more likely to be funded (see table 10).

Table 10 Comparison of success rates for women and men applicants for funding, by country and research field; i.e., the quotient (success rate for women)/(success rate for men)⁶²

quotient W/M	Natural sc	Engineering	Medicine	Agriculture	Social sc	Humanities	Total
Austria	1,00	1,12	1,08	1,07	1,01	1,15	1,01
Belgium	0,89	1,04	1,17	0,69	1,43	1,46	1,11
Cyprus	1,22	0,51	0,67	(2,78)	1,54	0,81	0,91
Czech Republic	1,23	0,56	0,69	0,99	0,68	1,27	0,87
Estonia	0,86	(0,95)	1,05	(0,00)	0,71	1,62	0,78
Israel	0,94	0,78	0,94	1,80	0,88	1,09	0,91
Italy	1,01	0,63	1,21	0,61	0,77	0,82	0,98
Norway	1,14	0,79	1,03	0,70	1,02	1,61	1,13
Spain	0,87	0,89	0,76	0,90	0,90	0,89	0,87
Sweden	1,00	1,42	0,94	1,61	1,11	1,02	1,00
Median	1,00	0,84	0,99	0,95	0,96	1,12	

The table contains the following number of cells of different colours.

Quotient W/M	Colour	# cells
$W/M < 0,67$	Red	6
$0,67 < W/M < 0,91$	Pink	19
$0,91 < W/M < 1,1$	Yellow	17
$1,1 < W/M < 1,5$	Pale Green	12
$1,5 < W/M$	Bright Green	6

Median	0,99
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The red colour denotes that women are less than 2/3 as likely to be funded as men are, or in other words, that men are more than 1.5 times as likely to be funded as women are. Thus, the 6 red cells, and the 6 bright green cells, denote very big gender differences in success rates. Similarly, the 19 pink cells, and the 12 pale green cells, denote relatively clear gender differences in success rates.⁶³

The yellow colour denotes that women and men are roughly equally likely to be funded; i.e., neither women nor men are more than 1.1 times as likely to be funded as the other gender.

⁶² The number of applications from women was less than 10 for Cyprus, Agriculture (2 applications, 1 funded), and for Estonia, Engineering (7 applications, 2 funded) and Agriculture (8 applications, none funded). The values in these three cells must be interpreted with caution.

⁶³ Naturally, a quotient value close to yellow denotes a less clear difference than a value further from 1.

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An inspection of Table 10 shows that the quotient varies, but no clear trend for all countries and fields emerges.

Country-wise, it can be noted that in Spain, women have lower success rates than men in all research fields; the entire row for Spain is pink, the highest value is 0.90, and the value for all fields taken together is 0.87. The country with the lowest value for all fields taken together, 0.78, is Estonia, but Estonia has also two yellow cells (and one bright green cell with only 2 applications from women). Moreover, the value for the Czech Republic for all fields taken together is 0.87, equally low as for Spain, but the Czech Republic has also two pale green cells and one yellow cell. Cyprus and Italy both have two red cells, with big differences in favour of men, but both countries have yellow Total values, for all fields taken together.

The countries with the highest value for Total, all fields taken together, are Norway, 1.13, and Belgium, 1.11, both pale green, but they each have two pink cells in the row.

It should be noted that the data for several countries in the table are aggregated from more than one research funder. Moreover, the GENDER-NET Plus RFOs each year surely will follow-up and analyse the gender differences in success rates in their funding; e.g., to see if similar differences occur each year or if the differences evens out when more years are studied. Of course, the follow-up and analysis is especially important when there are big gender differences and high numbers of applications.

When looking at research fields, the biggest gender difference in success rates seems to be in Engineering, which has median 0.84 (pink), and has three red and three pink cells (6 cells out of 10). However, Engineering has also two pale green and two yellow cells (one of the yellow cells, Estonia, had only 7 applications from women). Moreover, Humanities, has median 1.12, and five green cells (out of 10), but has also three pink and two yellow cells.

When looking at the entire Table 10, there are 7 more red and pink cells (25 together) than there are green cells (18). However, the median value in the entire table is 0.994, yellow and very close to 1, which indicates that there seem to be no big over-all systematic differences in success rates in favour of men or of women.

This observation is in line with the meta analysis of the 7th RTD Framework programme of the European Union, *Gender Gap and Funding* by Meulder *et al*, showing that women apply at a lower rate than men, that success rates are not systematically lower for women than for men, and that the gender gap in applications for and access to funding varies across disciplines.⁶⁴

However, under the assumption that the GENDER-NET Plus countries are more than average interested in gender equality work, the results above cannot rule out that systematic differences in favour of men can appear in the picture if all European countries were included.

⁶⁴ See section *Studies on gender and research funding published after 2009*, above.

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Additional data to Table 10

Belgium, Flemish-speaking part, FWO, reported data using a different division into research fields, giving the following row of success rate quotients W/M.⁶⁵

Quotient W/M	Science&Tech	Biology	Medicine	Social sc	Humanities	Interdisc	Total
Belgium FWO	1,10	0,92	0,80	0,69	1,00	(2,00)	0,88

France reported data using a different division into research fields. In total, for all research fields 2015-2019, the success rate for men was 13.8 percent, and the success rate for women 12.7 percent, and so:

Quotient W/M success rates, total, all fields	0,92
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⁶⁵ There were only 12 applications from women in Interdisciplinary (4 funded), and so the value for this field must be interpreted with caution.

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Summing-up table of template data on number of applications and HEI researchers

Table 11 Number of applications, success rates, and number of HEI researchers for women and men, divided by country and research field

Field of research	Natural sciences		Engineering and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Austria												
Applications	862	319	133	38	249	171	20	15	159	141	205	170
Funded	263	97	25	8	50	37	5	4	30	27	61	58
Success rate	31%	30%	19%	21%	20%	22%	25%	27%	19%	19%	30%	34%
Potential applicants	5526	2392	4753	1406	3575	3230	498	612	3200	3220	1439	1896
Share applying	16%	13%	3%	3%	7%	5%	4%	2%	5%	4%	14%	9%
Belgium ¹⁾, *												
Applications	114	37	58	7	157	106	12	5	38	29	19	13
Funded	52	15	24	3	67	53	7	2	11	12	7	7
Success rate	46%	41%	41%	43%	43%	50%	58%	40%	29%	41%	37%	54%
Cyprus												
Applications	228	80	238	38	116	60	50	2	60	52	37	25
Funded	42	18	62	5	29	10	9	1	9	12	11	6
Success rate	18%	23%	26%	13%	25%	17%	18%	50%	15%	23%	30%	24%
Potential applicants	665	501	551	243	114	95	123	90	350	307	144	137
Share applying	34%	16%	43%	16%	102%	63%	41%	2%	17%	17%	26%	18%
Czech Republic*												
Applications	457	64	372	67	238	114	266	109	237	115	238	107
Funded	151	26	130	13	91	30	91	37	73	24	63	36
Success rate	33%	41%	35%	19%	38%	26%	34%	34%	31%	21%	26%	34%
Estonia												
Applications	146	59	60	7	23	22	13	8	32	34	36	39
Funded	43	15	18	2	7	7	4	0	4	3	4	7
Success rate	29%	25%	30%	29%	30%	32%	31%	0%	13%	9%	11%	18%
Potential applicants	657	319	275	88	108	182	75	71	217	274	169	198
Share applying	22%	18%	22%	8%	21%	12%	17%	11%	15%	12%	21%	20%

Notes: ¹⁾ French-speaking part only, data from FNS-FRNS. *No data on *potential applicants*. **Data has been updated or complemented with data from She Figures 2018. The original data from the template can be found in Annex 3.

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Table 11, continued

Field of research	Natural sciences		Engineering and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Ireland*												
Potential applicants	2422	1466	1689	665	822	1454	224	244	1146	1254	488	515
Israel*, **												
Applications	674	117	217	34	555	271	30	10	373	323	168	87
Funded	233	38	41	5	159	73	5	3	96	73	62	35
Success rate	35%	32%	19%	15%	29%	27%	17%	30%	26%	23%	37%	40%
Italy												
Applications	1362	494	1009	229	1972	1167	361	142	560	269	350	206
Funded	188	69	139	20	243	174	42	10	95	35	66	32
Success rate	14%	14%	14%	9%	12%	15%	12%	7%	17%	13%	19%	16%
Potential applicants	13904	13758	14738	7460	20618	20835	3640	3175	10854	8684	5244	5008
Share applying	10%	4%	7%	3%	10%	6%	10%	4%	5%	3%	7%	4%
Norway												
Applications	569	265	272	96	263	247	32	13	411	383	120	126
Funded	62	33	25	7	29	28	7	2	62	59	13	22
Success rate	11%	12%	9%	7%	11%	11%	22%	15%	15%	15%	11%	17%
Potential applicants	1146	439	978	295	1086	1432	95	81	2012	1652	970	724
Share applying	50%	60%	28%	33%	24%	17%	34%	16%	20%	23%	12%	17%
Spain												
Applications	3082	1919	2734	1459	875	1144	522	521	1100	1007	814	773
Funded	1176	634	1027	490	310	308	177	159	414	336	295	279
Success rate	38%	33%	38%	34%	35%	27%	34%	31%	38%	33%	36%	36%
Sweden												
Applications	1430	624	533	183	650	583	191	152	1172	1665	256	243
Funded	292	127	92	45	157	133	32	41	150	237	30	29
Success rate	20%	20%	17%	25%	24%	23%	17%	27%	13%	14%	12%	12%
Potential applicants	3941	1473	2634	853	3040	3326	427	337	3105	3003	1531	1457
Share applying	36%	42%	20%	21%	21%	18%	45%	45%	38%	55%	17%	17%
All countries total												
Applications	8924	3978	5626	2158	5098	3885	1497	977	4142	4018	2243	1789
Share of total	69%	31%	72%	28%	57%	43%	61%	39%	51%	49%	56%	44%

Notes: *No data on *potential applicants*. **Data has been updated or complemented with data from *She Figures 2018*. The original data from the template can be found in Annex 3.

Conclusions and recommendations

Conclusions

Gender equality has improved in many ways in the European Higher Education and Research & Innovation landscape in the 12 years since 2009, when *The Gender Challenge in Research Funding* appeared. Accordingly, gender equality is higher on the agenda today for European Research Funding Organisations (RFOs). The sections above report a number of gender equality measures and initiatives undertaken by RFOs in the GENDER-NET Plus countries.

The representation of women among gate-keepers of research funding – decision-making bodies, assessment panels, and reviewers - has improved since 2009. However, in many cases, the improvement is from very low levels, and gender balance is still far from achieved. Among the 11 European countries studied in this report, 4 countries had less than 20 percent women in research funding boards in 2017, according to *She Figures 2018*. However, the data reported in the template shows diversity in the gender balance between different boards and panels within the countries.

In the European countries studied in this report, the share of women among HEI researchers with a doctorate was at least 40 percent in all scientific fields, except in Natural sciences and Engineering (Table 5).⁶⁶ However, women HEI researchers are less likely to apply for funding than men are. In 2/3 of the cases studied (country; research field), women HEI researchers applied for funding less often than men did, in 1/6 of the cases women were equally likely to apply, and in 1/6 of the cases women applied for funding more often than men did (Table 8). In the “median case”, men were 1.36 times more likely to apply for funding than women were. If it is assumed that GENDER-NET Plus countries are more than average interested in gender equality work, the median difference in application behaviour may be at least as big if all European countries were included.

The gender difference in success rates varied with the research field and country (Table 10). Some countries and fields had bigger differences than other did. It is to be assumed that these differences are monitored and analysed by the respective RFOs. No clear systematic trend for all countries and fields can be observed. There are a few more of the cases studied (country; research field) in Table 10 where men had higher success rates, than cases studied where women did. Nevertheless, in the “median case”, the success rates were about equal. However, if it is assumed that the GENDER-NET Plus countries are more than average interested in gender equality work, there may appear systematic differences in favour of men if all European countries were studied.

⁶⁶ Also, the share of women researchers was below 40% in France, Medicine (34%), and in Israel, Agriculture (20%) and Humanities (37%).

Recommendations for gender equality in research funding

In this section, a number of recommendations aimed at improving gender equality in Research Funding Organisations, RFOs, are put forward.

The background to the recommendations is the following. Many good examples of measures to improve gender equality in RFOs can be found in the previous sections. Also, the 2009 EC report *The Gender Challenge in Research Funding* gives a number of recommendations; most are still quite relevant. Similarly, there is the 2017 Science Europe handbook *Practical Guide to Improving Gender Equality in Research Organisations*⁶⁷, and other reports⁶⁸, as well as published Gender Equality Plans from a number of Research Funding Organisations. Moreover, a draft of the recommendations below was sent to the GENDER-NET Plus consortium for comments.

The recommendations are grouped under six headings.

1. Government instructions

- The European Commission has, e.g., in Horizon 2020, clearly stated the goal of gender equality in research⁶⁹. At the national level, the Government and the Ministries should apply external pressure, e.g., by instructions or missions, to the RFOs. This a very helpful measure to get the gender equality work going - and to keep it going. The RFO will need something meaningful to write about gender equality work in its Annual Report to the Government.
- National resource centres on gender in research (Ministry units, information centres, national committees) should be established and maintained to promote gender equality e.g., in Research Funding Organisations.
- Research in the field of gender equality in higher education should be funded; e.g., research on gender consequences of a changing higher education system, and research on gender consequences of increasing funding towards excellence centers.

2. RFO Gender Equality Plan

- The RFO leadership must be committed to gender equality in its research funding. The RFO must not just delegate the gender equality question to an HR officer or to a minor advisory committee.
- The RFO should establish a permanent structure (department/section/task force...) for monitoring gender equality in its funding. The structure should report to and be supported by the highest level in the funding organisation, and be given adequate resources.
- The RFO must decide on a Gender Equality Plan on how to promote gender equality in its research funding⁷⁰. Preferably, the following points should be covered.

⁶⁷ <https://www.scienceurope.org/our-resources/practical-guide-to-improving-gender-equality-in-research-organisations/>

⁶⁸ E.g., the Horizon 2020 project GEECCO report *Promoting gender equality in the evaluation process: Guideline for jury members, reviewers and research funding organizations' employees* (2020)

⁶⁹ See https://ec.europa.eu/info/research-and-innovation/strategy/gender-equality-research-and-innovation_en or <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation>

⁷⁰ See also the web page of the European Institute for Gender Equality, EIGE: <https://eige.europa.eu/>

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- * Goals/targets for the research funding and the funding process
- * Data on gender equality in the research funding
- * Follow up and analysis of how the goals are met
- * Knowledge and methods to reach the goals
- * Clear responsibility in the organization for each goal
- * Consequences/actions if the goals are not met
- The RFO should work actively with gender equality throughout the organisation. Invited speakers/experts can give valuable knowledge and positive energy.
 - * Discuss gender and other biases in the research funding within the RFO.
 - * Conduct awareness-raising activities in evaluation panels, decision-making bodies, and with staff on a regular basis.
 - * Provide training to staff, evaluation panels, and decision-making bodies.
- An ambitious action is to conduct gender equality observations in selected assessment panels as a basis for trainings and discussions, and for improving the assessment process.

3. Gender balance in decision-making bodies and evaluation panels

- All decision-making bodies of funding organisations should have gender balance, with at least 40 percent of each gender⁷¹.
- There should be at least 40 percent of each gender among evaluators and reviewers.
- The RFO should increase its efforts to identify and recruit more female evaluators and reviewers, including the use of databases of women scientists⁷².
- The gender balance among the chairpersons of evaluation panels should be considered.
- If a share of 40 percent women⁷³ is hard to reach in a particular research field, in order not to over-extend the few women in the field, a lower percentage can be chosen temporarily. Preferably, in these cases a woman can be appointed chairperson, to give a better balance to the panel.

4. Monitor gender data and publish the results

- The RFO should collect data on gender of applicants (including principal investigators and teams), grantees and evaluators as a part of the funding process.
- Gender data should be collected and presented in long-term time series to enable assessing trends and development over time.
- The RFO should make their gender monitoring data publicly available on a regular basis on their websites, publications and annual reports. In particular, success rates and average amounts of funding for women and men should be published.
- The RFO should estimate the pools of potential applicants to assess whether women apply for funding less often than men do.

⁷¹ The same percentage holds within EU programs, see <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation>

⁷² Cf. the Horizon 2020 project GEECCO report *Promoting gender equality in the evaluation process: Guideline for jury members, reviewers and research funding organizations' employees* (2020)

⁷³ Or men, in the very few research fields dominated by women.

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- The data should be presented by scientific field, since there are large variations in share of women researchers across disciplines.

5. Increase funding applications from women researchers

- Women should be especially encouraged to apply in the funding calls.
- Special attention should be given to the call texts, from a gender equality perspective, to avoid e.g., wordings that might appeal more to men than to women.
- Special gender equality attention should be given to grants aimed at researchers at later career stages, e.g., different kinds of excellence grants. Gender equality should be explicitly mentioned in the call text. Each application should be asked to describe the gender balance in the research team. Also, each application should include a Gender Equality Plan from the department/institution involved. This should be considered in the assessment of the application.
- Special gender equality attention should be given to the way researchers' CVs are presented in the applications. Biological age should be replaced by career age (time from PhD) when assessing career of applicants. Research output assessment should not rely only on Journal Impact Factors⁷⁴.
- Maternity and parental leave should be taken into account by counting off at least one year per child when assessing career age.
- Measures to improve and facilitate work-life balance should be integrated in all funding forms. Mobility grant schemes should take into account and compensate for additional costs for mobile researchers with family obligations.

6. Generally improve transparency in research funding

- The transparency of the funding process should be improved, as a means to promote gender equality.
- Evaluation procedures, criteria and results should be made public.
- Procedures and criteria for recruiting evaluators and reviewers should be made explicit and published.
- More international evaluators and reviewers should be used.
- Effective procedures to prevent conflict of interest, unethical behaviour and any form of discrimination in decision-making or peer review should be established and published. A gender perspective should be integrated in codes of conduct for all involved in funding decisions.
- The applicants should receive extensive evaluation feedback in writing.

⁷⁴ Cf. the San Francisco Declaration on Research Assessment (DORA) <https://sfedora.org/read/>

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Annex 1: Gender Gap Index and *She Figures*

Gender Gap Index

The World Economic Forum introduced the Global Gender Gap Index in 2006 as a framework for capturing the magnitude of gender-based disparities and tracking their progress over time. The Index benchmarks national gender gaps on economic, education, health and political criteria, and provides country rankings that allow for effective comparisons across regions and income groups.

Underlying the Global Gender Gap Index are three basic concepts. First, the Index focuses on measuring gaps rather than levels. Second, it captures gaps in outcome variables rather than gaps in input variables, and third, it ranks countries according to gender equality rather than women's empowerment.

The Global Gender Gap Index examines the gap between men and women across four fundamental categories (sub-indexes): Economic Participation and Opportunity, Educational Attainment, Health and Survival and Political Empowerment. This report focuses on the Overall index, which is an aggregated index of all the sub-indexes and the two separate sub-indexes Economic Participation and Opportunity, and Political Empowerment. The reason for this is that the sub-indexes on education and health gives little information of relevance for the purpose of this report.

Economic Participation and Opportunity: This sub-index contains three concepts: the participation gap, the remuneration gap and the advancement gap. The participation gap uses using the difference between women and men in labour force participation rates as indicator. The remuneration gap is measured as the ratio of estimated female-to-male earned income and a qualitative indicator as wage equality for similar work. Finally, the gap between the advancement of women and men is measured as the ratio of women to men among legislators, senior officials and managers, and as the ratio of women to men among technical and professional workers.

Political Empowerment: This sub-index measures the gap between men and women at the highest level of political decision-making through the ratio of women to men in ministerial positions and the ratio of women to men in parliamentary positions. In addition, we've included the ratio of women to men in terms of years in executive office (prime minister or president) for the last 50 years."

The two sub-indexes that are not analysed further in this report are the sub-index Educational Attainment and the sub-index Health and Survival. The Educational Attainment sub-index measures the gap between women's and men's current access to education through ratios of women to men in primary, secondary, and tertiary education. The sub-index Health and Survival gives an overview of the differences between women's and men's health through the use of the two indicators sex ratio at birth, which aims specifically to capture the phenomenon of "missing women", and the gap between women's and men's healthy life expectancy.

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Table A1. Global Gender Gap Index 2008 and 2015, by country

Country Name	Country ISO3	Overall Gender Gap Index 2008	Rank 2008	Category 2008	Overall Gender Gap Index 2015	Rank 2015	Category 2015
Norway	NO	0,82390	1	SG	0,850	2	SG
Finland	FI	0,81950	2	SG	0,850	3	SG
Sweden	SE	0,81390	3	SG	0,823	4	SG
Iceland	IS	0,79990	4	SG	0,881	1	SG
Denmark	DK	0,75380	5	SG	0,767	10	SG
Ireland	IE	0,75180	6	SG	0,807	5	SG
Netherlands	NL	0,73990	7	SG	0,776	9	SG
Latvia	LV	0,73970	8	SG	0,752	14	SG
Germany	DE	0,73940	9	SG	0,779	8	SG
United Kingdom	UK	0,73660	10	SG	0,758	12	SG
Switzerland	CH	0,73600	11	SG	0,785	6	SG
France	FR	0,73410	12	SG	0,761	11	SG
Spain	ES	0,72810	13	SG	0,742	16	SG
Lithuania	LT	0,72220	14	SG	0,740	17	SG
Belgium	BE	0,71630	15	SG	0,753	13	SG
Austria	AT	0,71530	16	SG	0,733	20	LG
Canada	CAN	0,71360	17	SG	0,740	18	SG
Bulgaria	BG	0,70770	18	SG	0,722	23	LG
EU	EU	0,70765	18,5	EU Median	0,739	18,5	EU Median
Estonia	EE	0,70760	19	LG	0,749	15	SG
Portugal	PT	0,70510	20	LG	0,731	21	LG
Croatia	HR	0,69670	21	LG	0,708	26	LG
Poland	PL	0,69510	22	LG	0,715	24	LG
Slovenia	SI	0,69370	23	LG	0,784	7	SG
Israel	IL	0,69000	24	LG	0,712	25	LG
Hungary	HU	0,68670	25	LG	0,672	31	LG
Slovak Republic	SK	0,68240	26	LG	0,675	30	LG
Luxembourg	LU	0,68020	27	LG	0,738	19	LG
Italy	IT	0,67880	28	LG	0,726	22	LG
Czech Republic	CZ	0,67700	29	LG	0,687	28	LG
Romania	RO	0,67630	30	LG	0,693	27	LG
Greece	EL	0,67270	31	LG	0,685	29	LG
Cyprus	CY	0,66940	32	LG	0,671	32	LG
Malta	MT	0,66340	33	LG	0,668	33	LG
Turkey	TR	0,58530	34	LG	0,624	34	LG

She Figures

The *She Figures* publication, released every three years since 2003, provides a range of indicators on gender equality in Research and Innovation (R&I) at the pan-European level. It aims to give an overview of the gender equality situation in research and innovation, using a wide range of indicators to examine the impact and effectiveness of the policies implemented in this area.

She Figures publication is dedicated to reporting back on well-established statistical indicators and presents and explores the following themes: i) the presence of women in research across different sectors of the economy; ii) horizontal segregation by sex across different fields of research and development and research occupations; and iii) vertical segregation by sex in academia, i.e. the (under-)representation of women in the highest grades and research posts and as heads of academic institutions.

By presenting statistical indicators on a wide range of related gender issues, the report enables readers to develop a comprehensive understanding of the current state of play as regards gender equality in research and innovation. Most of the data for the *She Figures* indicators originate from Eurostat (the Statistical Office of the EU), which provides sex disaggregated data on education, research and development, professional earnings and scientific employment. Data on education, research and the labour market for countries outside the EU, when not available in Eurostat, were compiled from web sites including the International Labour Organization (ILO), the OECD and the UNESCO Institute of Statistics (UIS). The Statistical Correspondents enrich this picture, by collecting primary data (broken down by sex) on senior academic staff, the heads of universities, funding applicants and beneficiaries, as well as the membership of boards of national research organisations. The expansion of the *She Figures* since 2003 has resulted in the use of other sources, including the EC MORE Survey on the Mobility of Researchers, the FP7 Monitoring the Evolution and Benefits of Responsible Research and Innovation (MoRRI) project, the Worldwide Patent Statistical Database (PATSTAT) of the European Patent Office (EPO) and the Scopus abstract and citation database.

Data are presented at the individual country level as well as the broader EU level for the current EU Member States and the associated countries. Data availability differs between the countries, with availability for EU Member States, EFTA and candidate countries usually being higher than for the rest of the countries examined. All tables and figures in the publication contain footnotes, which indicate the respective data that were not available.

The following table, with data from *She Figures*, shows the number of women and med HEI researchers in 2003 and 2015 in European countries, with Canada added in 2015 only.

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

Table A2. Number of HEI researchers in 2003 and 2015, by gender and country (She Figures data)

Country	Country ISO3	2003				2015			
		Women	Men	Share W	Category 2003	Women	Men	Women	Category 2015
Finland	FI	7324	6580	52,7%	MW	10583	11590	47,7%	MW
Latvia	LV	2181	1970	52,5%	MW	2953	2719	52,1%	MW
Lithuania	LT	4040	4264	48,7%	MW	6991	5609	55,5%	MW
Portugal	PT	9143	10763	45,9%	MW	25428	26897	48,6%	MW
Estonia	EE	1696	2066	45,1%	MW	2183	2427	47,4%	MW
Sweden	SE	16439	21141	43,7%	MW	19696	24215	44,9%	MW
Iceland	IS	467	617	43,1%	MW	1078	980	52,4%	MW
Luxembourg	LU	21	28	42,9%	MW	492	798	38,1%	FW
Slovakia	SK	4558	6444	41,4%	MW	7632	8933	46,1%	MW
Poland (Data from 2000)	PL	28758	42211	40,5%	MW	30792	39866	43,6%	MW
Romania	RO	3841	5685	40,3%	MW	7308	7749	48,5%	MW
Ireland	IE	3580	5650	38,8%	MW	8251	10093	45,0%	MW
Bulgaria	BG	1144	1880	37,8%	MW	4086	3816	51,7%	MW
Spain	ES	38670	63902	37,7%	MW	50782	70379	41,9%	FW
Norway (Data from 2001)	NO	6099	10117	37,6%	MW	11709	12895	47,6%	MW
Turkey *(Data from 2002)	TR	23040*	39167*	37,0%	MW	56503	76013	42,6%	MW
Greece	EL	7567	12940	36,9%	MW	14135	23328	37,7%	FW
Hungary	HU	6976	11995	36,8%	MW	6170	9473	39,4%	FW
United Kingdom	UK	51218	88722	36,6%	MW	157301	189737	45,3%	MW
Belgium	BE	7958	14417	35,6%	MW	13270	18639	41,6%	FW
EU	EU	345677	647162	34,8%	EU-average	599063	823189	42,1%	EU-average
France *(Data from 2014)	FR	34835	67275	34,1%	FW	40120*	73097*	35,4%	FW
Slovenia	SI	985	2004	33,0%	FW	1810	2376	43,2%	MW
Czech Republic	CZ	4205	8584	32,9%	FW	8427	15536	35,2%	FW
Denmark	DK	4379	9611	31,3%	FW	11769	16231	42,0%	FW
Cyprus	CY	172	383	31,0%	FW	571	949	37,6%	FW
Italy	IT	17371	39109	30,8%	FW	31198	45205	40,8%	FW
Austria (Data from 2002)	AT	5216	12198	30,0%	FW	14655	22044	39,9%	FW
Netherlands	NL	3589	8809	28,9%	FW	10900	14910	42,2%	MW
Switzerland	CH	5317	14010	27,5%	FW	17814	28118	38,8%	FW
Germany	DE	43593	130638	25,0%	FW	104622	165721	38,7%	FW
Israel (Data from 2001 and from template)	IL	1140	3498	24,6%	FW	No data	No data	34,0%	FW
Malta	MT	155	484	24,3%	FW	286	577	33,1%	FW
Canada (Data from template))	CAN	No data	No data			No data	No data	41,0%	FW
Croatia	HR	No data	No data			3582	3737	48,9%	MW

Annex 2: Template

Country specific data on research funding and gender

Please fill in your name and organisation(s), and the day when you send the answer:

Name:

Organisation(s):

Country:

Date:

Introduction

We want to collect country specific data with regard to the following six more general topics.

1. What are the different types of grant awarding procedures or research funding systems?
2. What are the success rates in getting funding by sex?
3. Which are the most transparent/opaque procedures/ systems?
4. What are the barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures?
5. What are the differences between disciplines?
6. How are members of selection committees appointed (or other gatekeepers)?

For each of the six general topics, we hope you can answer 1-3 questions that are more specific. If possible, please also add the source of the information (e.g. article, report, web page, internal data from organisation or official statistics etc.).

Please also comment your answers in relation to the specific data for your country in the 2009 report, The Gender Challenge in Research Funding. The report section with data specific for your country is enclosed to this mail.

The focus of this template is on the funding of academic research, mainly research project funding and individual grants from the key public funding organisations. Funding to the business sector and funding of industrial research and development can be excluded.

When you have completed the template, please send it back to us (as a word file):

E-mail:

With CC to:

Thank you for filling in the template.

Your answers are very valuable and crucial for our study.

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

1 What are the different types of grant awarding procedures or research funding systems?

1a) Please describe briefly the national systems for funding of research in your country (e.g., funding organisations where researchers apply for grants, direct grants to universities for research). Are there any specific measures taken for promoting gender balance in the funding system?

Please also comment on the development and differences from the situation in the 2009 report (see the enclosed specific country report).

[total 1/2–1 page]:

1b) Please list the main relevant funding organisations (research councils etc.) in your country, with brief descriptions of the main objectives and the funding instruments of the organisation. Are there specific measures to promote gender balance?

Please also comment on the development and differences from the situation in the 2009 report (see the enclosed specific country report).

[total 1/2–1 page]

2 What are the success rates in getting funding by sex?

Fill in the numbers according to the template as best as possible. Please comment if you need to use other categories or if it is not possible to find data. The focus is on grants to individual researchers from research funders.

Please comment on the development and differences from the numbers in the 2009 report (see tables under section 5.1 in the report).

To see if women are equally successful as men when applying for funding, the success rates can be calculated.

2a) Success rates according to sex of principal investigator, by main research field

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications												
nb funded												
success rate (nb funded/nb applications)												

Comments [total 1/2–1 page]:

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

To see if women apply for funding equally often as men, the set of applicants can be compared with the “pool of potential applicants”.

2b) Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants												

Comments [total 1/2–1 page]:

3 Which are the most transparent/opaque procedures/systems?

Please indicate yes or no to the statements below. Please indicate the name of each funding organisation covered by your answer.

Please also comment on the development and differences from the situation in the 2009 report (see report sections 3.3, 3.4 and the enclosed specific country report).

3a) Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	[org.name]	[org.name]	[org.name]	[org.name]
<i>Please mark with Y for Yes and N for No on the statements below</i>				
Does the funding organisation do the following?				
Monitors composition of selection committees				
Monitors composition of evaluation panels				
Uses (national and) international evaluators				
Publishes evaluation criteria				
Has ethical guidelines preventing nepotism, etc.				
Publishes ethical guidelines (preventing nepotism, etc.)				
Applicants can find out evaluators' names during the evaluation process				
Evaluators know applicants' names or sex				
There is a right of reply or a complaint procedure				

Comments [total 1/2–1 page]:

3b) Transparency of outcome

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

Name of funding organisation (if more than one, fill in the name in separate columns)	[org.name]	[org.nam e]	[org.nam e]	[org.nam e]
<i>Please mark with Y for Yes and N for No on the statements below</i>				
Does the funding organisation do the following?				
Calculates gendered success rates				
Publishes gendered success rates				
Compares applicants to pool of potential applicants				
Monitors amounts of funding awarded per sex				
Other quality checks (eg. nepotism)				
Gives information on granted projects (title, researchers, abstract, etc.)				
Applicants can find out evaluators' names after the evaluation process				

Comments [total 1/2–1 page]:

4 What are the barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures?

Please describe the barriers that can affect the transparency or accountability of the procedures in the funding organisation(s). It can be, for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc. If necessary, specify information for separate organisations.

Please also comment on the development and differences from the situation in the 2009 report (see report sections 4.3, 4.4 and the enclosed specific country report).

(total 0,5–1 page).

5 What are the differences between disciplines?

5a) Please comment on the differences (if any) of the success rates between main research areas in the table of Question 2a.

Please also comment on the development and differences from the situation in the 2009 report (see report section 5 and the enclosed specific country report).

(total 0,5–1 page).

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

5b) Please describe any differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender. *If necessary, specify information for separate organisations.*

Please also comment on the development and differences from the 2009 report (see report section 5 and the enclosed specific country report).

(total 0,5–1 pages).

5c) Please describe any differences in funding instruments between main research areas, and if these have implications for gender. *If necessary, specify information for separate organisations.*

Please also comment on the development and differences from the 2009 report (see report section 5 and the enclosed specific country report).

(total 0,5–1 pages).

6 How are members of selection committees appointed (or other gatekeepers)?

6a) Please describe the procedures for selecting committee members in research funding organisations, and if these have implications for gender. *If necessary, specify information for separate organisations.*

Please also comment on the development and differences from the situation in the 2009 report (see report section 5 and the enclosed specific country report)

(0,5–1 pages).

6b) Number of men and women in selection/funding committees in research funding organisations.

For each organisation, add one row for each type of committee.

Name of organisation	Type of committee	# Women	# Men

Please also comment on the development and differences from the situation in the 2009 report (see report section 4 and the enclosed specific country report). (0,5–1 pages).

Annex 3: Additional data on application behaviour and success rates

This Annex, contains data that is reported to the study, but does not use the division into research fields of the template.

Application behaviour

Belgium

F.R.S-FNRS - Comparison to pool of potential applicants

	All domains	
	men	women
pool of potential applicants to research projects fundings (including tenured researchers and academic professors)	1508.32	586.26

Canada

Subject Taught	Number	% Female
Agriculture, Natural Resources and Conservation	990	28.2%
Architecture, Engineering and Related Technologies	4,290	16.2%
Business, Management and Public Administration	4,560	39.7%
Education	2,145	62.0%
Health, Parks, Recreation and Fitness	3,537	65.8%
Humanities	5,196	46.7%
Mathematics, Computer and Information Sciences	2,751	21.2%
Personal, Protective and Transportation Services	48	50.0%
Physical and Life Sciences, and Technologies	4,359	33.1%
Social and Behavioural Sciences, and Law	8,322	45.6%
Visual and Performing Arts, and Communications Technologies	2,013	46.5%
Other	501	43.1%
Not applicable, not reported	294	43.9%
Total	39,006	41.0%

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

France

	Biology		Eng. and Technology		Medical sciences		Earth and environment		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants	52%	48%	81%	19%	66%	34%	71%	29%	55%	45%	37%	63%

Sources: Chiffres clé de l'égalité femmes-hommes 2020 <https://www.enseignementsup-recherche.gouv.fr/cid150061/esri-chiffres-cles-de-l-egalite-femmes-hommes-parution-2020.html>;
 L'état de l'emploi scientifique en France 2020 https://cache.media.enseignementsup-recherche.gouv.fr/file/2020/87/8/Etat_emploi_scientifique_2020_1341878.pdf

Israel

Proportion of female applications for research grants by female rates in academic staff by scientific field

Field	Female rates of academic staff (%)	Female application rates (%)
Engineering	22	12
Social sciences	44	36
Computer sciences	20	16
Humanities	37	31
Biological sciences	25	24
Chemical sciences	13	11
Physical Sciences	13	21
Mathematics	14	8
Medicine	42	21
Agriculture	20	27
Total	34	23

Computation of the Israel quotients for Table 8

In the sub-section *Additional data to Table 8*, the data above is used to compute the quotient

(Share of women HEI researchers that apply for funding)/(Share of men HEI researcher applying)

for Israel. As an example, we take Engineering, with 22 percent women among HEI researchers, and 12 percent women among applicants. Then it is possible to compute⁷⁵:

$$\begin{aligned} & (\text{share of women HEI researchers applying})/(\text{share of men HEI researchers applying}) = \\ & = (12\% \cdot (1-22\%))/(22\% \cdot (1-12\%)) = 0.48 \end{aligned}$$

It should be noted that the percentages in the Israel table above are rounded to integer values. Hence, the computed value 0.48 is not exact, but it is a good approximation (the correct value must be between 0.45 and 0.52, rounded to 2 decimals). However, the quotient for Natural Sciences cannot be computed from the data in the table above.

⁷⁵ The derivation of this formula is left as an exercise for readers with an interest in formulas.

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

Success rates

Belgium

FWO – Success rates according to sex of principal investigator

	PhD fundamental research		Fellowship basic research		PhD Fellowship strategic basic research		Postdoctoral Fellowship	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
	2019							
nb of applications	436	495	304	229	613	431		
nb funded	134	146	115	85	146	110		
success rate (nb funded/nb applications)	31	29	38	37	24	26		
	Average 2014 – 2019*							
nb of applications	463	522	354	302	450	317		
nb funded	110	115	108	93	116	83		
success rate (nb funded/nb applications)	24	22	31	31	26	26		

* For PhD Fellowship strategic basic research the average is calculated from 2015-2019 (programme transferred from IWT in 2015)

FWO Basic Research projects – Success rates according to sex of principal investigator, by main research field

	Biological sciences		Humanities		Social sciences		Medical sciences		Science & Technology		Interdisciplinary	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	138	44	71	33	168	94	276	160	259	61	42	12
nb funded	34	10	15	7	39	15	67	31	58	15	7	4
success rate (nb funded/nb applications)	25	23	21	32	23	16	24	19	22	25	17	33

GENDER-NET Plus – Gender equality in research funding – Deliverable 6.3

France

France – Success rates according to sex of principal investigator, by main research field (2015-2019)

AAPG 2015- 2019 - JCJC/PRC /PRCE	BS		EERB		NuMa		SHS		SPICE		Multi Dept		Total		
	PI - men	PI - women	PI												
nb of applications (first stage)	7 349	4 184	3 259	1 520	3 132	643	1 148	1 061	7 036	2 321	1 554	850	23 478	10 579	34 057
nb funded	947	481	424	190	499	97	173	159	961	284	225	133	3 229	1 344	4 573
success rate (nb funded/nb applications)	12.9 %	11.5 %	13. 0%	12.5 %	15. 9%	15.1 %	15. 1%	15.0 %	13. 7%	12.2 %	14. 5%	15.6 %	13. 8%	12.7 %	13. 4%

The figures include the 3 main categories of calls (young researchers “JCJC”, Public Research Only “PRC”, Public research with private partnership “PRCE”).

BS :	Biology and Health
EERB :	Environment and Biological Resources
NuMa :	Digital sciences and Maths
SHS :	Social sciences and humanities
SPICE :	Physics, Engineering, Energy
Multi Dept:	Cross-cutting domains

Ireland

Ireland – Success rates according to sex of principal investigator, by main research field

	Life sciences		Physical Sciences & Engineering		Social sciences & Humanities	
	PI – men	PI - women	PI – men	PI – women	PI - men	PI - women
nb of applications	62	54	129	20	66	71
nb funded	9	7	14	3	7	7
success rate (nb funded/nb applications)	14.5%	13%	11%	15%	10.6%	9.9%

GENDER-NET Plus

Gender equality in research funding

Country reports - Annex to Main Report

Deliverable 6.3



Project Acronym	<i>GENDER-NET Plus</i>
Task	<i>Quantitative and qualitative analysis of gender differences and bias to research grants</i>
Task number	<i>6.3</i>
Responsible task leader	<i>SRC</i>
Deliverable assignees	<i>SRC</i>
Authors	<i>Responses to the template</i>

H2020

EC project number: 741874



Horizon 2020
European Union Funding
for Research & Innovation



GENDER-NET Plus – Gender equality in research funding – Country Reports – Deliverable 6.3

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Introduction

This annex to the main report shows the country-specific answers to the template that has been part of the information used in the main report. The answers are structured according to the questions in the template, but the questions have been rewritten as headlines. For some countries, not all the questions in the template were answered; these questions have been left out in those specific country reports.

The reporting organisations from the respective countries are specified, but the names of the informants have been left out, since the answers are seen as working material. The information was collected during the period of May 2020 to January 2021, including updates of data.

Template

Country specific data on research funding and gender

Please fill in your name and organisation(s), and the day when you send the answer:

Name:

Organisation(s):

Country:

Date:

Introduction

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5. What are the differences between disciplines?
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For each of the six general topics, we hope you can answer 1-3 questions that are more specific. If possible, please also add the source of the information (e.g. article, report, web page, internal data from organisation or official statistics etc.).

Please also comment your answers in relation to the specific data for your country in the 2009 report, [The Gender Challenge in Research Funding](#). The report section with data specific for your country is enclosed to this mail.

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When you have completed the template, please send it back to us (as a word file):

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With CC to:

Thank you for filling in the template. Your answers are very valuable and crucial for our study.

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1a) Please describe briefly the national systems for funding of research in your country (e.g., funding organisations where researchers apply for grants, direct grants to universities for research). Are there any specific measures taken for promoting gender balance in the funding system?

Please also comment on the development and differences from the situation in the 2009 report (see the enclosed specific country report).

[total 1/2–1 page]:

1b) Please list the main relevant funding organisations (research councils etc.) in your country, with brief descriptions of the main objectives and the funding instruments of the organisation. Are there specific measures to promote gender balance?

Please also comment on the development and differences from the situation in the 2009 report (see the enclosed specific country report).

[total 1/2–1 page]

2 What are the success rates in getting funding by sex?

Fill in the numbers according to the template as best as possible. Please comment if you need to use other categories or if it is not possible to find data. The focus is on grants to individual researchers from research funders.

Please comment on the development and differences from the numbers in the 2009 report (see tables under section 5.1 in the report).

To see if women are equally successful as men when applying for funding, the success rates can be calculated.

2a) Success rates according to sex of principal investigator, by main research field

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications												
nb funded												
success rate (nb funded/nb applications)												

Comments [total 1/2–1 page]:

To see if women apply for funding equally often as men, the set of applicants can be compared with the “pool of potential applicants”.

2b) Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants												

Comments [total 1/2–1 page]:

3 Which are the most transparent/opaque procedures/systems?

Please indicate yes or no to the statements below. Please indicate the name of each funding organisation covered by your answer.

Please also comment on the development and differences from the situation in the 2009 report (see report sections 3.3, 3.4 and the enclosed specific country report).

3a) Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	[org.name]	[org.name]	[org.name]
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Monitors composition of selection committees			
Monitors composition of evaluation panels			
Uses (national and) international evaluators			
Publishes evaluation criteria			
Has ethical guidelines preventing nepotism, etc.			
Publishes ethical guidelines (preventing nepotism, etc.)			
Applicants can find out evaluators' names during the evaluation process			
Evaluators know applicants' names or sex			
There is a right of reply or a complaint procedure			

Comments [total 1/2–1 page]:

3b) Transparency of outcome

Name of funding organisation (if more than one, fill in the name in separate columns)	[org.name]	[org.name]	[org.name]
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Calculates gendered success rates			
Publishes gendered success rates			
Compares applicants to pool of potential applicants			
Monitors amounts of funding awarded per sex			
Other quality checks (eg. nepotism)			
Gives information on granted projects (title, researchers, abstract, etc.)			
Applicants can find out evaluators' names after the evaluation process			

Comments [total 1/2–1 page]:

4 What are the barriers (legal, administrative, etc.) to achieving transparency/accountability of procedures?

Please describe the barriers that can affect the transparency or accountability of the procedures in the funding organisation(s). It can be, for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc. If necessary, specify information for separate organisations.

Please also comment on the development and differences from the situation in the 2009 report (see report sections 4.3, 4.4 and the enclosed specific country report).

(total 0,5–1 page).

5 What are the differences between disciplines?

5a) Please comment on the differences (if any) of the success rates between main research areas in the table of Question 2a.

Please also comment on the development and differences from the situation in the 2009 report (see report section 5 and the enclosed specific country report).

(total 0,5–1 page).

5b) Please describe any differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender. *If necessary, specify information for separate organisations.*

Please also comment on the development and differences from the 2009 report (see report section 5 and the enclosed specific country report).

(total 0,5–1 pages).

5c) Please describe any differences in funding instruments between main research areas, and if these have implications for gender. *If necessary, specify information for separate organisations.*

Please also comment on the development and differences from the 2009 report (see report section 5 and the enclosed specific country report).

(total 0,5–1 pages).

6 How are members of selection committees appointed (or other gatekeepers)?

6a) Please describe the procedures for selecting committee members in research funding organisations, and if these have implications for gender. *If necessary, specify information for separate organisations.*

Please also comment on the development and differences from the situation in the 2009 report (see report section 5 and the enclosed specific country report)

(0,5–1 pages).

6b) Number of men and women in selection/funding committees in research funding organisations.

For each organisation, add one row for each type of committee.

Name of organisation	Type of committee	# Women	# Men

Please also comment on the development and differences from the situation in the 2009 report (see report section 4 and the enclosed specific country report).

(0,5–1 pages).

Country reports

Austria

Reporting organisation(s):

Austrian Ministry of Education, Science and Research

Austrian Academy of Sciences

AWS - Austria Wirtschaftsservice Gesellschaft mbH

FFG – Austrian Research Promotion Agency

FWF – Austrian Science Funds

Different types of grant awarding procedures or research funding systems?

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), specific measures taken for promoting gender balance in the funding system.

In Austria, research is either financed by the universities and research institutions themselves, or research funding is granted through the key funding agencies for research, technology and innovation at the level of the Federal Government and the federal states, while the universities and research institutions provide the infrastructure, the expertise and an environment conducive to science. Along with this national research funding, there is also international research aid – above all, the aid granted through the EU Framework Programmes for Research and Technological Development (Horizon 2020, Horizon Europe). Research can also be financed by business enterprises and other private funders.

The bulk of federal aid is provided by three major agencies, the Austrian Science Fund (FWF), the Austrian Research Promotion Agency (FFG) and the Austria Wirtschaftsservice (aws), or handled by these agencies on behalf of the Federal Government. The FWF finances basic research while the FFG focuses on funding applied research associated with industry. The aws is the federal development bank in Austria for business-related economic development.

Three other research funding institutions are worth noting. Ludwig Boltzmann Gesellschaft (LBG) pursues medicine, the life sciences as well as the humanities, the social sciences and cultural sciences as its priority fields. The Christian Doppler Research Association (CDG) funds collaborations between science and business and the Austrian Exchange Service (OeAD) is the main service centre for European and international mobility and cooperation programmes in education, science and research.

Women have represented over 50 percent of university graduates in Austria since 2000, but they are still under-represented in many areas of research, especially at higher hierarchical levels, in industrial research, in many natural sciences, and in most engineering sciences. The Austrian RTI strategy therefore included the goal of gender balance amongst those involved in research work. To this end, measures were proposed in a number of areas (Gender budgeting in all research funding measures, Individual support measures for early stage female researchers, measures to improve compatibility between career and family). These measures are implemented at various levels, namely (i) at the

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federal budget level, (ii) in the federal funding agencies, (iii) in the research institutes and their governance, and (iv) at the individual level of female researchers. A whole series of specific measures has been developed and implemented, using both approaches, gender mainstreaming as well as the promotion of women.

For the development and differences from 2009 please see the Austrian Research and Technology Reports. The important chapters and statistical data can be tracked there. The English version of the Austrian Research and Technology Report 2020 is available from September 2020. <https://www.bmbwf.gv.at/en/Topics/Research/Research-in-Austria/Services/Austrian-Research-and-Technology-Report.html>

Main relevant funding organisations (research councils etc.), main objectives and the funding instruments of the organisation and specific measures to promote gender balance

The bulk of federal aid in Austria is provided by three major agencies:

The Austrian Science Fund (FWF)

The Austrian Science Fund (FWF) is Austria's central funding organisation for basic research.

The FWF's mission is to support the ongoing development of basic research in Austria in line with the highest international standards. In pursuing that aim, the FWF makes a significant contribution to Austria's cultural enrichment, to its development as a knowledge-based society and thus to creating value and prosperity in the country.

The FWF's goals are:

- To further improve Austria's research performance on the international stage and to increase the country's attractiveness as a research location, primarily by funding top-class research conducted by both individuals and teams, but also by helping to enhance the competitiveness of Austria's research facilities and its innovation system as a whole.
- To heighten Austria's research potential, both qualitatively and quantitatively, in line with the principle of research-based education.
- To strengthen links and foster interaction between scholarly research and all other fields of economic, social and cultural activity, and in particular to enhance the standing of basic research through concerted, long-term public relations work.

FWFs basic principle are:

Excellence and competition – The FWF's funding activities focus on research devoted to generating fresh knowledge, the quality of which is assessed on a competitive basis and by international referees.

Independence – Creativity in basic research requires freedom. Thanks to its legally independent status, the FWF is able to shield researchers from the direct influence of interest groups and so guarantee that freedom.

Internationality – The FWF is guided by the highest standards of the international academic community and supports cooperation across national borders.

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Equal treatment of all disciplines – The FWF treats all researchers according to the same principles, neither favouring nor discriminating against particular disciplines.

Transparency and fairness – To attain a maximum of impartiality, the FWF strives to avoid conflicts of interest, to build in checks and balances at all stages of its procedures and to communicate clearly its practices and decision-making processes.

Gender mainstreaming – Ensuring the equal treatment of all researchers, regardless of gender, is a priority for the FWF, which it pursues through specific programmes and by practising gender mainstreaming in all areas of its work.

Equal opportunities – The FWF assesses all the applications for funding it receives without regard to the applicant's position or academic title.

Ethical standards – The FWF is committed to ensuring, within its sphere of influence, that the rules of sound research practice and internationally recognised ethical standards are scrupulously observed.

Gender equality actions within the FWF

While women have constituted the majority of Austrian university graduates since 2000, they are still clearly under-represented in many areas of research. As part of its gender-mainstreaming strategy, the FWF has made an ongoing commitment to highlighting disparities at both Austrian and European levels and, at the same time, initiating and shaping positive changes in equality of gender representation.

Since 2005, the following initiatives have been put in place:

- Enhancing the attractiveness of the FWF's portfolio in terms of the career development of women (see 'Consultation process for the career programmes', p. 17)
- Increasing the visibility of women as principal investigators (through, for example, science-communication initiatives)
- Awareness-raising activities to increase the number of female applicants
- Ensuring the quality of data concerning gender balance in research and communicating the corresponding key indicators on an annual basis

Thanks to its monitoring of equal opportunities, the FWF is able to present all the relevant data, updated on an annual basis, and thus illustrate the current situation of the FWF's structures, programmes, and processes.

In 2019, a third of all applications were submitted by women when considered across all the funding programmes. This is consistent with the long-term average. The only area in which the percentage of women is lower is the natural and technical sciences (18 percent), whereas the percentage in the areas of biology and medical sciences as well as humanities and social sciences is 40 and 46 per cent, respectively. The key figure for the issue of equal opportunities is the approval rate, which, in 2019, was 27 per cent for women and 26.7 per cent for men.

To further emphasise gender awareness, a balanced participation of female and male researchers is a funding decision-making criterion in three programmes (Young Independent Researcher Groups, Special Research Programmes, and Research Groups).

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In addition, since the beginning of 2019, all applicants have been required to reflect explicitly on the gender dimension of their project's research approach. These statements are also taken into consideration when evaluating the project.

The Austrian Research Promotion Agency (FFG)

The Austrian Research Promotion Agency (FFG) is the national funding agency for industrial research and development in Austria. FFG funding schemes play an important role in generating new knowledge, developing new products and services, and enhancing competitiveness in the global marketplace. They make it easier, or possible, to finance research and innovation projects, and help to absorb the risks involved in research. The FFG supports international networking and encourages careers in science. FFG offers a wide scope of funding possibilities, starting with low-threshold offerings, even for businesses lacking an internal research department, up to large-scale collaborative projects between business and science. FFG funds corporate research, SMEs and start-ups, structures and infrastructures, qualifications, human resources and young talent. With regard to this questionnaire, it is important to note that beneficiaries are always companies, not individual researchers!

Gender criteria are an integral part of all funding schemes and help to ensure equal opportunities:

- Gender aspect in the project content
- Gender-specific balance in the project team
- Gender aspects with regard to commercialization

Internal gender quality trainings and an internal gender-working group as well as membership in international programmes like CoP FORGEN make sure, that the organizational awareness and knowledge on gender equality is high.

FFG transacts a number of **funding programmes with focus on gender equality**:

- **Talents**: The Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology supports people in research and development throughout their whole career. There are three main targets: Encouraging young people to start a career in research and development, connecting researchers with businesses and ensuring equal opportunities for all. (<https://www.ffg.at/en/talents>)
 - Internships for Students – Four Weeks in Science and Technology
 - Talents Regional – Children, Companies and the World of Research
 - FEMtech Career – Equal Opportunities in Applied Research
 - FEMtech Internships for Female Students – Entry into a Research Career
 - FEMtech Research Projects – Gender-Relevant Projects
- **w-fORTE** - Economic stimuli from women in research and technology (<https://www.ffg.at/en/service/w-fforte-economic-stimuli-women-research-and-technology>): w-fORTE promotes women in scientific research and technology and encourages discussions with the goal of achieving greater equal opportunity in research and career development. It offers free, high-quality training and discussions tailored to the career needs of researchers, networking, peer-to-peer learning and information based on the latest studies for managers in cooperative research.

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- **Laura Bassi 4.0** (<https://www.ffg.at/en/program/laura-bassi-40-programme-0>): The Laura Bassi 4.0 programme is aimed at women who want to play an active role in shaping digitalisation. The programme enables the implementation of network-based inter- and transdisciplinary research and innovation projects and focuses on digitalisation and cooperation based on equal opportunities in order to increase the innovation output of Austrian businesses (especially SMEs).
- **Research partnerships - Industrial PhD** (<https://www.ffg.at/en/programm/forschungspartnerschaften>): The programme is sponsored by Nationalstiftung für Forschung, Technologie und Entwicklung and Österreich-Fonds, supported by the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK). The focus lies on funding industrial PhD projects to improve qualifications of research and innovation staff in companies and non-university research institutions. 50 percent of fundings are for female researchers.

Austria Wirtschaftsservice Gesellschaft mbH (aws)

Austria Wirtschaftsservice Gesellschaft mbH (aws) is the promotional bank of the Austrian federal government and is 100 percent owned by the Republic of Austria. The Austrian Federal Ministry for Digital and Economic Affairs (BMDW) and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) act as its owner representatives. The aws renders its services as part of its public mandate. Its clients include its owner representatives, the BMDW and BMK, as well as other Austrian federal ministries, states, public authorities and interest groups.

The Austrian Academy of Sciences (ÖAW)

The Austrian Academy of Sciences offers funding for doctoral candidates and young postdocs in 9 fellowship programmes with a yearly budget of around 10 Mio euros. One of these programmes is targeted only to women in the MINT subjects (L'ORÉAL Austria).

In 2019, 58 percent of the applicants were women; 54 percent of those whose applications were successful were women.

The evaluation process is organised as a peer review. For each program, a committee of scholars and scientists (nominated by the Presiding Committee of the Austrian Academy of Sciences) create a shortlist of those applications to be reviewed by experts (who are from abroad). The representation of women among the committee members is 42 percent and among the reviewers 30 percent.

The final decision is made by the committee and is communicated to the applicants with the complete written review (which has been anonymized). On the ÖAW website, applicants can find criteria to assess the applications (applicant's academic qualification and ability to undertake the project, scientific quality of the research project, including originality, research questions and methodology) and information about the selection process.

With regard to eligibility criteria, there is no age limit and time taken off for childcare is considered. For fellowship recipients, in case of childcare duties, the fellowship can be taken up as a part-time fellowship. In this case, the fellowship's duration can be lengthened by up to half the time granted.

Success rates in getting funding by sex

FWF – Success rates according to sex of principal investigator, by main research field

2019	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	862	319	133	38	249	171	20	15	159	141	205	170
nb funded	263	97	25	8	50	37	5	4	30	27	61	58
success rate (nb funded/nb applications)	30.5%	30.4%	18.8%	21.1%	20.1%	21.6%	25.0%	26.7%	18.9%	19.1%	29.8%	34.1%

FFG – Does not provide grants to individual researchers. The reference entity in our funding database is the project and the organisation. Projects are classified according to subject identification codes, not to scientific disciplines. FFG collect information on the gender of the project lead. In 2018, 5662 proposals were submitted (24 percent female project leaders), of which 3620 were funded (27 percent female project leaders). These are the figures for the total funding portfolio managed by FFG.

The impact monitoring carried out on behalf of FFG (survey, ca 6 percent response rate, 4 years after project termination) covers most of the portfolio where FFG provides R&D aid for RDI projects.

To see if women apply for funding equally often as men, the set of applicants can be compared with the “pool of potential applicants”.

AWS - n.a.

ÖAW – Success rates according to sex of principal investigator, by main research field

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	73	79	7	8	23	48	1	5	41	48	50	82
nb funded	21	17	1	4	8	9	0	2	11	10	20	29
success rate (nb funded/nb applications)	29%	22%	14%	50%	35%	19%		40%	27%	21%	40%	35%

The table combines data of all funding programmes of the ÖAW – doctoral programmes DOC, DOC-team and Chemical Monthly, post-doc programmes APART-GSK, MAX KADE, L’ORÉAL Austria and Post-DocTrack, mobility programmes ROM and ATHEN, in the year 2019. All these programmes fund individuals, that is, all data refer to principal investigators.

The ÖAW does not publish information on gender specific success rates, but success rates are monitored and evaluated. Measures are being considered since women seem to be less successful when applying for funding.

FWF – Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants ¹

2017	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants	5.526	2.392	4.753	1.406	3.575	3.230	498	612	3.200	3.220	1.439	1.896

FFG – Again, this question is not applicable to FFG funding as applicants and beneficiaries are organisations, not individual researchers.

AWS – n.a.

ÖAW – n.a

Transparent/opaque procedures/systems

Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	FWF	FFG	AWS	ÖAW
<i>Please mark with Y for Yes and N for No on the statements below</i>				
<i>Does the funding organisation do the following?</i>				
Monitors composition of selection committees	y	y	Y	Y
Monitors composition of evaluation panels	y	y	Y	N/A
Uses (national and) international evaluators	y	y	Y	Y
Publishes evaluation criteria	y	y	Y	Y
Has ethical guidelines preventing nepotism, etc.	y	y	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)	y	y	N	Y
Applicants can find out evaluators' names during the evaluation process	n	n	N	N
Evaluators know applicants' names or sex	y	Not applicable	Depends on program	Y
There is a right of reply or a complaint procedure	y	n		N

FFG – Right of reply or a complaint procedure: Not as a general rule, only e.g if the process was not applied properly.

ÖAW – There is no defined right of reply or a complaint procedure. However, there is a standardized process for revising and re-submitting an application after rejection, which is published on the ÖAW website.

¹ Source: STATISTIK Austria, http://www.statistik.at/web_de/statistiken/energie_umwelt_innovation_mobilitaet/forschung_und_innovation/f_und_e_in_allen_volkswirtschaftlichen_sektoren/041104.html

Transparency of outcome

Name of funding organisation (if more than one, fill in the name in separate columns)	FWF	FFG	AWS	ÖAW
<i>Please mark with Y for Yes and N for No on the statements below</i>				
<i>Does the funding organisation do the following?</i>				
Calculates gendered success rates	y	y	Y	Y
Publishes gendered success rates	y	n	Y	Y
Compares applicants to pool of potential applicants	n	n	N	N
Monitors amounts of funding awarded per sex	y	n	N	Y
Other quality checks (eg. nepotism)	y		Y	Y
Gives information on granted projects (title, researchers, abstract, etc.)	y	y	N	Y
Applicants can find out evaluators' names after the evaluation process	n	n	N	N

FFG – Gendered success rates are not published, because applicants are organisations.

ÖAW – The ÖAW calculates gendered success rates for their programmes and publishes gendered success rates in the annual report, but does not compare applicants to pool of potential applicants. The names of the members of the fellowship committees are published on the ÖAW website; but applicants cannot find out names of international reviewers (reviews are anonymized before being sent to the applicants).

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

FWF:

- A 2010 study could not identify any particular barriers in the application and decision making process for women for the years 1999 to 2009 (see Reckling/Fischer 2010). This analysis will be repeated for the years 2010-2019 and published in 2021.
- A new career programme will be introduced from 2021. Here, a guided evaluation by the GRANteD network is planned from the beginning to eliminate potential barriers.
- The central difference to 2009 is that at that time such studies were not yet available.

FFG – n.a.

AWS – n.a.

ÖAW - Committee members are appointed by the Presiding Committee, usually for a certain period. They should be scholars and scientists working in Austria. These committee members assess the applications and nominate reviewers (predominantly from abroad); the funding decisions are then made on the basis of the application documents and the reviews. In two programmes (DOC-team, APART-GSK) interviews with those candidates who have received positive reviews are used additionally.

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Researchers in the natural, medical and agricultural sciences, engineering and technology need to submit their applications in English; researchers in humanities, social and cultural sciences are offered a choice between German and English.

All reviewers receive guidelines for avoiding conflicts of interest and are asked to inform about any doubts they might have.

Differences between disciplines

Differences (if any) of the success rates between main research areas

FWF

- For years, the FWF has observed slightly different approval rates among the main research areas (see also Reimann 2019). For the FWF, this reflects the relative strength of the main research areas in an international comparison.
- The FWF cannot observe any major differences in success rates for women and men by main research areas. In fact, women tend to have slightly higher success rates (especially in the humanities).
- In the field of agricultural sciences, results should be interpreted with caution due to the small number of cases.
- The central difference to 2009 is that at that time such data were not yet available.

FFG – This question is not applicable to FFG funding schemes. As there are many different programmes, partly with thematic focus, and as we don't fund individual researchers, there can be no comparison such as the one mentioned above.

AWS – n.a.

ÖAW – No data

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

FWF

- The different numbers of applications with regard to the main research areas reflect the fact that other funding sources are available in Austria, especially in applied research.
- Whether systematic gender differences exist here must be observed over a longer period of time.
- Such data were not yet available in 2009.

FFG – Please see answer for 5a – please note information on gender criteria for general funding and funding programmes with gender focus above (1b).

AWS – n.a.

ÖAW – No data

Differences in funding instruments between main research areas, and if these have implications for gender.

FWF – At the moment the FWF still has two programme to promote women. However, starting in 2021, these programmes are to be transformed into two junior researcher programmes in which an equal distribution of funding between women and men is ensured.

FFG – Please see answer for 5a (**Differences (if any) of the success rates between main research areas**).

AWS – n.a.

ÖAW – No data

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender.

FWF – The FWF has set out a gender policy (published 2019) which describes the FWF standards including Gender Mainstreaming and equal opportunities.

For this reason in the course of nomination of international experts our reporters aim for participation of female researchers within our reviewer pools (2019 25 percent) as well as within different jury and boards which can be looked at on our website – [equality monitoring](#) (from 2015 on).

In 2009 we did not have such data available yet.

FFG – n.a.

AWS – For each funding program a specific selecting committee is appointed. Procedures are developed to best suit the program at hand.

ÖAW – Committee members are appointed by the Presiding Committee and – for a few committees – by the Österreichische Universitätenkonferenz (uniko), usually for a certain period. They should be scholars and scientists working in Austria.

Committee members should be actively and successfully engaged in research and have broad expertise in the field. Women and men should be represented equally in all research areas.

Number of men and women in selection/funding committees in research funding organisations

Name of organisation	Type of committee 2019	# Women	# Men
FWF – Austrian Science Fund	Executive Board	3	2
FWF – Austrian Science Fund	Supervisory Board	7	3
FWF – Austrian Science Fund	Strategic Advisory Board	4	4
FWF – Austrian Science Fund	Board (Reporters of the FWF)	19	37
FWF – Austrian Science Fund	Jury START Programme/ Wittgenstein-Award	5	7
FWF – Austrian Science Fund	Jury Programme for Arts-based Research (PEEK)	3	3
FWF – Austrian Science Fund	Jury Science Communication Programme	3	3
FWF – Austrian Science Fund	Jury Doc.Funds	4	7
FWF – Austrian Science Fund	Jury Young Independent Researcher Groups	7	6
ÖAW	Fellowship committees	40	54

Name of organisation	Type of committee	# Women	# Men
FFG	Selection committee	30%	70%

AWS


Indikator 7: Gender und Gleichstellungsförderung

	2018		2019	
	Anzahl	Anteil	Anzahl	Anteil
Anzahl Projektleiterinnen und Anteil Frauen an den Projektleitungen aller geförderten Projekte	740	20 %	1.100	23 %
Anzahl Gründerinnen und Anteil Frauen an allen geförderten Unternehmensgründungen	390	25 %	240	20 %
Bewertungsgremien				
aws Aufsichtsrat	5	33 %	5	33 %
ERP Kredit	2	20 %	2	20 %
ERP Tourismus	3	43 %	3	43 %
ERP Agrar	3	43 %	3	43 %
ERP Verkehr	3	43 %	3	43 %
Verarbeitung, Vermarktung und Entwicklung	3	27 %	4	36 %
Digital Innovation Call	-	-	3	30 %
FISA – Filmstandort Austria	7	78 %	7	78 %
Impulse	11	52 %	11	52 %
Seed	6	29 %	6	29 %
Gründung am Land	2	33 %	2	33 %
kit4Market	5	60 %	5	40 %

Quelle: aws.

Comments

FWF – The FWF has reached equality within its strategic bodies such as the executive and supervisory board. The participation within board of reports still has to reach equality. With the next turn on position in October 2020 we will get closer to reach this goal. With other juries and board we are pretty close to reaching equality

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FFG – The share of proposal evaluations carried out by female experts is monitored, It increased from ca 20 percent in 2015 to 30 percent in 2019.

ÖAW – The table combines data of the committees for all funding programmes of the ÖAW – doctoral programmes DOC, DOC-team and Chemical Monthly, post-doc programmes APART-GSK, MAX KADE, L'ORÉAL Austria and Post-DocTrack, mobility programmes ROM and ATHEN, in the year 2019. The number for “Men” includes the chairpersons for each committee; since all committees are chaired by a member of the Presiding Committee of the ÖAW, these are all men. If the chairpersons are not included, the fellowship committees consist of 45 men and 40 women.

Belgium

Reporting organisation(s):

Fonds Wetenschappelijk Onderzoek – Vlaanderen (FWO)

Fonds de la Recherche Scientifique – FNRS

Different types of grant awarding procedures and research funding systems

National systems for funding of research, specific measures taken for promoting gender balance in the funding system

In Belgium, scientific research is a competence shared by the Federal State, the Regions and the Communities. Regions are basically in charge of funding applied research while Communities fund basic research. Belgian Federal state also supports research mainly through tax cuts on salaries of researchers (under certain conditions) but also through the federal science policy (BELSPO). Research funding is decentralised to the regional governments in Flanders and Wallonia (Fédération Wallonie-Bruxelles).

There are two funding agencies for basic research in Belgium: FWO (Research Foundation Flanders) for the Flemish-speaking part of Belgium and F.R.S.-FNRS (Fonds de la Recherche Scientifique – FNRS) for the French-speaking part.

The French-speaking community of Belgium is referred to as “Federation Wallonia-Brussels”, where basic research is mainly carried out within the six French-speaking Belgian universities, namely:

- l’Université catholique de Louvain (UCLouvain) ;
- l’Université libre de Bruxelles (ULB) ;
- l’Université de Liège (ULiège) ;
- l’Université de Mons (UMons) ;
- l’Université de Namur (UNamur)
- l’Université Saint-Louis - Bruxelles (USL-B).

And university hospitals linked to them:

- le CHU de Liège (ULiège) ;
- les Cliniques universitaires Saint-Luc (UCLouvain) ;
- l’hôpital Erasme (ULB).

The budget of the Federation Wallonia-Brussels in the field of scientific research amounted to more than 143 million euros in 2017, a budget that has been constantly increasing in recent years (+ 8.3 percent compared to 2014). Within this budget, around 75 percent concerns the F.R.S.-FNRS and its associated funds (who funds universities mainly following a bottom-up approach, through calls for proposals in all scientific domains). Part of this budget also goes directly to universities to fund research through programmes of their own.

For Flanders, there are two main research-funding organisations: FWO, that funds mainly (strategic) basic research in academia, and VLAIO, that funds mainly later stage translational and applied research

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in academia and industry. Compared to the previous report, the IWT no longer exists. Its funding schemes were transferred to VLAIO or FWO (strategic basic research fellowships and research projects, applied biomedical research projects and senior clinical investigator).

The FWO's gender and diversity policy extends across the entire organisation, from application and evaluation procedures to the HR policy for fellows and researchers appointed to projects.

The FWO allows budgetary flexibility to cover costs for medical and social conditions. FWO has replaced the absolute age limits for applying for a personal mandate with (relative) scientific seniority to accommodate researchers with e.g. a career break due to pregnancy and parental leave. FWO has also abolished the nationality requirement for applicants and, since 2017, the gender choice in applications has been extended with the option "X". By adding this third choice, next to "M" (male) and "V" (female), we guarantee gender neutrality.

The FWO closely monitors the gender dimension in its funding schemes for several years now. For example, the ratio between the number of male and female applicants on the one hand, and the gender distribution in the allocations, on the other hand, are consistently analysed.

Specific measures have been taken to reduce the drop-out of young female researchers after their PhD (i.e. the leaky pipeline). This includes the possibility to adjust the scientific seniority limits per pregnancy with one year and to extend an ongoing fellowship (both doctoral and postdoctoral) with one year per pregnancy.

FWO is also committed to maintain diversity and gender balance in the composition of the expert panels and the board, since the evaluation of grant applications itself is also a crucial part to promote a proper gender balance in academia. For 2020, the board consists of 41,6 percent female members and 36,6 percent of all expert panel members are female, (38.3 percent in biological sciences, 40.5 percent in humanities, 39.8 percent in social sciences, 37.5 percent in interdisciplinary research, 33.7 percent in medical sciences and 34.9 percent in science and technology), meeting the government quota of a maximum two thirds of one sex.

Main relevant funding organisations (research councils etc.), main objectives and funding instruments of the organisation. Specific measures to promote gender balance.

In Belgium, applied research is basically funded by regions (in charge of economical matters) while basic research is funded by communities, along with higher education.

There are basically two research funding agencies for basic research in Belgium, namely F.R.S.-FNRS with regards to the French-speaking part of the country and FWO for the Flemish-speaking counterpart.

Fonds de la Recherche Scientifique – FNRS (F.R.S.-FNRS) is a private foundation of public utility. It is the main funding agency for fundamental research in the Federation Wallonia-Brussels. With an annual budget of around 200 million euros, the Fund has a set of funding schemes intended to support fundamental research mainly within the six universities of the Federation Wallonia-Brussels. Members from specific non-university institutions, like some federal institutions, also have access to funding from the F.R.S.-FNRS, under certain conditions.

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The resources of the F.R.S.-FNRS mainly consist of public subsidies (approximately 90 percent of the resources), the Federation Wallonia-Brussels being the source of approximately 65 percent of these subsidies (in 2016: 66.6 percent of the public subsidies came from the Federation Wallonia-Brussels, 23.2 percent from the Federal State, 5.4 percent from Wallonia and 4.8 percent from the National Lottery). The remaining 10 percent comes from various donations and legacies, notably thanks to the Télévie operation.

Around 60 percent of the resources allocated to the F.R.S.-FNRS are dedicated to pay the salaries of researchers under the F.R.S.-FNRS payroll, selected by committees of international experts following publication of calls for proposals, and conducting their research at one of the six universities of the Federation Wallonia-Brussels. The F.R.S.-FNRS also has the "Credits and Projects" funding schemes allowing it to finance operating, equipment and personnel costs necessary for carrying out research projects submitted by permanent researchers (i.e. Research Associates, Senior Research Associates or Research Directors of the F.R.S.-FNRS or other researchers permanently appointed in one of the six universities of the Federation Wallonia-Brussels). F.R.S.-FNRS also offers other types of funding to support the mobility of Federation Wallonia-Brussels researchers and collaborative research.

The F.R.S.-FNRS annually organizes two main calls for proposals - a call for "Grants and Fellowships" and a call for "Credits and Projects" - to which are added two other calls specifically dedicated to the funding of doctoral scholarships: the FRIA (Fund for Research training in Industry and Agriculture) and the FRESH (Human Sciences Research Fund) calls. The Fund also organizes other occasional calls for proposals, fewer in terms of the number of received applications, such as the "Large Equipment", "FRFS-WELBIO" and "FRFS-WISD" calls.

Since 2017, the F.R.S.-FNRS is involved jointly with the FWO (Fonds Wetenschappelijk Onderzoek) in the management of the EOS (Excellence Of Science) call which has succeeded to the federal PAI (Interuniversity Attraction Poles Program) following the 6th reform of the Belgian State. EOS provides funding for joint fundamental research projects between French- and Flemish-speaking researchers in all disciplines.

In order to finance art research projects, the "Fonds de la Recherche en art (FRArt)" has been created in 2018 under the management of the F.R.S.-FNRS. It can allocate until 50.000 euros for one year. It is used to cover staff, equipment and operating expenses, and is open to artist-researchers, holders of a higher artistic education diploma, or an equivalent diploma, or demonstrating a recognized artistic research practice. The projects can be carried out individually or collectively, outside the framework of any doctorate, and must be validated by one or several « écoles supérieures des Arts » (ESA).

Finally, the F.R.S.-FNRS allocates a total budget of around 180.000 euros each year to support the activities of graduate colleges and thematic doctoral schools. The distribution between schools is partly linked to the number of PhD holders trained over the last 5 years.

Gender equality is very important for F.R.S.-FNRS. The Fund monitors in a permanent way if the odds to be funded depend on gender of applicants (among other variables) in the frame of its different funding schemes, trying to identify potential biases in order to further prevent them. Eligibility rules are adapted in order to give as much as possible fair chances to all applicants: eligibility durations to apply to doctoral, postdoctoral or permanent researcher positions are for example extended by one year per childbirth for women. On the evaluation side, a particular effort is made in the selection of experts and panel members involved in within the whole evaluation processes, to try to ensure a good

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gender balance among them. Since 2015 (?), the Fund publishes annually a “report on the state of gender equality” that is available on its website (in French). This report contains a lot of indicators and explanations about the situation in terms of gender equality and what is currently made to tackle the potential issues. F.R.S.-FNRS does also participate in the funding of AcademiaNet, a website hosting a portal of excellent woman academics.

For Flanders, there are two main research funding organisations: FWO and VLAIO. Compared to the previous report, the IWT no longer exists.

The FWO supports fundamental and strategic scientific research at the Flemish universities, stimulates international cooperation and promotes equal opportunity. The FWO stimulates international cooperation and encourages international mobility by giving researchers the opportunity to gain experience or work as members of international research groups or by attracting researchers from abroad.

The selection follows the bottom-up principle and is conducted on an inter-university basis. The sole criterion is the outstanding quality of researcher and research proposal, regardless of scientific discipline, host institute, gender, political or religious beliefs. Family-friendly provisions and flexible working conditions should further balance gender relationships (cf. question 1a). Scientists with functional restrictions receive extra support for the financing of adapted material.

The main funding schemes at FWO are

- Personal fellowships
 - o PhD Fellowship fundamental research
 - o PhD fellowship strategic basic research
 - o PhD Fellowships L'Oréal – UNESCO specifically targeting female researchers. For more information: <https://www.fwo.be/en/fellowships-funding/phd-fellowships/phd-fellowship-lor%C3%A9al-unesco/>
 - o Junior postdoctoral fellowship
 - o Senior postdoctoral fellowship
 - o Senior clinical investigator
- Research projects
 - o Junior Research projects (including joint projects with foreign countries)
 - o Senior Research projects (including joint projects with foreign countries)
 - o SBO (Strategic Basic Research) projects
 - o TBM (Applied Biomedical Research with a Primary Social finality) projects
 - o EOS Research project (in collaboration with F.R.S.-FNRS)
 - o Odysseus programme to attract researchers from abroad
- Research infrastructure
- International mobility, contacts and collaboration
- Scientific Prizes

A complete overview of all possible financing resources can be found at <https://www.fwo.be/en/fellowships-funding/>

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Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field
F.R.S-FNRS

research projects (funding schemes: CDR, PDR, EQP, MIS)	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	114	37	58	7	157	106	12	5	38	29	19	13
nb funded	52	15	24	3	67	53	7	2	11	12	7	7
success rate (nb funded/nb applications)	45.6%	40.5%	41.4%	42.9%	42.7%	50.0%	58.3%	40.0%	28.9%	41.4%	36.8%	53.8%

Doctoral grants and fellowships (funding schemes: ASP, FRESH, FRIA, SD, CSD)	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	women
nb of applications	113	51	88	21	98	151	12	10	106	129	70	71
nb funded	45	18	35	6	38	56	4	3	18	25	13	13
success rate (nb funded/nb applications)	39.8%	35.3%	39.8%	28.6%	38.8%	37.1%	33.3%	30.0%	17.0%	19.4%	18.6%	18.3%

Postdoctoral grants (funding schemes: CR, SPD)	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	women
nb of applications	99	31	22	4	17	45	7	3	50	56	59	57
nb funded	24	8	4	2	7	18	3	0	9	9	6	13
success rate (nb funded/nb applications)	24.2%	25.8%	18.2%	50.0%	41.2%	40.0%	42.9%	0.0%	18.0%	16.1%	10.2%	22.8%

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FWO

FWO does not have data on the success rate per gender and per research field for the fellowship funding schemes. We do have data on the success rate per gender and per fellowship scheme. These data for 2019 and the five year average (2014-2019) can be found in the table below.

	PhD Fellowship fundamental research		PhD Fellowship strategic basic research		Postdoctoral Fellowship	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
	2019					
nb of applications	436	495	304	229	613	431
nb funded	134	146	115	85	146	110
success rate (nb funded/nb applications)	31	29	38	37	24	26
	Average 2014 – 2019*					
nb of applications	463	522	354	302	450	317
nb funded	110	115	108	93	116	83
success rate (nb funded/nb applications)	24	22	31	31	26	26

* For PhD Fellowship strategic basic research the average is calculated from 2015-2019 (programme transferred from IWT in 2015)

For the fundamental research projects we have started collecting data per gender and per research field. Data from the 2019 call can be found in the table below:

	Biological sciences		Humanities		Social sciences		Medical sciences		Science & Technology		Interdisciplinary	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	138	44	71	33	168	94	276	160	259	61	42	12
nb funded	34	10	15	7	39	15	67	31	58	15	7	4
success rate (nb funded/nb applications)	25	23	21	32	23	16	24	19	22	25	17	33

Since we did not have sufficient time to consult the 2009 report in depth, we cannot comment on differences in the numbers between 2009 and 2019.

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

F.R.S-FNRS

	All domains	
	men	women
pool of potential applicants to research projects fundings (including tenured researchers and academic professors)	1508.32	586.26

FWO does not have data on the pool of potential applicants in Flanders. This information could be available at the Flemish universities.

Transparent/opaque procedures/systems

Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	F.R.S.-FNRS	FWO
Please mark with Y for Yes and N for No on the statements below		
<i>Does the funding organisation do the following?</i>		
Monitors composition of selection committees	Y	Y
Monitors composition of evaluation panels	Y	Y
Uses (national and) international evaluators	Y	Y
Publishes evaluation criteria	Y	Y
Has ethical guidelines preventing nepotism, etc.	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)	Y	Y
Applicants can find out evaluators' names during the evaluation process	Y/N	Y
Evaluators know applicants' names or sex	Y	Y
There is a right of reply or a complaint procedure	N	Y

Since 2010, all F.R.S.-FNRS evaluation processes have been updated in accordance with international standards. We have now strict rules to prevent potential conflicts of interests, we publish the names of panel members (the names of remote peer reviewers are not published however), the evaluation criteria and solicit international experts to perform remote evaluations. We of course monitor the composition of our panels and make sure there is no bias in our processes.

The 2009 report mentions that 25 percent of the expert panel members are female researchers at FWO. This has increased to 36,6 percent for 2020 (38.3 percent in biological sciences, 40.5 percent in humanities, 39.8 percent in social sciences, 37.5 percent in interdisciplinary research, 33.7 percent in medical sciences and 34.9 percent in science and technology).

Names of panel members are listed on the website, unless a panel member objects to this.

All evaluation procedures are listed in the “Regulations of the Research Foundation – Flanders governing the internal and external peer review” that are available on the website (<https://www.fwo.be/en/the-fwo/organisation/fwo-expertpanels/regulations-fwo-internal-and-external-peer-review/>). Scoring grids used by the expert panel members (e.g. https://www.fwo.be/media/1023817/asp_fo_interview-scoring-grids_2020.pdf) are also available online as well as guidelines on research ethics (<https://www.fwo.be/en/the-fwo/organisation/research-ethics/>) and research integrity (<https://www.fwo.be/en/the-fwo/organisation/research-integrity/>).

[fwo/organisation/research-integrity/](https://www.fwo.be/en/the-fwo/organisation/research-integrity/)). Finally, there is also a dedicated section on appeal (<https://www.fwo.be/en/the-fwo/organisation/the-appeal-procedure/>) and complaint (<https://www.fwo.be/en/the-fwo/organisation/complaint-procedure/>) procedures.

Transparency of outcome

Name of funding organisation (if more than one, fill in the name in separate columns)	F.R.S.-FNRS	FWO
Please mark with Y for Yes and N for No on the statements below		
Does the funding organisation do the following?		
Calculates gendered success rates	Y	Y
Publishes gendered success rates	Y	Y
Compares applicants to pool of potential applicants	N	N
Monitors amounts of funding awarded per sex	Y	N
Other quality checks (eg. nepotism)	Y	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y	Y
Applicants can find out evaluators' names after the evaluation process	Y/N	Y

Panel members' names are available on the website of the F.R.S.-FNRS. Remote peer reviewers always remain anonymous.

Names of panel members are listed on the website of FWO, unless a panel member objects to this.

Each panel member has to indicate whether he/she has a conflict of interest for each application assigned to a panel. The rules for conflicts of interest and how to deal with them are laid out in "Regulations of the Research Foundation – Flanders governing the internal and external peer review" (Article 24, §3) (<https://www.fwo.be/en/the-fwo/organisation/fwo-expertpanels/regulations-fwo-internal-and-external-peer-review/>).

At the end of each evaluation procedure, the selected projects are listed on the website (<https://www.fwo.be/en/news/results/>). Success rates are published yearly in the annual report (e.g. for 2018 https://www.fwo.be/media/1023685/fwo_jaarboek_2019_en.pdf).

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

In general, research funding organisations are not allowed to disclose information and personal details of applicants nor expert reviewers who participate in the calls for proposals they organize. This is a basic requirement that originates from good practice based on the rules for protection of personal data (GDPR). We must therefore be careful in order to always be able to ensure anonymity of all people

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involved. Anonymity is also important in terms of research evaluation in order to ensure that all experts can express their opinion in a free manner.

The 2009 situation was basically the same for F.R.S.-FNRS, except that we did less reporting regarding the gender equality.

At the FWO Calls for new members of the expert panels are open and published on the website (e.g. <https://www.fwo.be/nl/actueel/nieuws/2020-call-for-fwo-review-college-fundamental-research/>).

For fundamental research projects, PhD fellowships fundamental and strategic basic research, and postdoctoral fellowships expert panel members are appointed for a duration of three years (renewable once for 3 years). More information on the selection procedure can be found under Question 6.

For the SBO projects, panels are made up of a core panel, which is appointed for 3 years (renewable once for 3 years), supplemented with members that are selected ad hoc based on the correspondence between the submitted topics and the available expertise. The topics, composition and/or number of members of these panels may be revised annually by the FWO on the basis of the number of submissions, trends in the scientific topics of the project proposals, evaluation of the panel meetings and/or necessary expertise for the proper operation of the SBO expert panels. In addition, two steering committees (one committee for each finality: economical or societal) are involved. The SBO steering committee is made up of experts with an academic or non-academic background, representing various scientific and socio-economic research domains. The committee members are selected in such a way that the respective committee as a whole possesses the necessary expertise in a broad range of societal and/or economic applications of innovative products, processes and services, scientific research and/or policy. The activities of each of these committees comprise the assessment, modification and/or ratification of the evaluation reports and scores of the individual SBO expert panels.

For the TBM projects, eligible project proposals are divided into (broad) thematic groups (6 to 10 proposals per group) based on their subject matter. For each thematic group a specific expert panel (4 to 8 experts) is formed from experts drawn from the TBM expert pool. For any missing expertise, additional experts are invited ad hoc.

For all expert panels no more than two-thirds of the panel members may be of the same gender.

All applications and evaluations are written in English. Scoring grids used by the expert panel members (e.g. https://www.fwo.be/media/1023817/asp_fo_interview-scoring-grids_2020.pdf) are available online. The detailed contents of the discussion during panel meetings are confidential. However, each applicant receives feedback on his/her application after the evaluation procedure has been completed.

Differences between disciplines

Differences (if any) of the success rates between main research areas in the table 2a.

By analysing the tables for F.R.S.-FNRS, one can observe some differences in terms of success rates between men and women, at least for some scientific fields. In some cases, men harbour success rates that are a little bit higher, in some other cases women do. Our analysis is that these figures are related to only one year (2019), and that for some categories the total amount of applicants can be very low. In order to properly analyse such results, the best approach is to include the results of more applications that took place over several years in statistical models, for example in logistic regression

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models, allowing to study the impact of the inclusion of variables such as gender and other variables in the model. We perform such analyses in our annual “report on the state of gender equality” that is published online.

FWO does not have data on the success rate per gender and per research field for the personal fellowships. For the fundamental research projects we have recently started collecting data per gender and per research field. Success rates differ between male and female PIs across the different fields. In some fields male PIs have a higher success rate (e.g. medical sciences) , while in others (e.g. Science & Technology) women have a higher success rate. Since we have only recently started collecting this data, it is too early to draw any firm conclusions. We will monitor how the success rates per gender and per research domain evolve over the next years.

Since we did not have sufficient time to consult the 2009 report in depth, we cannot comment on differences in the numbers between 2009 and 2019.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

At F.R.S.-FNRS, funding instruments do not significantly differ among different research areas, neither do the evaluation mechanisms and processes.

The FWO supports fundamental and strategic scientific research at the Flemish universities. The selection follows the bottom-up principle and is conducted on an inter-university basis. There are no differences in application or evaluation procedures per research area. It is the responsibility of the applicant to indicate to which expert panel his/her application is submitted. The sole criterion is the outstanding quality of researcher and research proposal, regardless of scientific discipline, host institute, gender, political or religious beliefs.

Differences in funding instruments between main research areas, and implications for gender

At F.R.S.-FNRS, funding instruments do not significantly differ among different research areas. However, success rates may vary among funding schemes and scientific disciplines, resulting in lower success rates in certain disciplines (eg Humanities and Social Sciences) where the share of women applicants is often high. This is counterbalanced by the fact that for other scientific fields (eg Health and Life Sciences) success rates are globally high and share of women are also high in this field.

With a few exceptions, all funding schemes are open to all disciplines and to all genders at FWO. These exceptions are:

- Personal fellowships
 - o PhD fellowship strategic basic research: only open for biological sciences, medical sciences and science & technology
 - o PhD Fellowships L'Oréal – UNESCO: only open for female researchers.
 - o Senior clinical investigator: only open to clinicians affiliated with a university hospital
- Research projects
 - o TBM (Applied Biomedical Research with a Primary Social finality) projects: only open to medical sciences
- Scientific Prizes: each scientific prize has its own scope. The full list of scientific prizes is available at <https://www.fwo.be/en/fellowships-funding/scientific-prizes/>

Apart from the L'Oréal – UNESCO PhD fellowships, FWO has no funding scheme that specifically targets female researchers.

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and its implications for gender.

F.R.S.-FNRS panel members are appointed by the Board of Trustees of the Fund on the basis of proposals made by a panel named the “Comité d’Accompagnement”. This panel is regularly informed about the evolution of the situation as regards the gender equality among panel members, typically at each meeting. Members are reminded about the importance of reaching gender balance among panel members.

In 2009, the appointment of panel members was made through a different mechanism and gender balance was given less importance than nowadays.

At the FWO the procedure for selecting committee members for the expert panels in the fundamental research projects proceeds is as follows:

- 1) An open call for new panel members is published and distributed extensively in the networks of the FWO. The call includes a specific encouragement for women to apply (“FWO strongly encourages women to apply.”, printed in bold)
- 2) All applications are screened on the basis of scientific excellence; only applicants who belong to the top 30 percent of their discipline in Belgium are retained. This screening takes into consideration the research output in the last ten years (regardless of gender, social circumstances, etc.).
- 3) New panel members are formally appointed by the FWO Board of Trustees on the advice of the Domain Boards, which are made up of the scientific chairs of the panels in one domain. At least one third of the international scientific chairs are women. In formulating this advice and in appointing new members, these bodies follow the FWO regulations that stipulate that “no more than two-thirds of the appointed members across all panels of the same application programme, should be of the same gender.” While the stipulation applies to expert panels across one program, we monitor the gender composition of panels also on the level of the scientific domain and on an individual panel level. In composing panels we will thus often prefer to seek an external candidate of the underrepresented gender to appointing someone from our pool of applicants of the overrepresented gender in a panel. In practice, we must say, that this means that at FWO we are often very actively seeking female panel members.

The procedure for selecting committee members for the expert panels in the SBO and TBM projects proceeds as follows:

- 1) Since 2018, a pool of experts is used as a starting point to form the expert panels. The pool of experts consists of senior scientific profiles from different backgrounds in terms of scientific expertise, employment sector, gender and nationality. For example, in 2018 the pool consisted of 39,5 percent female experts, 37 percent had a non-academic background (industry,

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government, non-profit, non-academic hospitals) and 72,2 percent were affiliated with an institution outside Belgium.

- 2) For the SBO projects, panels are made up of a core panel, which is appointed for 3 years, supplemented with members that are selected ad hoc based on the correspondence between the submitted topics and the available expertise. In addition, two steering committees (one committee for each finality: economical or societal) are involved. The SBO steering committee is made up of experts with an academic or non-academic background, representing various scientific and socio-economic research domains.

For the TBM projects, eligible project proposals are divided into (broad) thematic groups. For each thematic group a specific expert panel (4 to 8 experts) is formed from experts drawn from the TBM expert pool. Panel members can only participate in TBM evaluations for 4 years, after which they are replaced. As such, continuity and experience are balanced with new trends and novel insights. For any missing expertises additional experts are invited ad hoc. For more information, we refer to Question 4.

- 3) For all expert panels no more than two-thirds of the panel members may be of the same gender.

Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
F.R.S.-FNRS	Regular panels	50	145
FWO	Overall panel composition	274	474

In 2010, F.R.S.-FNRS reformed all panels and are now in a process of continuously increasing the proportion of women who are seating.

For FWO the country specific Annex of the 2009 reports states that “FWO publishes the members of the review panels and seem to be able to meet the quota, although differences occur between disciplines. Before the quota the committees had only 11 percent female members. Over the past few years this increased to 25 percent.”

For 2020, 36,6 percent of all expert panel members at FWO (38,3 percent in biological sciences, 40,5 percent in humanities, 39,8 percent in social sciences, 37,5 percent in interdisciplinary research, 33,7 percent in medical sciences and 34,9 percent in science and technology) are female, indicating an upward trends compared to the 2009 report and meeting the government quota of a maximum two thirds of one sex.

Canada

Reporting organisation(s):

Natural Sciences and Engineering Research Council (NSERC)

Canadian Institutes of Health Research (CIHR)

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research)

Canadian federal investments in research are dispersed primarily between intramural research performed by the federal government's 13 science-based departments and agencies, and extramural research performed by the postsecondary education sector. Research funding for universities and colleges is allocated on a competitive basis mainly through the Tri-agencies:

- The Natural Sciences and Engineering Research Council of Canada (NSERC)²;
- The Canadian Institutes of Health Research (CIHR)³; and
- The Social Sciences and Humanities Research Council of Canada (SSHRC)⁴

Some programming is offered by the Tri-Agencies in consortium, administered by the Tri-agency Institutional Programs Secretariat (TIPS)⁵. Federal research funding is also allocated through two other organisations: the Canada Foundation for Innovation (CFI)⁶ and Genome Canada⁷. As well, there are a number of provincial research organizations that support academic research.

Canada has a Chief Science Advisor whose key functions include: ensuring that government science is fully available to the public; ensuring that scientific analyses are considered when the government makes decisions; assessing and recommending ways to improve the existing science advisory function within the federal government; and assessing and recommending ways for the Government to better support quality scientific research within the federal system.

Specific measures taken for promoting gender balance in the funding system

Canada's commitment to gender equity is demonstrated through the integration of Gender-Based Analysis Plus (GBA+)⁸ across all federal departments and agencies, including research granting agencies. GBA+ is an analytical process used to assess how diverse groups of women, men and gender diverse people may experience policies, programs and initiatives. The "plus" in GBA+ acknowledges that GBA goes beyond biological (sex) and socio-cultural (gender) differences and also considers many

² https://www.nserc-crsng.gc.ca/index_eng.asp

³ <https://cihr-irsc.gc.ca/e/193.html>

⁴ <https://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx>

⁵ https://www.rs-fsr.gc.ca/about-au_sujet/governance-gouvernance-eng.aspx

⁶ <https://www.innovation.ca/>

⁷ <https://www.genomecanada.ca/>

⁸ <https://cfc-swc.gc.ca/gba-acis/index-en.html>

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other identity factors, like race, ethnicity, religion, age, and mental or physical disability. GBA+ is the process by which sound equity, diversity and inclusion (EDI) practices are integrated across all agency activities. Each agency reports on GBA+ activities through the GBA+ annex within the annual Departmental Results Report (e.g. CIHR report; NSERC report; SSHRC report)⁹.

The Canada Research Coordinating Committee (CRCC)¹⁰ was created to improve the coordination efforts of Canada's granting agencies—SSHRC, NSERC and CIHR—as well as CFI. One of the five CRCC priorities is strengthening equity, diversity and inclusion (EDI) in research.¹¹ In 2018, the CRCC led Canada-wide consultations with the research community to discuss barriers experienced by underrepresented groups (including women, persons with disabilities, Indigenous peoples, members of visible minorities, and individuals from the LGBTQ2+ community), and mechanisms for providing fairer access to research funds and opportunities. Subsequently, a harmonized approach to EDI across granting agencies has been undertaken, including a statement on EDI¹² and an EDI Action Plan¹³. Initiatives in the EDI Action Plan are at various stages of implementation, some of which are described in sections below. See the first annual report to the CRCC¹⁴ for a summary of EDI activities.

At TIPS, an EDI Action Plan¹⁵ has been developed specifically for the Canada Research Chairs Program. This plan requires that institutions meet and sustain equity and diversity targets¹⁶ to address the underrepresentation of women, persons with disabilities, Indigenous peoples and members of visible minorities who are awarded Research Chairs.

Main funding organisations (research councils etc.), main objectives and the funding instruments of the organisation.

NSERC

The Natural Sciences and Engineering Research Council (NSERC) came into existence in 1978 and aims to make Canada a country of discoverers and innovators for the benefit of all Canadians. The agency supports students in their advanced studies, promotes and supports discovery research, and fosters innovation by encouraging Canadian organizations to participate and invest in postsecondary research projects in the natural sciences and engineering research areas.

SSHRC

The Social Sciences and Humanities Research Council (SSHRC) is the federal research funding agency created in 1977 that promotes and supports postsecondary-based research and training in the humanities and social sciences. It also advises government on matters relating to social sciences and

⁹ <https://cihr-irsc.gc.ca/e/51684.html>, https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/DRR/2018-2019/supplementary/t4_eng.asp, https://www.sshrc-crsh.gc.ca/about-au_sujet/publications/drr/2018-2019/drr-rrm-eng.aspx

¹⁰ <https://www.canada.ca/en/research-coordinating-committee.html>

¹¹ <https://www.canada.ca/en/research-coordinating-committee/priorities/equity-diversity-inclusion-research.html>

¹² https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/index_eng.asp

¹³ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Action-Plan_Plan-dAction_eng.asp

¹⁴ <https://www.canada.ca/en/research-coordinating-committee/services/publications/2018-2019/progress-report.html>

¹⁵ https://www.chairs-chaire.gc.ca/program-programme/equity-equite/action_plan-plan_action-eng.aspx

¹⁶ <https://www.chairs-chaire.gc.ca/program-programme/equity-equite/targets-cibles-eng.aspx>

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humanities research. Through its Talent, Insight and Connection funding programs, and through partnerships and collaborations, SSHRC strategically supports world-leading initiatives that reflect a commitment to ensuring a better future for Canada and the world. SSHRC hosts the Tri-agency Institutional Programs Secretariat (TIPS), which administers tri-agency (CIHR, NSERC and SSHRC) research funding programs.

CIHR

Created in 2000, the Canadian Institutes of Health Research (CIHR) is the Government of Canada's health research granting agency. CIHR's mission is to create new knowledge and to enable its translation into improved health, more effective health services and products and a strengthened Canadian health care system. CIHR supports investigator-initiated research programs, training and career support programs, research in priority areas, Tri-agency programs, as well as strategic initiatives that have been announced in Federal Budgets.

CFI

The Canada Foundation for Innovation (CFI) was established in April 1997 by an act of Parliament to fund research infrastructure. The CFI makes financial contributions to Canada's universities, colleges, research hospitals and non-profit research organizations to increase their capability to carry out high quality research. CFI conducts a number of competitions under various funds, including the John R. Evans Leaders Fund, which runs three times a year, and the Innovation Fund competition, which runs every two years.

Specific measures to promote gender balance

Prior to 2018, the federal granting agencies (CFI, CIHR, NSERC, SSHRC) each developed and implemented agency-specific initiatives to meet the Government of Canada GBA+ commitments, for example: CIHR's GBA+ Framework¹⁷; SSHRC-TIPS' Canada Research Chairs – EDI Requirements and Practices¹⁸; and NSERC's Framework on EDI¹⁹.

An Equity, Diversity and Inclusion Action Plan²⁰ was also developed specifically for the Canada Research Chairs Program which focuses on improving the program's governance, transparency, and monitoring of its measures and in addressing its EDI challenges.

To introduce a more collaborative approach to EDI, the agencies developed and are now implementing a Tri-Agency EDI Action Plan²¹. While the Action Plan is not specific to gender, all of its initiatives are intended to improve access to, and participation in, the research system for women and gender-diverse people.

For example:

Self-identification data collection: Historically, the agencies individually collected 'sex' of applicants to funding programs in the form of 'male' or 'female', making it difficult to assess the extent to which inequitable access and/or participation was occurring within the agencies' funding systems. In 2018,

¹⁷ <https://cihr-irsc.gc.ca/e/50970.html>

¹⁸ <https://www.chairs-chaire.gc.ca/program-programme/equity-equite/index-fra.aspx>

¹⁹ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/framework_cadre-de-reference_eng.asp

²⁰ https://www.chairs-chaire.gc.ca/program-programme/equity-equite/action_plan-plan_action-eng.aspx

²¹ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Action-Plan_Plan-dAction_eng.asp

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the agencies launched a harmonized self-identification questionnaire²² including age, gender (woman/man/gender-fluid, non-binary, and/or two-spirit), and whether a person identifies as Indigenous, as a visible minority, or as a person with disability. All applicants to the agencies' programs are required to complete the questionnaire, which will allow the agencies to analyse trends over time and identify inequities. Implementation of the self-identification questionnaire for peer reviewers and advisory boards is underway. SSHRC has used the data to create a public EDI dashboard²³, with statistics on applicants, award-holders and adjudication committee members.

Addressing systemic barriers in post-secondary institutions: Based on the UK Athena SWAN model, the Dimensions program²⁴ publicly recognizes post-secondary institutions that identify and address systemic barriers experienced by members of underrepresented or disadvantaged groups including but not limited to women, Indigenous Peoples, persons with disabilities, members of visible minorities/racialized groups, and members of LGBTQ2+ communities. The launch of the pilot included a cohort of 17 Canadian institutions to participate in the co-development model, benefit from guidance from EDI experts and each other, and ultimately develop action plans based on in-depth reflective assessment of the institution's systems, practices and culture. Additionally, the EDI Institutional Capacity-Building Grant²⁵ program, a pilot funding opportunity from the three research granting agencies, was launched to foster EDI in the Canadian post-secondary research ecosystem through a focus on the identification and elimination of systemic barriers that impede the career advancement, recruitment and retention of underrepresented or disadvantaged groups. As part of the 2019 pilot competition, 15 post-secondary institutions shared \$5.3 million in funding to advance their own EDI objectives.

Integrating EDI practices into agency programs and policies: To address the issue of all-male events, the agency presidents personally²⁶ committed to refusing to participate on panels or in events that are not inclusive and do not reflect the diversity of the Canadian population. To begin socializing the research community to EDI best practices, the agencies have purposefully incorporated EDI requirements and assessment criteria in agency funding opportunities, such as the New Frontiers in Research Fund²⁷ and provide EDI guidance for applicants.²⁸

Training in bias awareness: As part of granting agencies' EDI Action Plan, peer reviewers at CIHR, NSERC and SSHRC, are required to complete training on bias in peer review before adjudicating funding applications. The CIHR's modules for peer reviewers on conducting quality reviews²⁹ and on unconscious bias training³⁰, for example, are available online.

²² http://www.science.gc.ca/eic/site/063.nsf/eng/h_97615.html

²³

<https://app.powerbi.com/view?r=eyJrIjoizmU1YjAxYjYtYWU0Yy00YmU4LWJhZDItMmRhNWViMzA3NGI4IiwidCI6ImZiZWYwNzk4LTlwZTMtNGJINy1iZGM4LTM3MjAzMjYxMGY2NSJ9https://app.powerbi.com/view?r=eyJrIjoizmU1YjAxYjYtYWU0Yy00YmU4LWJhZDItMmRhNWViMzA3NGI4IiwidCI6ImZiZWYwNzk4LTlwZTMtNGJINy1iZGM4LTM3MjAzMjYxMGY2NSJ9>

²⁴ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Dimensions_Dimensions_eng.asp

²⁵ https://www.nserc-crsng.gc.ca/Institutions-Etablissements/EDI-Capacity_eng.asp

²⁶ <https://cihr-irsc.gc.ca/e/51566.html>

²⁷ <https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/index-eng.aspx>

²⁸ <https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/edi-eng.aspx>

²⁹ <https://cihr-irsc.gc.ca/lms/e/conductingqualityreviews/>

³⁰ <https://cihr-irsc.gc.ca/lms/e/bias/>

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

Research fields can be mapped to the mandate of three agencies in the following way:

- NSERC covers the research fields of Natural Sciences, Engineering and Technology and Agricultural Sciences;
- SSHRC covers the research fields of Social Sciences and Humanities; and
- CIHR covers research fields in Medical Sciences.

As previously stated, historically, the agencies individually collected ‘sex’ of applicants to funding programs in the form of ‘male’ or ‘female’ but since 2018, the agencies have started collecting self-identification data on gender (woman/man/gender-fluid, non-binary, and/or two-spirit).

An excerpt from the first annual CRCC report³¹ provides an initial snapshot of self-identification data collected from applicants to CIHR, NSERC and SSHRC funding opportunities from May to December 2018 and from CFI Awards Management users beginning in March 2017. Consequently, these preliminary figures do not include the full suite of funding opportunities offered by the agencies and may include some applications that were subsequently declared ineligible. Data on success award rates and data for 2019 principal investigators will be made available in the next CRCC report that will be available in late 2020.

B. Summary of self-identification data collected, per agency

TABLE 2A: Gender

Agency	Number of responses	Woman	Man	Gender-fluid, non-binary, and/or two-spirit	Prefer not to answer
CIHR	7,364	47.3%	49.4%	0.5%	2.7%
NSERC	10,467	25.5%	68.2%	0.4%	5.9%
SSHRC	6,622	50.8%	43.5%	0.9%	5.1%
CFI	6,738	33.1%	61.6%	0.2%	4.8%
Total	31,191	39.2%	55.7%	0.5%	4.6%

Note: Does not include tri-agency programs (e.g., Canada Graduate Scholarship—Masters and Canada Research Chairs Program). Figures may not add up to 100 per cent due to rounding.

³¹ https://www.canada.ca/content/dam/crcc-ccrc/documents/SSHRC_CRCC_progress_report_2019-eng.pdf

C. Summary of applicant self-identification data for tri-agency and agency-specific funding opportunities

TABLE 3: Representation of four designated groups among applications to major funding opportunities

Program	Number	Women	Visible minorities	People with disabilities	Indigenous
1. Research					
Canada Research Chairs	191	50.0%	22.5%	7.3%	-
SSHRC Insight Grants	1,379	47.4%	17.6%	4.4%	1.3%
SSHRC Partnership Grants	282	49.6%	16.3%	4.6%	-
NSERC Discovery Grants	3,417	22.2%	23.8%	1.7%	0.6%
NSERC Partnership Grants	606	14.5%	27.4%	-	-
CIHR Foundation Grants	216	27.9%	18.0%	-	-
CIHR Project Grants	2,484	35.8%	21.4%	2.1%	1.0%
John R. Evans Leaders Fund	642	32.8%	20.1%	-	-
Total	9,217	35.0%	20.9%	2.5%	0.4%

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

3.15 Full-time University Teachers by Sex and Subject Taught, 2017-2018		
Subject Taught	Number	% Female
Agriculture, Natural Resources and Conservation	990	28.2%
Architecture, Engineering and Related Technologies	4,290	16.2%
Business, Management and Public Administration	4,560	39.7%
Education	2,145	62.0%
Health, Parks, Recreation and Fitness	3,537	65.8%
Humanities	5,196	46.7%
Mathematics, Computer and Information Sciences	2,751	21.2%
Personal, Protective and Transportation Services	48	50.0%
Physical and Life Sciences, and Technologies	4,359	33.1%
Social and Behavioural Sciences, and Law	8,322	45.6%
Visual and Performing Arts, and Communications Technologies	2,013	46.5%
Other	501	43.1%
Not applicable, not reported	294	43.9%
Total	39,006	41.0%

Source: Statistics Canada, University and Colleges Academic Staff Survey (UCASS) Updated August 1, 2019. Data on University Staff: <https://www.caut.ca/resources/almanac/3-academic-staff>;

specifically table 3.15 https://www.caut.ca/sites/default/files/3.15_full-time_university_teachers_by_sex_and_major_discipline_2017-2018.xlsx

The University and Colleges Academic Staff Survey (UCASS) can be used to compare the set of ‘potential applicants’. This annual survey collects national comparable information on the number and socio-economic characteristics of full-time teaching staff at Canadian universities. The information is collected for each individual staff member employed by the institution as of October 1st of the academic year. Note that it is not possible to verify if the data from Statistics Canada on university staff correlate exactly to the eligibility requirements of grants offered by NSERC, CIHR and SSHRC. They are included here simply to provide some context on the sex of university staff in Canada. Furthermore, Statistics Canada does not collect information on Post-Doctoral Fellow population, therefore it is not possible at this time to comment or compare on the “potential applicants” for these funding opportunities.

Most transparent/opaque procedures/systems

Transparency of evaluation process

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	CIHR	NSERC	SSHRC
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Monitors composition of selection committees	N/A	N/A	N/A
Monitors composition of evaluation panels	Y	Y	Y
Uses (national and) international evaluators	Y	Y	Y
Publishes evaluation criteria	Y	Y	Y
Has ethical guidelines preventing nepotism, etc.	Y	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)	Y	Y	Y
Applicants can find out evaluators' names during the evaluation process	N	N	N
Evaluators know applicants' names or sex	Y (names only)	Y (names only)	Y* (names only)
There is a right of reply or a complaint procedure	Y	Y	Y

*For the 2019 Exploration stream of [NFRF](#), double-blind review was used for the adjudication of applications.³²

NOTE:

The answers provided in the table above are based on the following definitions provided by the Swedish Research Council:

³² https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/exploration/2019/reviewers_manual-guide_de_l_evaluateur-eng.aspx

Evaluation panels: Used for evaluation and ranking of the proposals.

Selection committees: Used to take decisions on funding projects based on the evaluation and rankings made by the evaluation panels.

Evaluation panels are subject to specific composition guidelines including expertise, diversity, geographical representation, etc. (see NSERC’s guidelines³³ as an example). CIHR has also put in place a college of reviewers³⁴ in June 2017 that aims to enhance the current peer review system by systematizing reviewer recruitment to identify and mobilize the appropriate expertise for the review of all funding applications.

All three agencies have put in place a number of policies or guidelines to ensure transparent evaluation processes. These include but are not limited to:

- Guidelines governing membership of selection committees and panels: https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Policies-Politiques/committeemembers-membrescomite_eng.asp; <https://cihr-irsc.gc.ca/e/49564.html>.
- Conflict of Interest and Confidentiality Agreement for Review Committee Members, External Reviewers, and Observers: [http://www.science.gc.ca/eic/site/063.nsf/vwapj/Agreement2.pdf/\\$FILE/Agreement2.pdf](http://www.science.gc.ca/eic/site/063.nsf/vwapj/Agreement2.pdf/$FILE/Agreement2.pdf)
- Published evaluation criteria:
 - NSERC: Peer review manual (section 3.1.5): https://www.nserc-crsng.gc.ca/_doc/Reviewers-Examineurs/CompleteManual-ManualEvalCompletemembrescomite_eng.pdf
 - SSHRC: Manual for Adjudication Committee Members: https://www.sshrc-crsh.gc.ca/funding-financement/merit_review_evaluation_du_merite/adjudication_manual-guide_comite_selection-eng.aspx
 - CIHR: Standards of Practice for Peer Review - <https://cihr-irsc.gc.ca/e/51645.html> or <https://cihr-irsc.gc.ca/e/49564.html>

Agencies publish on their websites lists of committee members (CIHR, NSERC, SSHRC)³⁵. They also have in appeals processes in place – mechanisms to allow applicant to reply or complain about the evaluation process (CIHR, NSERC, SSHRC)³⁶ For the most part, only procedural errors are taken into consideration.

³³ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Policies-Politiques/committeemembers-membrescomite_eng.asp

³⁴ <https://cihr-irsc.gc.ca/e/47382.html>

³⁵ <https://cihr-irsc.gc.ca/e/39399.html>; https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Committees-Comites/programmes-programmes_eng.asp; https://www.sshrc-crsh.gc.ca/funding-financement/merit_review_evaluation_du_merite/selection_committees-comites_selection/index-eng.aspx

³⁶ <https://cihr-irsc.gc.ca/e/50805.html>; https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Policies-Politiques/appeals-appel_eng.asp; https://www.sshrc-crsh.gc.ca/about-au_sujet/policies-politiques/statements-enonces/appeals-appels-eng.aspx

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	CIHR	NSERC	SSHRC
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Calculates gendered success rates	Y	Y	Y
Publishes gendered success rates	Y	Y	Y
Compares applicants to pool of potential applicants*	N	N	N
Monitors amounts of funding awarded per sex**	Partially***	Y	Y
Other quality checks (e.g. nepotism)	Y	Y	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y	Y	Y
Applicants can find out evaluators' names after the evaluation process	N	N	N

NOTES:

*The Tri-agency are exploring this aspect.

** For the Tri-agency, sex refers to a set of biological attributes in humans and animals. It is primarily associated with physical and physiological features including chromosomes, gene expression, hormone levels and function, and reproductive/sexual anatomy. Sex is usually categorized as female or male, but there is variation in the biological attributes that comprise sex and how those attributes are expressed. Whereas gender refers to the socially constructed roles, behaviours, expressions and identities of girls, women, boys, men and people with diverse gender identities. It influences how people perceive themselves and each other, how they act and interact, and the distribution of power and resources in society. Gender is often conceptualized as a binary (girl/woman and boy/man) but there is considerable diversity in how individuals and groups understand, experience and express it, including non-gendered, non-binary and transgendered. The tri-agency have in the past reported their funding awards per sex and have more recently started to look at reporting by gender now that the agencies are collecting self-identification data.

*** CIHR is not systematically doing this but did so for the Gender Equity Framework in 2016 (see <https://cihr-irsc.gc.ca/e/50497.html>)

Each agency publishes with a varying level of detail outcomes of the evaluation process through statistical packages or dashboards. In recent years, all three agencies have improved on their reporting and are increasingly incorporating gender-based success rates but also monitoring other groups such as participation and success of visible minorities, person with disabilities and Indigenous populations.

Some examples are provided for each agency:

NSERC:

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- Discovery Grants Competition Statistics ³⁷
- NSERC awards database³⁸

SSHRC

- Competition Results³⁹
- EDI Dashboard⁴⁰

CIHR

- **CIHR Project Grants Fall 2019** Competition Results⁴¹
- Canadian 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Opportunity Results ⁴²

All three agencies publish information on funded project that include title, name of the applicants and a short abstract. Information on unsuccessful project proposals is not published.

To maintain the integrity of the review process, the names of the evaluators are kept confidential to applicants. Names of the selection committee members are however generally published either before or after the review process is completed.

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

The Tri-agencies recognize that a number of barriers can affect the transparency or accountability of funding procedures and perpetuate inequities in the research enterprise. For example:

- **Nominations processes:** Universities nominate candidates for Tri-agency flagship programs like the Canada Research Chairs (CRC) program. The 15th year evaluation of the program in 2016 revealed consistently low success rates for women and equity seeking groups. Since then, to ensure greater equity, the Tri-agencies have instituted measures requiring universities to abide by the program's accountability and transparency requirements ⁴³ and clearly publish on their websites information related to the management of their chair allocations.

³⁷ https://www.nserc-crsng.gc.ca/Professors-Professeurs/DiscoveryGrants-SubventionsDecouverte/Index_eng.asp

³⁸ https://www.nserc-crsng.gc.ca/ase-oro/index_eng.asp

³⁹ <https://app.powerbi.com/view?r=eyJrljoiODVmZGQyMzEtODk3Yi00OTMyLWJkZDUtNzNiYmEyZGNmMwVlliwidCl6ImZiZWYwNzk4LTlwZTMtNGJlNy1iZGM4LTM3MjAzMjYxMGY2NSJ9>

⁴⁰ <https://app.powerbi.com/view?r=eyJrljoiZmU1YjAxYjYtYWU0Yy00YmU4LWJhZDItMmRhNWViMzA3NGI4IiwidCl6ImZiZWYwNzk4LTlwZTMtNGJlNy1iZGM4LTM3MjAzMjYxMGY2NSJ9>

⁴¹ <https://cihr-irsc.gc.ca/e/51837.html>

⁴² \\Unityfs01\fsusers\CMillington\My Documents\Claire Files\GenderNet Plus\Canadian 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Opportunity Results

⁴³ https://www.chairs-chaire.gc.ca/program-programme/admin_guide-eng.aspx#accountability

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- **Diversity on Tri-agency peer review panels:** Canada’s 2017 Fundamental Science Review Panel ⁴⁴ recommended that the Tri-agencies do more to develop recruitment strategies that help build peer review panels that are more reflective of the diverse composition of the Canadian research community. Since then, the agencies have articulated their commitments and have undertaken a collaborative approach to identify, recruit, and retain reviewers through Tri-agency EDI Action Plan.

Currently, the agencies are undertaking a collaborative approach to EDI via implementation of the Tri-agency EDI Action Plan⁴⁵

- **Unconscious bias in reviewing applications:** To combat bias in the peer review process, peer reviewers in some funding programs are required to complete education and training on bias in peer review before adjudicating funding applications. The CIHR’s modules for peer reviewers on conducting quality reviews⁴⁶ and on unconscious bias training⁴⁷, for example, are available online. The latter addresses gender biases in peer review, as well as biases related language, culture, age and institution.
- **Criteria to assess research excellence can negatively affect women and equity groups:** In November 2019, the Tri-agencies signed onto the San Francisco Declaration for Research Assessment (DORA)⁴⁸ by joining research leaders around the world who are working to strengthen research excellence by ensuring robust, equitable and impactful measures of research assessment.
- **Applicant self-identification:** To better track who is applying and succeeding in competitions and implement measures to enhance equity in program design, the Tri-agencies now require that all applicants complete a self-identification form.⁴⁹ All questions have an option of “I prefer not to answer.” The self-identification information collected by the Tri-agencies is neither accessible to, nor shared with external reviewers and/or selection committee members in an identifiable form. The agencies are currently exploring how best to make application and success rates by equity group public. For its part, SSHRC has developed an EDI dashboard.⁵⁰
- **Survey of Postsecondary Faculty and Researchers:** This survey was launched by Statistics Canada and Innovation, Science and Economic Development Canada in the fall of 2019 in order to fill data gaps on equity, diversity and inclusion among those who teach or conduct research in Canada’s postsecondary sector. It will also provide an overview of career experiences and barriers to career advancement. Data is anticipated to be released in the fall 2020.

Differences between disciplines

Differences (if any) of the success rates between main research areas

N/A – See above.

⁴⁴ <http://www.sciencereview.ca/eic/site/059.nsf/eng/home>

⁴⁵ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/Action-Plan_Plan-dAction_eng.asp

⁴⁶ <https://cihr-irsc.gc.ca/lms/e/conductingqualityreviews/>

⁴⁷ <https://cihr-irsc.gc.ca/lms/e/bias/>

⁴⁸ https://www.nserc-crsng.gc.ca/Media-Media/NewsDetail-DetailNouvelles_eng.asp?ID=1103

⁴⁹ https://www.ic.gc.ca/eic/site/063.nsf/eng/h_97615.html

⁵⁰ <https://app.powerbi.com/view?r=eyJrIjoizmU1YjAxYjYtYWU0Yy00YmU4LWJhZDItMmRhNWViMzA3NGI4IiwidCI6ImZiZWYwNzk4LTlwZTMtNGJlNy1iZGM4LTM3MjAzMjYxMGY2NSJ9>

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender

Canada's granting Tri-agencies have implemented various EDI best practices within their application procedures and evaluation processes, which in turn does have implications for gender and equity. Some examples include:

The Tri-agency Institutional Programs Secretariat has developed Guidelines and Best Practices for Reference Letter Writers⁵¹, which has been adopted in several programs across the three Canadian granting agencies that require reference letters as part of the application procedures as a means of tackling unconscious bias in letters of recommendations written for female versus males applicants.

Programs supporting graduate students and Post-Doctoral Fellows, such as the Vanier Canada Graduate Scholarships program⁵², have developed resources on equitable practices for applicants, nominating institutions, referees, and peer reviewers.

The granting agencies have also taken steps to implement solutions to mitigate biases experienced by researchers or trainees who have taken leaves of absence for medical or care-giving reasons, which disrupts their research productivity. This may negatively impact how they are evaluated by selection committees. For example, all granting agencies now provide space for applicants in the Canadian Common CV to explain the impact of the leave on their application.

As a means of addressing the systemic and cultural biases in the broader research enterprise and to prevent underrepresented groups from being disadvantaged, Canada's granting agencies published an official letter⁵³ stating a shared commitment to ensuring EDI in the research enterprise.

Differences in funding instruments between main research areas, and if these have implications for gender

N/A

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender

Committee members are selected from both the Canadian and international research community. Members can be from academic institutions but also from industry, non-for-profit organizations and governmental research organizations. The recruitment of members is done by staff of the agency based on the required expertise. At CIHR, a college of reviewers was established in 2017. Selection committees typically are voluntarily participating in the review process.

Number of men and women in selection/funding committees in research funding organisations

As part of its EDI Action Plan, the agencies are working on putting in place mechanisms to capture self-identification data about their selection committee members. Until this is in place, the agencies have put in place guidelines to increase diversity including gender representation. Guidelines governing

⁵¹ <https://www.chairs-chaire.gc.ca/program-programme/referees-repondants-eng.aspx>

⁵² https://vanier.gc.ca/en/equity_diversity_inclusion-equite_diversite_inclusion.html

⁵³ <https://cihr-irsc.gc.ca/e/51566.html>

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membership of selection committees are available at each agency. At NSERC⁵⁴, for example, committees have aimed at having a minimum of 20 percent women, since 2016, with the objective of reaching 30 percent in 2020. SSHRC aims for at least 50 percent female composition of its selection committees, in addition to a balance of other criteria including size of institution, geographic location in Canada, and first official language (French or English). CIHR⁵⁵ aims to ensure that the representation by gender on review committees is proportionate to membership in the Canadian health research community.

⁵⁴ https://www.nserc-crsng.gc.ca/NSERC-CRSNG/Politiques-Politiques/committeemembers-membrescomite_eng.asp

⁵⁵ <https://cihr-irsc.gc.ca/e/39380.html>

Cyprus

Reporting organisation(s):

Research and Innovation Foundation

Different types of grant awarding procedures or research funding systems

National systems for funding of research in your country (e.g., funding organisations where researchers apply for grants, direct grants to universities for research) and specific measures taken for promoting gender balance in the funding system.

Research and Innovation activities in Cyprus fall under the mandate of the newly established (March 2020) Deputy Ministry for Research, Innovation and Digital Policy.

The R&I Governance system includes institutions and Bodies, such as the National Board for Research and Innovation, The Chief Scientist for Research and Innovation and the Research and Innovation Foundation.

The National Board for Research and Innovation is the principal advisory body for defining R&I Strategy under the President of the Republic.

The Chief Scientist assumes a coordinating and supervisory role in the formulation of national R&I Policy as well as in the operation of the national R&I governance system.

The Research and Innovation Foundation is the executive arm of the government for Research and Innovation. The Chief Scientist is appointed ex-officio as Chairman of the Foundation's Board of Directors.

The Research and Innovation Foundation, **is the only national R&I funding agency** and is funded by the Government and ESIF funds. The funding is allocated mainly through competitive funding, the Foundation's Framework Programme for Research, Innovation and Technological Development.

Moreover, the government allocates directly funds to the 3 public universities (University of Cyprus, Cyprus University of Technology and Open University).

The only measures that are being implemented and aim at promoting gender balance in the funding system are those introduced by the Research and Innovation Foundation (described in the next section).

Main relevant funding organisations (research councils etc.), main objectives and funding instruments of the organisation. Specific measures to promote gender balance.

The Research and Innovation Foundation (RIF) is a non-profit private foundation with public mandate. It was founded in 1996 by the Government of the Republic of Cyprus, to serve as the national agency for the promotion of scientific and technological research. The RIF has developed a number of activities which fall into two broad categories:

- the design, launching, funding and monitoring of competitive national research programmes, with the aim of enhancing research, technological development and innovation activities in Cyprus, and
- the promotion of the participation of Cypriot researchers in European research programmes and international organisations (EU Framework Programmes, COST, Joint Research Centre (JRC), EUREKA and CERN). It is also responsible for the implementation of bilateral agreements on Research and Development (R&D) signed by the Government.

RIF has currently the overall responsibility for the coordination of activities related to the Horizon 2020 Programme (a continued mandate since 1999: 5th, 6th and 7th Framework Programmes). It coordinates the network of National Contact Points (NCPs) and representatives of Cyprus in the various Programme Committees, provides information, organises information days, trainings and provides advice and customised assistance to researchers. RIF has also been actively involved in a number of EC funded projects, including most of the NCP Network Projects, a considerable number of ERA-NET Projects and four JPIs. It is also member of the Enterprise Europe Network (EEN).

The specific objectives and priorities defined by the Foundation's Statute and the decisions of its Board of Directors are as follows:

- To monitor and coordinate the scientific and technological research and innovation in Cyprus.
- To identify appropriate thematic areas for conducting demand-driven research, taking into consideration the developmental needs of Cyprus.
- To provide funding for the implementation of research and technological development projects and innovation activities.
- To promote the participation of Cypriot research organisations in European research programmes.
- To evaluate the potential of organisations or individual researchers for carrying out research.
- To advise the government on research issues.
- To promote awareness of the Cypriot public for the importance of research in contemporary societies.

RIF has been representing Cyprus in the Helsinki Group on Gender in Research and Innovation since 2010. RIF staff was participating as a Member of the Management Committee of the COST Action TN1201 "GenderSTE Science, Technology and Environment", which was a network of policy makers and experts committed to promoting a fairer representation of women and better integration of gender dimension in research. After that, RIF took part in a number of initiatives and projects promoting gender equality in Research and Innovation (GENDER-NET, GENDERACTION, TARGET and GENDER-NET Plus). In the framework of these projects a number of initiatives have been taken, such

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as organisation of trainings and a gender audit within the institution leading to the drafting of RIF's 1st Gender Action Plan.

The Plan was endorsed by RIF's Board of Directors in October 2018, after the endorsement by the Board of Directors and includes, among others, the following measures that promote gender balance in research proposals:

(1) Gender in Research Content

- i. A gender-sensitive statement has been included in all Call for Proposals launched by the Foundation as well as other related documents (e.g. Guide for Evaluators, Part of Proposal Submission Forms). The statement in the Call text reads "The Foundation encourages women to submit proposals as Coordinators";
- ii. In Part B of the proposal submission form, Research Teams are prompted to describe if and how gender issues are relevant to their proposals;
- iii. Researchers submitting proposals are suggested to set up research teams that are as gender-balanced as possible.

(2) Videos for Evaluators: Informative videos have been uploaded to the Foundation's website and a reference was made in the Guide for Evaluators, with the aim to improve evaluators' awareness about gender issues and gender integration in the proposals.

(3) Measures have been taken that are longer-term and directly linked to a number of internal policies and decisions:

- i. Actions relating to the promotion of gender equality are included in the draft Strategic Action Plan of the Foundation (not yet approved);
- ii. Gender Equality will be incorporated in the HR Policy of the Foundation under preparation, and
- iii. the electronic system of the Foundation will allow the collection of sex disaggregated data (not fully functional yet).

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

2018	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	228	80	238	38	116	60	50	2	60	52	37	25
nb funded	42	18	62	5	29	10	9	1	9	12	11	6
success rate (nb funded/nb applications)	18%	23%	26%	13%	25%	17%	18%	50%	15%	23%	30%	24%

2019	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	115	19	112	19	34	12	13	0	46	20	8	3
nb funded	3	0	7	1	7	0	0	0	1	2	1	0
success rate (nb funded/nb applications)	3%	0%	6%	5%	21%	0%	0%		2%	10%	13%	0%

Year		Female	Male	Total	Female/Total
2018	nb of applications	257	729	986	26%
	nb funded	52	162	214	24%
	success rate (nb funded / nb applications)	20%	22%	22%	
2019	nb of applications	73	328	401	18%
	nb funded	3	19	22	14%
	success rate (nb funded / nb applications)	4%	6%	6%	

The 2009 Report had no data available for Cyprus and therefore we cannot make any comparisons to the 2009 Report. The data shown in the above tables refer to the Programmes RESTART 2016-2020 and therefore to Proposals submitted and signed Contracts for the Calls for Proposals announced in 2018 and 2019 respectively. We provide data for both years since the data for number of funded projects for the year 2019 are not final due to the fact that not all contracts have been signed and therefore, we cannot have concrete results based on them.

The conglomerative data indicate that the first difference between men and women is at the number of submitted proposals, since proposals submitted with a woman as coordinator were only 26 percent in 2018 and 18 percent in 2019. Moreover, only 24 percent and in 2018 and 14 percent in 2019 of the funded projects had a woman as Coordinator. Therefore, these numbers indicate that the differences

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among men and women start from the low number of women submitting proposals as Coordinators. The Research and Innovation Foundation in late 2018 when approving its 1st Gender Action Plan started enhancing women in submitting proposals as Coordinators by stating this in all of its Calls for Proposals. However, data for more years are needed in order to see if this has decreased the initial gap of men and women submitting proposals. Having a look at the conglomerative success rates for men (22 percent) and women (20 percent) for 2018 we can see that although there is a gap in the number of women and men submitting proposals as Coordinators, this gap is being narrowed in the success rates of women and men. Therefore, the evaluation procedure seems to be unbiased giving almost the same success rate for men and women.

It should be noted that, some data are missing from the Table, since they relate to proposals not submitted through RIF's electronic system IRIS (e.g. Competitions, Awards, Encouragement of Participation in H2020).

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	women
pool of potential applicants	665	501	551	243	114	95	123	90	350	307	144	137
nb of applications	228	80	238	38	116	60	50	2	60	52	37	25
% submitting applications	34%	16%	43%	16%	102%	63%	41%	2%	17%	17%	26%	18%

As a proxy to the “pool of potential applicants” we used the R & D Personnel by field of Science for the latest available year, that is 2017. When comparing these data to the number of applications in 2018 it is clear that the percentage of women submitting proposals from the pool of potential women applicants is lower than that of men in all fields of science. Only in the field of social sciences the percentage is the same. Therefore, fewer women relative than men are submitting proposals as Coordinators. Again, looking at the data of the pool of potential applicants we can see that that there is an initial gap to begin with since the number of women is relatively lower than that of men.

Transparent/opaque procedures/systems

Transparency of evaluation process

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	Research and Innovation Foundation
Please mark with Y for Yes and N for No on the statements below	
<i>Does the funding organisation do the following?</i>	
Monitors composition of selection committees	N
Monitors composition of evaluation panels	Y
Uses (national and) international evaluators*	Y
Publishes evaluation criteria	Y
Has ethical guidelines preventing nepotism, etc **.	Y
Publishes ethical guidelines (preventing nepotism, etc.)	N
Applicants can find out evaluators' names during the evaluation process	N
Evaluators know applicants' names or sex	Y
There is a right of reply or a complaint procedure	Y

* Only international evaluators are used

** The “ethical guidelines” take the form of a Conflict of Interest Declaration.

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	Research and Innovation Foundation
Please mark with Y for Yes and N for No on the statements below	
<i>Does the funding organisation do the following?</i>	
Calculates gendered success rates*	Y
Publishes gendered success rates	N
Compares applicants to pool of potential applicants	N
Monitors amounts of funding awarded per sex *	Y
Other quality checks (eg. nepotism)	N
Gives information on granted projects (title, researchers, abstract, etc.)	Y
Applicants can find out evaluators' names after the evaluation process	Y

* Not systematically and on an ad hoc basis since RIF's electronic system is still under development

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

There are no legal barriers to achieving transparency or accountability of procedures. The main barrier is an administrative one and relates to the pressures of recruiting reviewers from abroad to conduct

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remote evaluations, in very tight time frames. It is very difficult to find suitable reviewers and at the same time keep an eye on gender balance.

Differences between disciplines

Differences (if any) of the success rates between main research areas in the table of Question 2a.

Regarding the various scientific fields, the 2018 data indicate that the number of women submitting proposals relative to men is very low in the “Engineering and Technology” (16 percent, 38 proposals for women over 238 for men) and “Agricultural Sciences” (4 percent, 2 proposals for women over 50 for men) fields and their success rate remains low in the “Engineering and Technology” field (8 percent, 5 projects for women over 62 for men) when compared to that of men. Women submit more proposals in the fields of “Social Sciences” and “Humanities” but still relatively fewer than those of men. An interesting result is the success of women in the “Social Sciences” field since although the number of proposals submitted by women is lower than that of men it seems that the number of funded projects earned by women is higher than that of men.

Looking at the data of the pool of potential applicants we can see that there is an initial gap to begin with since the number of women is relatively lower than that of men in all fields, especially in the fields of “Engineering and Technology”.

Summarizing the above, we can say that the data indicate the following:

- the number of women being able to submit an application (R&E Women Personnel) is lower than that of men to begin with, especially in the fields of “Engineering and Technology” and “Agricultural Sciences”,
- the percentage of women submitting an application to those being able to submit an application as Coordinators is lower than that of men, especially in the fields of “Engineering and Technology” and “Agricultural Sciences”,
- the number of women getting funded is lower compared to men,
- the success rates of women being funded over women submitting proposals have a small deviation to those of men, with the success of men being higher in the “Engineering and Technology” and “Medical Sciences” and the success of women being higher in the “Social Sciences” field.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender

No differences between main research areas in application or evaluation process.

Differences in funding instruments between main research areas, and implications for gender.

No differences in funding instruments between main research areas.

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender.

There is only one funding organisation, the Research and Innovation Foundation (RIF). The evaluations performed by the RIF have the following steps:

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1) Preliminary Check:

This is performed partly by the electronic system of the organisation and partly by an officer of the RIF and includes some basic criteria like the language used, the duration, funding etc. The number of men and women performing these preliminary checks depends on the composition of the Research and Innovation Projects Unit that is responsible for these checks. Now, the composition of the abovementioned Unit is as follows: 5 women, 6 men.

2) Evaluation can include one or more of the following:

- Remote Evaluation: Evaluators are being selected for each project based on merit. The sex of the evaluator does not determine his/her selection. Based on data for evaluators used up to March 2019 it is shown that only 17 percent of the evaluators used were women (453 out of 2,600).
- Evaluation by a Scientific Evaluation Committee: When evaluation committees must be formed then evaluators are not only chosen based on merit but effort is placed in having a fair representation of both sexes. No data are available for these Committees.
- Internal Evaluation: The internal evaluation is performed by the officers of the Research and Innovation Projects Unit that comprises of 5 women and 6 men.

Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
Research and Innovation Foundation	Evaluators Used	453	2147

Czech Republic

Reporting organisation(s):

Czech Science Foundation (GACR)

Technology Agency of the Czech Republic (TACR)

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research) and specific measures taken for promoting gender balance in the funding system.

In the Czech Republic, currently the main providers of competitive funding for research are the Czech Science Foundation (GACR), the Technological Agency of the Czech Republic (TACR) and individual ministries (the Ministry of Education, Youth and Sport, the Ministry of Industry and Trade, the Ministry of Interior, the Ministry of Defence, the Ministry of Agriculture, the Ministry of Culture and the Ministry of Health).

Both GACR and TACR are organizational units of the state. GACR (established in 1993) is the only institution in the Czech Republic, which provides public funding exclusively for basic research projects. It supports research throughout all scientific fields on the basis of calls for proposals. It has several funding schemes – the Standard grant projects scheme (for both single investigators and research teams), Junior Star aimed at providing opportunities for excellent young researchers and EXPRO projects creating favourable circumstances for development of excellent research. In addition, GACR also finances projects implemented via bilateral and European international programmes.⁵⁶

Other Czech providers of funding for research – including TACR – support projects that fulfil the aims of their specific programmes. TACR finances applied research, experimental development and innovation. It manages and implements funding programmes with the focus on all key areas such as new technologies, materials, energy, environment, transportation, ICT, creative and digital economy, societal challenges of the 21st century and many others. It was founded in 2009 as part of the reform of the national R&D support system. Its aim was to simplify the state support of applied research and experimental development, which had been fragmented among many governmental sectors before the reform.⁵⁷

Although gender equality is not routinely considered in the Czech research funding system, in the last few years, both GACR and TACR have started several activities in this area. Both organizations monitor on a regular basis the composition of their boards, committees and panels. In search for new panel members, GACR communicates in the call that they are (also) interested in suggested female members. In the past, they actively increased gender balance in their committees through appointing new female members. Both GACR and TACR also monitor the success rates of male and female applicants. The results are published in their annual reports. TACR has a specific funding programme ZÉTA focusing on junior researchers, whose explicit aim is also to support equal opportunities for men and women in

⁵⁶ Source: <https://gacr.cz/en/>

⁵⁷ Source: <https://www.tacr.cz/en/>

development of their research paths. In addition, TACR is involved in a structural project GEECCO⁵⁸ (Horizon 2020) and as part of this project, it develops measures for promoting gender balance among its beneficiaries and panel members, guidelines and trainings focusing on elimination of gender bias in the evaluation process and integration of the gender dimension in the content of research. It is also a member of the GENDER-NET Plus consortium.

Main relevant funding organisations (research councils etc.), main objectives and funding instruments of the organisation, and specific measures to promote gender balance.

GACR: GACR provides public funding for basic research projects in all scientific fields through the Standard grant projects scheme, Junior Star aimed at providing opportunities for excellent young researchers and EXPRO projects creating favourable circumstances for development of excellent research. In addition, GACR also finances projects implemented via bilateral and European international programmes.

GACR constantly tries to increase the representation of women in evaluation panels and discipline committees, including motivating organizations that submit nominations for members of evaluation panels. The main criteria are, of course, high expertise, time possibilities of the potential evaluator, his/her willingness to work in the panel, his/her affiliation and the field of expertise in comparison with other members of the panel.

GACR is also considering the introduction of a completely new group of grant projects that would be focused and primarily aimed at strengthening and balancing Czech science in terms of the representation of women and men, i.e. projects where the main goal would be to support women and men in science returning from maternity and parental leave.

The tender documentation for all groups of grant projects of the GACR stably regulates the situation where the beneficiary may request the interruption of the project implementation for the whole calendar year due to the principal investigator's departure on maternity or parental leave.

In the Code of Ethics for Evaluators and the Code of Ethics for Investigators, equal treatment and non-discrimination is one of the basic pillars of these key documents.

TACR: TACR provides public funding for applied research and experimental development. Its portfolio of funding programmes covers various fields and focuses (energy, environment, transportation, societal challenges of the 21st century etc.). In 2019, it started to administer departmental programmes for the Ministry of Industry and Trade, the Ministry of the Environment and the Ministry of Transport. Some TACR's programmes are aimed at international cooperation in applied research. In addition, TACR is involved in several ERA-NET Cofunds of Horizon 2020 issuing joint calls on agreed themes in various specified areas.

TACR is involved in a structural project GEECCO (Horizon 2020) and as part of this project, it develops measures for promoting gender balance among its beneficiaries and panel members, as well as guidelines and training focusing on elimination of gender bias in the evaluation process. TACR has a specific funding programme ZÉTA focusing on junior researchers, whose explicit aim is also to support equal opportunities for men and women in development of their research paths. Extra points are

⁵⁸ <http://www.geecco-project.eu/about/>

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awarded to the teams that are gender balanced and/or led by a female principal investigator. Gender balance in research teams is also considered in the evaluation of the team in the ÉTA programme and the aim is to transfer this measure to other programmes in the future.

In addition, there is also a more indirect measure in place that may contribute to gender balance among beneficiaries – in some of its programmes, TACR awards extra points (or higher flat rate) to institutions with an advanced human resources management and gender equality measures in place (e.g. holders of HR Excellence in Research Award, Company of the Year: Equal Opportunities Award, organizations implementing Gender Equality Plan etc.).

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

Primarily in basic research, this part contains only the data from GACR.

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	457	64	372	67	238	114	266	109	237	115	238	107
nb funded	151	26	130	13	91	30	91	37	73	24	63	36
success rate (nb funded/nb applications)	33,0%	40,6%	34,9%	19,4%	38,2%	26,3%	34,2%	33,9%	30,8%	20,9%	26,5%	33,6%

Information on the representation of women and men among the applicants of standard projects, junior projects and grant projects of excellence in basic research called EXPRO is given, noting that these are only those projects for which it was possible to determine whether the applicants were women or men.

A total of 2,397 project proposals were evaluated in public tenders to support standard projects, junior projects and EXPRO projects, starting in 2019. It was possible to determine whether the applicant was a man or a woman in 2,384 project proposals.

A total of 576 project proposals (i.e. 24.2 percent) were submitted by women in the role of the applicant, of which 166 projects received support (i.e. 21.7 percent). The share of women in the role of applicant and principle investigator of standard projects, junior projects and EXPRO projects with the beginning of the implementation in 2019 according to the discipline committees was as follows:

Natural sciences - a total of 64 project proposals (i.e. 12.3 percent) were submitted by women in the role of applicant, of which 26 projects were allocated support (i.e. 14.7 percent);

Eng. and Technology - a total of 67 project proposals (i.e. 15.3 percent) were submitted by women in the role of applicant, of which 13 projects were awarded support (i.e. 9.1 percent);

Medical sciences - a total of 114 project proposals were submitted by women in the role of applicant (ie 32.4 percent), of which 30 projects were granted support (i.e. 24.8 percent);

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Agricultural sciences - a total of 109 project proposals were submitted by women in the role of applicant (ie 29.1 percent), of which 37 projects were awarded support (i.e. 28.9 percent);

Social sciences - a total of 115 project proposals were submitted by women in the role of applicant (ie 32.7 percent), of which 24 projects were allocated support (i.e. 24.7 percent);

Humanities - a total of 107 project proposals (i.e. 31.0 percent) were submitted by women in the role of applicant, of which 36 projects were allocated support (i.e. 36.4 percent).

The success rate of women in these public tenders was 28.8 percent, and that of men was 33.1 percent.

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

No data

Transparent/opaque procedures/systems

Transparency of evaluation process

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	GACR	TACR
<i>Please mark with Y for Yes and N for No on the statements below</i>		
<i>Does the funding organisation do the following?</i>		
Monitors composition of selection committees	Y	Y
Monitors composition of evaluation panels	Y	Y
Uses (national and) international evaluators	Y	N
Publishes evaluation criteria	Y	Y
Has ethical guidelines preventing nepotism, etc.	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)	Y	Y
Applicants can find out evaluators' names during the evaluation process	N (please see the comments)	N (please see the comments)
Evaluators know applicants' names or sex	Y	Y
There is a right of reply or a complaint procedure	Y	Y

Comments – Both GACR and TACR continuously monitor the composition of all its managing and evaluation bodies and regularly publish this information. The evaluation process and criteria are published, as is the code of ethics, which is separate for evaluators, applicants and office staff. Applicants do not know the name of the evaluator during the evaluation process, but they know the names of all members in the panel. The evaluators do not know the gender of the applicant, but this is usually evident from the name of the applicant that is available to the evaluators. Applicants have the right to file a complaint about the evaluation process or other errors made during the evaluation process.

Transparency of outcome

Name of funding organisation (if more than one, fill in the name in separate columns)	GACR	TACR
Please mark with Y for Yes and N for No on the statements below		
<i>Does the funding organisation do the following?</i>		
Calculates gendered success rates	Y	Y
Publishes gendered success rates	Y	Y
Compares applicants to pool of potential applicants	N	N
Monitors amounts of funding awarded per sex	Y	Y
Other quality checks (e.g. nepotism)	Y	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y	Y
Applicants can find out evaluators' names after the evaluation process	Y	N

In both organizations, data on gender imbalance are continuously monitored. GACR publishes it in its annual reports, TACR* has just launched a specific section dedicated to this issues (e.g. success rates, amount awarded by sex of the principle investigator) on its webpage. Information on funded projects is also available to the public.

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

The GACR has been working hard for a long time to remove barriers that would affect the transparency of the evaluation processes. The only restrictions that may appear to be negative in connection with transparency at this time are set by Act 130/2002 Coll. (on Support of Research, Experimental Development and Innovation from public funds and amending certain related laws). One example may be that the applicant does not know the names of the specific evaluators of his project, but only the names of all the panellists in the panel, which is given by the respective Act. (This condition that the applicant cannot know the names of peer reviewers influences also TACR.)

Differences between disciplines (GACR)

Differences of the success rates between main research areas in the table of Question 2a.

	Natural sciences	Eng. and Technology	Medical sciences	Agricultural sciences	Social sciences	Humanities
nb of applications	521	439	352	375	352	345
nb funded	177	143	121	128	97	99
success rate (nb funded/nb applications)	34,0%	32,6%	34,4%	34,1%	27,6%	28,7%

Differences in success rates across all disciplines are minimal as can be seen in the attached table.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

The process of evaluation of project proposals within the GACR meets the following conditions in all groups of grant projects: the evaluation period stipulated by law is 8 months; the evaluation system has three levels (evaluation panels, discipline committees, the presidium of the GACR); the statutory number of at least two independent reviews for each project proposal; at least one foreign review for projects advancing to the second evaluation phase (in the case of EXPRO and JUNIOR STAR projects there must be at least 3 reviews); participants in the evaluation process are bound by professional secrecy. The gender perspective is taken into account, but is complementary, with the excellence of the researcher and the quality of the project proposal being crucial.

Differences in funding instruments between main research areas, and if these have implications for gender.

The largest part of public funds for targeted support of the GACR (approx. 75 percent) is spent on the support of the so-called Standard Projects, the duration of which is 2 to 3 years. Project proposals can be submitted from all areas of basic research (approximately 1,800 project proposals are received each year); the topic of the project is chosen by the applicant. The main criteria for the evaluation of project proposals are the originality and quality of the project proposal, the professional preconditions of the applicant to achieve the declared objectives and also the adequacy of the planned costs. Project proposals are evaluated by discipline committees and their expert bodies composed mainly of national experts.

A group of Junior Projects (last announced in 2019) focused on promising beginning researchers, the aim of which was to build an independent scientific team equipped with the appropriate scientific background for the implementation of basic research at the international level. The applicant could only be a scientist working in the field of basic research who duly completed his doctoral studies, and no more than 8 years have elapsed since the completion of his doctoral studies and completed a postdoctoral internship in another country than the one in which he obtained his Ph.D. with a total duration of at least 6 months. Project proposals were evaluated by discipline committees and their expert bodies composed mainly of national experts.

This group of grant projects is now replaced within the GACR by a new group of projects called JUNIOR STAR, which aims to create opportunities for outstanding young researchers to support excellent basic research, provide an opportunity to build an independent group with several collaborators and modern equipment (project duration is 5 years). The proposer must have significant international scientific experience (e.g. obtaining a PhD degree abroad, a longer research stay at a foreign institution during or after the PhD study, as well as short-term repeated research stays at a foreign institution, etc.) and must meet the condition of a maximum of 8 years since the award of the academic title of Ph.D. For persons caring for minors, the period demonstrably spent on maternity and parental leave is not included in this limit; in the case of persons who have suffered a long-term illness, the period of incapacity for work is not included; other similar long-term legal obstacles to the performance of work are also not counted into the eight year period. Applicants can also be talented young scientists coming

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from abroad. The proposals of these projects are evaluated by eight international expert commissions (each with approximately 15 renowned foreign experts).

The international discipline committees of GACR also evaluate proposals for EXPRO projects (the duration of the projects is 5 years), the aim of which is to support excellent research. The applicant can only be a scientist working in the field of basic research, who has demonstrably achieved excellent scientific results on an international scale, is an internationally recognized scientific figure and is the author (co-author) of recent top publications with a demonstrably high response in the international scientific community. One of the conditions for successful completion of the project is to submit a project proposal to one of the main ERC calls with the host organization in the Czech Republic no later than one year after the end of the project implementation.

GACR also provides support for international projects (length of the projects is two to three years), on a bilateral basis (with the National Research Foundation of Korea (NRF), the German agency Deutsche Forschungsgemeinschaft (DFG), the Taiwanese Ministry of Science and Technology, the Brazilian agency São Paulo Research Foundation and the Russian agency Russian Foundation for Basic Research), as well as the Lead Agency (with the Austrian agency Fonds zur Förderung der wissenschaftlichen Forschung, the Swiss National Science Foundation and within CEUS - Central European Science Partnership with Austria, Poland and Slovenia).

In 2021, the GACR plans to announce a new call for projects to support starting researchers - postdoctoral researchers (POSTDOC INDIVIDUAL FELLOWSHIP) so that the possibilities of support cover all levels of researchers' careers.

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender.

GACR – Evaluation panels are expert bodies of discipline committees. Based on the invitation of the GACR presidium, legal and natural persons engaged in research in the Czech Republic submit nominations for panel members. Calls for nominations of candidates for the evaluation panels of the GACR contain recommendations to take into account the representation of women when submitting proposals. The selection of members for individual panels is then carried out by working groups composed of a representative of the RVVI (Council for Research, Development and Innovation), a member of the GACR presidium and a representative of the GACR scientific advisory board.

In 2019, there was a significant personnel change in the panels, almost half of the panel members were newly appointed. At the end of 2019, a total of 415 experts worked in 39 panels, of which 332 were men and 83 were women. The overall representation of women in the panels was 20.0 percent.

A total of 532 scientists were nominated, of which 122 were women, i.e. 22.9 percent of the nominees were women. Of the total number of new panel members of 190 scientists, a total of 35 were women, the share of women in the number of panel members was 18.4 percent. Of the total number of nominated women, 28.7 percent were appointed to advisory bodies. Considering that the share of women scientists in the Czech republic is around 26 percent, the success rate of selected women panellists out of the nominations is above average.

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The discipline committees of the GACR are a professional advisory body evaluating grant project proposals. They consist of 10 to 20 members, experts in the field. Discipline committees consists of chairmen and vice-chairmen of panels. The chairman and vice-chairman of the discipline committee are appointed by the presidency for a two-year term of office from among the persons elected as candidates for the positions by the relevant discipline committee by secret ballot of its members.

TACR – In TACR, the members of evaluation panels are selected by the Scientific Board of TACR and appointed by TACR’s presidium. According to the formal rules governing this process, gender balance should take into account. However, most evaluation panels remain unbalanced. This is in part due to TACR’s primary focus on STEM fields.

Number of men and women in selection/funding committees in research funding organisations.

GACR – At the end of 2019, a total of 415 experts worked in 39 panels, of which 332 were men and 83 were women. The overall representation of women in the panels was 20.0 percent.

The governing bodies of the GACR consist of the Presidium, the Scientific Advisory Board and the Supervisory Board. The Presidium is appointed by the Government of the Czech Republic on the proposal of the Council for Research, Development and Innovation (RVVI). At the moment both President and vice-president are women. The members of the Scientific Advisory Board are appointed and removed by the Government of the Czech Republic on the proposal of the RVVI (Council for Research, Development and Innovation). The members of the Supervisory Board are appointed from among experts by the Chamber of Deputies of the Parliament of the Czech Republic on the proposal of legal entities engaged in research and development. GACR does not enter into the process of selecting members of governing bodies and thus has no possibility to influence the representation of women in these bodies. At the end of 2019, the composition of governing bodies of GACR was as follows:

Name of organisation	Type of committee	# Women	# Men
GACR	Panel members	83	332
GACR	Presidium	2	3
GACR	Supervisory Board	2	8
GACR	Scientific Advisory Board	1	10
TACR	Panel members	93*	347*
TACR	Presidium	1	4
TACR	Supervisory Board	3	7
TACR	Scientific Advisory Board	0	11

* Data for 2018

TACR – At TACR, each project is evaluated by 2-3 remote peer reviewers and one rapporteur, who is a member of an expert evaluation committee or a board of the programme. Some programmes have both of these kinds of evaluation panels (as successive steps in the evaluation process), others only one of them. The final decisions are taken by the presidium of TACR.

Estonia

Reporting organisation(s):

Estonian Research Council

Different types of grant awarding procedures or research funding systems

National systems for funding of research, main relevant funding organisations and funding instruments.

In Estonia, R&D institutions receive base funding as well as compete for grants. In 2019, 51 percent (40.6 mln EUR) of state support came from research grants and 49 percent (39.1 mln EUR) from base funding. The share of base funding has grown year by year and reached 50:50 in 2020.⁵⁹

Base funding is managed by the Estonian Ministry of Education and Research.⁶⁰ Competitions for national research grants are organised by the [Estonian Research Council \(ETAg\)](#).⁶¹

ETAg is the main public R&D funding organisation (governmental agency) in Estonia. It receives its budget from the Ministry of Education and Research. (In the public sector, sectoral ministries and Enterprise Estonia fund R&D to some extent in their respective areas⁶², but only ETAg has instruments for funding bottom-up research themes.) ETAg was created in 2012 and is the successor of the previous main research funding agency, the Estonian Research Foundation (ETF, often translated also as the Estonian Science Foundation).

Grant applications (see section "Research Grants" in the table below) submitted to ETAg are assessed by external evaluators (peer reviewers) as well as by field-specific Expert Panels, and by the Evaluation Committee of the Estonian Research Council. The Expert Panels, convened by the Evaluation Committee, rely on the reviews of the external evaluators and the Evaluation Committee relies both on the reviews of the external evaluators and the Expert Panels. The Estonian Research Council's Evaluation Committee makes the final decision on the applications' scores and confirms the ranking lists.

A comprehensive overview of all research funding instruments of ETAg as of 2019 has been provided in the following table.

⁵⁹ <https://www.etag.ee/en/activities/analysis/statistics-rd-funding-estonia/>

⁶⁰ <https://www.hm.ee/en/activities/research-and-development/base-funding-and-centres-excellence>

⁶¹ On the research funding system, see more in https://www.etag.ee/wp-content/uploads/2019/04/Estonian_Research_2019_veeb.pdf, pp. 6-7, and pp. 9-19. See also <https://www.hm.ee/en/activities/research-and-development>

⁶² In addition, Archimedes Foundation funds applied projects in the field of Education.

NB! The analyses and statistics in this report will be based on the first and main research funding instrument of ETAg, Personal Research Grants⁶³ (marked grey in the table).

RESEARCH GRANTS	<p>* Personal Research Grants (PUT) – aimed at supporting high-quality R&D projects carried out by a researcher or a research group working at Estonian R&D institutions. According to the new framework of research grants and baseline funding, personal research grants have been the main competitive R&D funding instrument since 2016. There are currently three types of personal research grants: postdoctoral, start-up, and team grants.⁶⁴</p> <p>* Proof-of-Concept Grants – aimed at supporting the implementation of experimental development projects at Estonian R&D institutions.⁶⁵</p>
MOBILITY FUNDING	<p>* Mobilitas Plus postdoctoral grant – support for researchers coming to Estonia to carry out their research projects. The support is aimed at researchers who have defended their doctoral degrees abroad;</p> <p>* Returning researcher grant – support for researchers who have carried out their postdoctoral research (or research at least at the same level) abroad and return to continue their research in Estonia;</p> <p>* Top researcher grant – support for top researchers who come from abroad to work in an Estonian R&D institution and to establish their own research group;</p> <p>* Support for study visits and training abroad – support for researchers working at Estonian R&D institutions to participate in trainings and study-visits.</p>
PARTNERSHIP AND CO-OPERATION FUNDING	<p>ETAg participates in various forms of research funding cooperation such as ERA-NET, BONUS, NordForsk, and Baltic Research Cooperation Programme calls.</p>
INFRASTRUCTURE FUNDING	<p>* Research Infrastructure support.</p>
PROGRAMMES	<p>* RITA programme – supporting socio-economical applied research based on the needs of the Estonian state. The aim is to increase the role of the state in strategic management of research and the capacity of R&D institutions in carrying out socially relevant research;</p> <p>* Mobilitas Plus – facilitates internationalisation of research, mobility of researchers, the next generation of researchers, and international cooperation.</p> <p>* NUTIKAS support – aims to contribute to growth in the research-intensity of the Estonian economy, supporting collaboration between R&D institutions and companies.</p> <p>* TeaMe+ programme – an European Regional Development Fund financed programme for popularising STEM fields (natural sciences and engineering).</p>

⁶³ <https://www.etag.ee/en/funding/research-funding/personal-research-funding/>;
<https://www.etag.ee/en/funding/research-funding/personal-research-funding/call-2020/>

⁶⁴ <https://www.etag.ee/en/funding/research-funding/personal-research-funding/>;
<https://www.etag.ee/en/funding/research-funding/personal-research-funding/call-2020/>

⁶⁵ <https://www.etag.ee/en/funding/research-funding/proof-of-concept-grant/>

Objectives of the Estonian Research Council⁶⁶

The Estonian Research Council provides research and mobility grants in order to facilitate high-quality research projects in all fields to strengthen the international competitiveness of Estonian R&D, promote cooperation between the government, businesses and research institutions, and contribute to the internationalisation of research and support the next generation of researchers. To support the development and implementation of the research and innovation policy, ETAg represents Estonia's positions in international networks, assemblies and cooperation projects; supports ministries in making knowledge-based decisions; ensures the availability of research information to the researchers as well as to the general public; manages the Estonian Research Information System as a hub of information on research and development institutions, researchers, research projects and activities; analyses research and development practices; organises the evaluation of research and development activities. We educate and advise researchers, research institutions and ministries on the opportunities and criteria of participation in international research cooperation. To enhance international research cooperation, ETAg represents Estonia in research networks and partnership programmes, supports the participation of researchers, research institutions, public organisations and businesses in international research initiatives, and advises foreign researchers working in Estonia. To promote Estonian research, ETAg fosters research communication and promotes the spread of scientific thinking, organises competitions for school and university students, researchers and research promoters, funds research-promoting TV programmes, such as *Rakett 69*, presents Estonian research to an international audience through the Research in Estonia initiative, and coordinates and supports the popularisation of research and engineering.

Specific measures taken for promoting gender balance in the funding system

There are no specific measures for promoting gender balance in the funding system, in terms of specific funding instruments or support for female applicants. However, there are some principles to be considered in the evaluation of grant applications that aim at supporting gender fairness.

(1) The most long-standing principle has been that for grant applications, time spent both on maternity leave and parental leave (which may take about three years per child in Estonia) is taken into account when determining the eligibility for postdoctoral and start-up grants, and when considering the bibliometric data of the applicant – the respective period of eligibility (five or seven years) will be extended by the corresponding period in full months and rounded up to the higher number of months. This principle was reported already for 2007 in the 2009 report (p. 50).

(2) A few years ago, the principle was established that in case of the applications of equal standing, the Evaluation Committee is asked to prefer the applications whose principal investigator represents the less represented gender in that area.

⁶⁶ <https://www.etag.ee/en/introduction/>

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the applications which sustain equal standing after the ranking procedure /../ will be prioritised according to the underrepresented gender among the applicants whose applications rank above the applications of equal standing⁶⁷

(3) For team grants (see the table above), gender balance within the research team is among the applications' evaluation criteria.

Is the size and composition of the research team justified in order to guarantee the diversity and sustainability of the research team (e.g., gender equality, researchers at different career stages, PhD students, technical staff if appropriate, etc.)?⁶⁸

These principles have been fixed in the guidelines for the evaluation of Personal Research Grant Applications, i.e. the applications for the main research funding instrument of ETAg, and to some extent, are also present in the procedures of other funding instruments that follow the example of Personal Research Grant procedures as far as possible (considering the specifics of the particular instrument).

It can be concluded that at present, gender balance is desired and, to some extent, supported, but not actively pursued. Where possible (when forming decision-making bodies, choosing grantees, etc.), the underrepresented candidate is chosen in the case of otherwise equal candidates. There are no quotas or other more specific measures in place.

Gender specific data, as part of other data and analyses, is being published and regularly updated on the organisation's website. Gender mainstreaming has become an increasingly important topic inside the organisation. In 2020, the Estonian Research Council will implement its first Gender Equality Plan, as part of ETAg's participation in the Horizon 2020 Project GEARING-Roles (2019-2022). Also ETAg's participation in the GENDER-NET Plus project reflects this same tendency.

Thus, as compared to the year 2009, the awareness of the gender dimension seems to have increased in ETAg and in Estonian research scene in general. In ETAg, apart from the Gender Equality Plan, as mentioned above, since recently, the applicant who represents the under-represented gender should be preferred when ranking equal applications, and gender balance is mentioned among the criteria of evaluating research teams. Since recently, similar principles are also applied when forming ETAg's Evaluation Committee (more on this below).

The funding instruments themselves have changed several times since 2007 (i.e. when ETAg's predecessor ETF was the main research funding organisation in Estonia); we cannot go into more detail on all that rather complicated history here.⁶⁹

⁶⁷ <https://www.etag.ee/wp-content/uploads/2020/02/PRG-Evaluation-Guidelines-2020.pdf> - this clause is included in Evaluation Guidelines of all three Personal Research Grant types. Similar principles are also applied when forming ETAg's Evaluation Committee (more on this below).

⁶⁸ <https://www.etag.ee/wp-content/uploads/2020/02/PRG-Evaluation-Guidelines-2020.pdf>

⁶⁹ Some insights into the more recent developments can be gained from the following publications in English:
https://www.etag.ee/wp-content/uploads/2019/01/Estonian_Research_2019_veeb.pdf;
https://www.etag.ee/wp-content/uploads/2015/12/TA_teaduskogumik_ENG_veeb.pdf;

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We would like to stress here that the gender situation within a country's research scene should not be viewed separately from that country's general research funding situation. For example, one should carefully consider the context and different meanings of a "research grant" in countries where only a small part or research funding is competition-based, compared to countries where the latter form the main means of research funding.⁷⁰

With regard to the reality behind the numbers we would like to stress that the gender situation within a country's research scene cannot, and should not, be viewed separately from that country's general research funding situation. At least as strongly as "gender issues" the data presented below reflects the great challenges that Estonian research funding has been facing in general. In fact, by many if not all Estonian researchers the situation is seen as extremely worrying particularly in the recent years. Several research groups, institutes and even institutions have expressed strong fear for their future – and indeed for the future of Estonian research in general – due to the low success rates of the largely project-based research funding.⁷¹ It is understandable that in general, and for both individual researchers of both genders, the survival of their research group or even (sub-)discipline would be the first order problem.

Thus presently the discussion in Estonia focuses more on the rather dramatic situation in research funding in general (see the success rates below). Nevertheless, and within this context, discussion of specific challenges faced by female researchers seems to have become increasingly visible, and is being voiced in several fora where general issues of research politics are being discussed.⁷²

It would be interesting to analyse more deeply the impact of systemically unstable research funding situation on gender balance within research, including on "glass ceiling", "glass cliff", etc. Application numbers and success rates may reflect various hidden dynamics which we are presently not (yet) aware of. Since in Estonia the funding system has made through several changes over the past decades, it could make a nice case study to analyse such interferences. At the same time, detecting clear trends would probably be more complicated due to the contextual fluctuations.

⁷⁰ In Estonia "in 2005 when baseline funding was introduced, the ratio of competition-based and stable funding was 90:10, and between 2007 and 2015 it stayed at 80:20 for a very long time, in 2018 the ratio of 60:40 was reached." (pp. 14-15 in https://www.etag.ee/wp-content/uploads/2019/01/Estonian_Research_2019_veeb.pdf - institutional research grants that are not awarded any more were also competition-based grants.)

⁷¹ Some exemplary articles in English from Estonia's main public news site (most of the ongoing discussion pieces have apparently not been translated): <https://news.err.ee/1058864/researchers-submit-statement-in-support-of-estonian-studies-to-riigikogu>; <https://news.err.ee/1036208/report-folklore-archive-jeopardized-by-lack-of-funding>; <https://news.err.ee/1030773/public-address-estonian-research-policy-must-face-estonia>; <https://news.err.ee/946602/president-when-scientists-lose-faith-in-estonian-people-they-go-elsewhere>; <https://news.err.ee/907158/researchers-warn-prime-minister-of-collapse-of-estonia-s-research-system>

⁷² Including in this publication https://www.etag.ee/wp-content/uploads/2019/01/Estonian_Research_2019_veeb.pdf

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities and the Arts	
PI gender	M	F	M	F	M	F	M	F	M	F	M	F
No of applications (total 479)	146	59	60	7	23	22	13	8	32	34	36	39
No funded (total 114)	43	15	18	2	7	7	4	0	4	3	4	7
Success rate (total 24%) (No funded/No applications)	29%	25%	30%	29%	30%	32%	31%	0%	13%	9%	11%	18%

The data includes national research grants (personal research funding grants) applications from 2019 that received funding in 2020. The data includes applications for postdoctoral research grants, start-up grants and team grants ("personal research grants" in the table above).

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

Total		Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities and the Arts	
M	F	M	F	M	F	M	F	M	F	M	F	M	F
1501	1132	657	319	275	88	108	182	75	71	217	274	169	198
57%	43%												

The numbers include all researchers (with a PhD) working in the higher education sector – all universities, and other educational institutions providing higher education and all institutions under their direct control or associated with them (research institutes, clinics, scientific centres), whatever their source of finance or legal status.⁷³

The numbers confirm that **albeit female and male researchers are represented rather equally in the HEI institutions in terms of absolute numbers, female researchers tend to apply less frequently than males and thus also get less funding in sum**, even though the grant amounts are predefined.

NB! The actual pool of potential applicants is somewhat larger, since the potential pool also includes for-profit organisations (researchers from all positively evaluated R&D institutions can apply for grants). However, applications from for-profit organisations have amounted to less than 1 per cent of

⁷³ <http://andmebaas.stat.ee/>, table TD076

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applications over the past eight years. So even though the gender balance is different in for-profit organisations (2.6 times more male researchers or engineers as compared to females in the private sector), considering also those applications would not noticeably influence the general picture.

Comparison with the situation in 2007

According to the 2009 report, the share of female researchers was either 43% (p. 41) or 48% (p. 95) in 2007 in Estonia. The report does not say who exactly were included in this data. Anyhow, in general the present situation seems to be rather similar to that of more than 10 years ago.

As referred to above, the comparison between 2007 and 2019 is complicated for several reasons. First or all, the funding instruments and thus grant amounts have changed (cf. the success rates and No of funded applications). There were less applications, but much higher success rates, in 2007. The relative success rates have fallen strongly in all fields. Secondly, also the research fields are not easy to translate between 2007 and 2019. Only in case of "Health" and "Culture and Society" are there clear counterpart fields in 2019. The disciplines that in 2007 belonged under "Envir. and biosciences" on the one hand, and under "Physical sciences and engineering" were in contrast not "neatly" divided between the three more specific fields. Thus, "Natural sciences" of 2019 include disciplines from both previous fields. This is also the inherently most diverse field, including disciplines from computer science to genetics.

Due to Estonia's smallness, the absolute numbers of applications are not so high either – albeit they are actually rather high as compared to the total number of eligible researchers. Nevertheless, here is a numeric comparison of the success rates:

	M	F	M	F	M	F	M	F	M	F	M	F
2007	Envir. and biosciences				Physical sciences and engineering		Health		Culture and Society			
Success rate (%) 2007, total 55%	50	50			64	50	52	57	60	45		
Total No applications submitted (total 328)/ funded (total 181)	110/55				100/62		44/24		74/40			
2019	Natural sciences		Agricultural sciences		Eng. and Technology		Medical sciences		Social sciences		Humanities and the Arts	
Success rate (%) 2019, total 24%	29	25	31	0	30	29	30	32	13	9	11	18
Total No applications submitted (total 479)/ funded (total 114)	205/58		21/4		67/20		45/14		68/7		75/11	

Transparent/opaque procedures/systems

Transparency of evaluation process

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	Estonian Research Council
Please mark with Y for Yes and N for No on the statements below	
<i>Does the funding organisation do the following?</i>	
Monitors composition of selection committees	Y
Monitors composition of evaluation panels	Y
Uses (national and) international evaluators	Y
Publishes evaluation criteria	Y
Has ethical guidelines preventing nepotism, etc.	Y
Publishes ethical guidelines (preventing nepotism, etc.)	N ⁷⁴
Applicants can find out evaluators' names during the evaluation process	Y
Evaluators know applicants' names or sex	Y
There is a right of reply or a complaint procedure	Y

Some comments based on the following criteria: recruitment of evaluators and reviewers, pre-application information, anonymity in evaluation, feedback to applicants, right to complain:

Recruitment of evaluators and reviewers; anonymity in evaluation

As mentioned above, the applications are evaluated (1) first by **external peer reviewers** who remain anonymous for the applicants (single-blind peer review, as the applications are not anonymous), and then (2) by **ETAg's Expert Panels and the Evaluation Committee**.

The peer reviewers are recruited by ETAg's research funding officers.

The Evaluation Committee members are appointed by the main research organisations in Estonia, and their names are published immediately after their appointment. The Committee consists of the main panel and field-specific Expert Panels.⁷⁵

The main panel consists of a selection of expert panel members, aiming at disciplinary and institutional balance. Gender balance is considered through preferring the representative of the less represented gender in case of equal candidates.

ETAg recruits committee member candidates from positively evaluated R&D institutions. Since a few past years, the institutions submitting the candidates have been informed that in the case of equal

⁷⁴ ETAg and the universities have however published an agreement on research , "Estonian Code of Conduct for Research Integrity" (<https://www.eetika.ee/en/ethics-estonia/estonian-code-conduct-research-integrity>), a document that is well known and often referred to by the research community (from which the ETAg Evaluation Committee and expert panel members are recruited from). Also, an ethics self-evaluation for is available both in Estonian and English: https://www.etag.ee/wp-content/uploads/2020/01/Eetika_Tabel_ENG_2020.pdf

⁷⁵ <https://www.etag.ee/en/estonian-research-council/evaluation-committee/>

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candidates, the candidate of the underrepresented gender will be preferred.⁷⁶ New members are appointed by the Ministry of Education and Research.

Presently, an expert panel is formed for each of the six research fields as depicted in the following table (see Section 6b on the current gender composition of the panels).

Panel	No of members
Evaluation Committee (main panel)	21 ⁷⁷
Natural sciences expert panel	45
Engineering and technology expert panel	8
Medical and health sciences expert panel	11
Agricultural and veterinary sciences expert panel	6
Social sciences expert panel	9
Humanities and the arts expert panel	11

Since it is impossible to exclude researchers from the applying institutions from the evaluation panel (both the committee members and the applicants mostly come from three or four main universities), careful attention is paid to the possible conflicts of interest. The Committee member who works at the same *institute or department* as the applicant, therefore has a conflict of interest with this application and has to step out of the room while that application is being discussed. Co-authoring a research article in the past five years always classifies as a conflict of interest as well.

Obviously, it is stated that "[a]ll applications are to be evaluated according to the same rules and procedures and all of them are treated equally".⁷⁸

Pre-application information; feedback to applicants; right to complain

Thorough pre-application information on both the requirements and evaluation procedure is provided to the applicants both in Estonian and in English on the ETAg web page. Live info days are also organised, and applicants are encouraged to submit queries by phone or via email.⁷⁹ The names of the Evaluation Committee and Expert Panel members are public, as mentioned above.

Both the peer reviews (text and scores) and final statement by the Expert Panels and Evaluation Committee are made available to the applicants, and a right to complain is in place, although no major revisions of the Evaluation Committee decisions have taken place in recent years.

⁷⁶ <https://www.etag.ee/teadusagentuur/hindamisnoukogu/hindamisnoukogu-moodustamise-kord-ja-tookord/>

⁷⁷ Main members. In addition, 18 substitute members have been nominated, see *ibid*.

⁷⁸ <https://www.etag.ee/wp-content/uploads/2020/02/PJD-Evaluation-Guidelines-2020.pdf>

⁷⁹ E.g. for the last call <https://www.etag.ee/en/funding/research-funding/personal-research-funding/call-2020/>

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	ETAg
Please mark with Y for Yes and N for No on the statements below	
<i>Does the funding organisation do the following?</i>	
Calculates gendered success rates	Y
Publishes gendered success rates	Y
Compares applicants to pool of potential applicants	Y
Monitors amounts of funding awarded per sex	Y/N
Other quality checks (eg. nepotism)	Y/N
Gives information on granted projects (title, researchers, abstract, etc.)	Y
Applicants can find out evaluators' names after the evaluation process	N/Y

"Compares applicants to pool of potential applicants" – not necessarily in publications, but the data are available and used at least for internal purposes.⁸⁰

"Monitors amounts of funding awarded per sex" – **since recently, grant amounts are fixed for different grant types, so there is no need to monitor specific amounts requested by, and awarded to, men and women.** This certainly supports women who, as research from other countries has shown, may tend to request small grant sums in case the sums are not fixed.

Monitoring takes place in terms of how many of these fixed-rate grants are awarded to one and another sex).

"Other quality checks (eg. nepotism)" – "yes" in terms of employing mainly foreign reviewers as peer reviewers. However, due to the country's smallness and tight competition and relatively low success rates, it may be difficult to eliminate all possible conflicts of interest when making the final funding decisions by the evaluation panels, even if the choices are based on the external peer reviews.

"Applicants can find out evaluators' names after the evaluation process" – the peer reviewers' names remain anonymous even after the evaluation process. The names of the members of the Evaluation Committee and expert panels are always public.

Comparison with the situation in 2007

The main principles (applications in English, foreign peer reviewers, expert panels and the Evaluation Committee) have remained the same since the 1990s. At the end of this report we have included a comparison of members' gender in various boards, compared to the boards and members mentioned in the 2009 report, p. 95.

At present, ETAg's transparency principles accord with the general principles described in the 2009 report, section 3.4.

⁸⁰ For submitted applications, numbers of applications are published by the main six fields, though not by subdisciplines, themes or PI's gender.

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Unfortunately we lacked time for a historical investigation, our information on how the process was organised in ETAg's predecessor in 2007, i.e. in the Estonian Research Foundation, comes from the brief description in the 2009 report. Our impression is that attention to the gender aspect has grown over time.

The same goes for monitoring as described in the 2009 report's section 3.3: for example, we are not sure which data were published in 2007. At present, ETAg's Department of R&D Analysis is responsible for such monitoring, and publishes the data on ETAg home page (mainly in Estonian).

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

Estonia and particularly its research scene are very small, as is the number of major research institutions (most applications are submitted by three or four main universities). ETAg's Evaluation Committee that decides the final ranking of the applications is composed of the representatives of the same few research institutions whose researchers are applying for funding. It is therefore questionable whether complete objectivity is possible – as the interest of the Committee's members' institutions would be in play even if they have no personal conflict of interest with regard to particular applicants.

In general, to reduce the potential influence of personal contacts or other types of conflict of interest, finding foreign peer reviewers is attempted, but peer reviewers from Estonia are sometimes used as the last resort: especially if the foreign reviewer withdraws at the last minute, a replacement may also be invited from Estonia, but only if there is no conflict of interest.

As for the potential barriers mentioned in the question, the applicant's knowledge of English is important as the applications have to be submitted in English. This is because a large share of peer reviewers are foreigners. This can make the procedure more difficult for applicants with limited English skills. On the other hand, using foreign peer reviewers (external evaluators who determine the initial ranking of the proposals within a research field) reduces the potential problem of nepotism in the small country.

Differences between disciplines

Differences of the success rates between main research areas

First of all, there are still significantly fewer female applicants. This reflects a similar tendency as stressed in the 2009 report, Section 5.

As shown above in Section 2, within the entire pool of applicants, 57 percent of researchers are men and 43 percent are women, however 310 men (65 percent) and 169 women (35 percent) applied.

Interestingly, in the potential pool of applicants there are significantly more women in the fields of medical sciences, social sciences and humanities, whereas among actual applicants the share of men and women in those fields was nearly identical.

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All fields taken together, 80 male and 34 female PIs received the grant. This means that **the success rate was more equal, in terms of the PI's gender, than the application rate: the success rate was 26 percent for men and 20 percent for women.**

While in the fields of medical sciences and humanities, women were slightly more successful than men, in other fields, the success rates were quite similar. The 6 percent gap for total success rates was caused mostly due to the fact the most of the grants received were in the fields of natural sciences and engineering and technology, which are fields dominated by men.

Due to the very different contexts, funding instruments and also disciplinary groups (four research fields in 2007 that do not neatly translate into the six fields in 2019) a direct comparison of the situations and results in 2007 and 2019 is complicated and not really appropriate.

Differences between main research areas in application procedures, evaluation processes etc., and its implications for gender.

The evaluation process does not differ between research fields. All expert panels are composed of experts from relevant fields. What does vary is the size of the panel - for example, the expert panel for natural sciences is significantly larger (45 members) than the expert panel for agricultural and veterinary sciences (6 members)⁸¹ which certainly makes a difference in the panels' work.

Differences in funding instruments between main research areas, and its implications for gender.

No differences, see above.

⁸¹ <https://www.etag.ee/en/estonian-research-council/evaluation-committee/expert-panels-2/>

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and its implications for gender.

Already described in Section 3, subsection "Recruitment of evaluators and reviewers; anonymity in evaluation".

Number of men and women in selection/funding committees in research funding organisations.

For each organisation, add one row for each type of committee as of May 2020⁸², and in the previous round (in brackets)⁸³

Name of organisation	Type of committee	# Women	# Men
Estonian Research Council	Evaluation Committee (main panel)	7 (8)	14 (14)
Estonian Research Council	Natural sciences expert panel	12 (15)	31 (30)
Estonian Research Council	Engineering and technology expert panel	3 (0)	7 (8)
Estonian Research Council	Medical and health sciences expert panel	2 (7)	6 (4)
Estonian Research Council	Agricultural and veterinary sciences expert panel	4 (3)	5 (3)
Estonian Research Council	Social sciences expert panel	1 (3)	7 (6)
Estonian Research Council	Humanities and the Arts expert panel	7 (9)	3 (2)

As mentioned above, ETAg recruits committee member candidates from positively evaluated R&D institutions. Institutions submitting the candidates have been informed that in the case of equal candidates, the candidate of the underrepresented gender is preferred for the past few years. New members are appointed by the Ministry of Education and Research. Those who are applying in that particular round cannot participate.

Other gatekeepers as compared to the 2009 report:

According to the 2009 report (p. 41), women were "heavily under-represented among gatekeepers". This is still true especially for those bodies where various institutions are represented by one member. The situation has changed for ETAg's Evaluation Committee and expert panels, as R&D institutions who nominate them are explicitly asked to prefer the less represented gender in case of equal candidates (cf. above). Generally, public awareness of gender imbalance in such boards seems to have increased.⁸⁴

⁸² <https://www.etag.ee/en/estonian-research-council/evaluation-committee/expert-panels-2/>

⁸³ The lists often change as those who are applying in that particular round cannot participate.

⁸⁴ E.g. for Research and Development Council of the Estonian Government:
<https://novaator.err.ee/655507/professor-tahab-teadus-ja-arendusnougusse-sookvoote>

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Institution	According to the 2009 report (2007?)		23 May 2020 (according to the web reference)	
	M	F	M	F
Estonian Academy of Sciences⁸⁵	56	1	66	6 ⁸⁶
Estonian Young Academy of Sciences⁸⁷	-	-	15	18 ⁸⁸
Key advisory institution of the government on science policy	Scientific Competence Council		Research and Development Council ⁸⁹	
	9	0	13	1
Key body in awarding research grants	Council of the Estonian Science Foundation		ETAg's Evaluation Committee (main panel)	
	6	1	14	7
Expert commissions for grant evaluation	32	10	59	29

Among the current main institutions of the Estonian Research and Development System there is also a Research Policy Committee that advises the Ministry of Education and Research.⁹⁰ Currently there are 14 men and 9 women (including the minister herself).

The Council of ETAg (the supervisory body which plans the activities of ETAg, organises its management and carries out supervision; members are appointed and removed by the minister for education and research) currently includes 6 men and 1 woman.⁹¹

⁸⁵ <http://www.akadeemia.ee/en/academy/> Elects its own members for lifetime, has advisory and honorary function, is neither a research nor a research funding body.

⁸⁶ <http://www.akadeemia.ee/en/membership/abc/>

⁸⁷ <http://www.akadeemia.ee/en/eyas/> A new and very vocal NGO since 2017, established by the Academy of Sciences to give voice to young researchers, includes young researchers with PhD until the age of 40, also elects its members based on applications. Has been repeatedly raising awareness of specific challenges faced by young female researchers among other topics. Is being consulted among other target groups in research policy making, but does not have an established position among the main institutions of the Estonian Research and Development System.

⁸⁸ <http://www.akadeemia.ee/et/enta/foundingmembers/>. The 29 founding members in 2017 were nominated by Estonian R&D institutions: 13 men and 16 women.

⁸⁹ <https://www.riigikantselei.ee/en/research-and-development-council>

⁹⁰ <https://www.hm.ee/et/teaduspoliitika-komisjon>

⁹¹ <https://www.etag.ee/en/estonian-research-council/board-of-estonian-research-council/>

France

Reporting organisation(s):

ANR (French national research funding agency)

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), specific measures taken for promoting gender balance in the funding system

The French Ministry of Higher Education, Research and Innovation is providing 74 percent of the budget of universities and 64 percent of the research organisations, mainly to cover the costs of the permanent personnel.

The total funding of research contracts is 5.0€ billions, including 3.0€ billions by public funders out of which ANR is the most important for (1.0€ B) for public research performing organisations, especially in basic research.

The French National Research Agency (ANR), founded in 2005, is a public administrative institution under the authority of the French Ministry of Higher Education, Research and Innovation. The agency funds project-based research carried out by public operators cooperating with each other or with private companies.

Main relevant funding organisations (research councils etc.), main objectives and the funding instruments of the organisation, and specific measures to promote gender balance

ANR is the biggest funding organisation. 47.0 percent of the ANR funds go to universities. Other public and private contract funders are mainly specialized in one thematic field, e.g. energy, cancer, AIDS, etc.

Along with research stakeholders, the French National Research Agency (ANR) is contributing to the development of a policy that aims to reduce gender inequality in higher education and research. It seeks and encourages parity in Scientific Evaluation Panels. It also encourages scientific communities to systematically consider sex and/or gender aspects in research projects in all fields and in review processes.

The ANR's commitments to gender equality and consideration of sex and/or gender aspects are included in its Gender Equality Plan (2020-2023) and its [Code of Ethics and Scientific Integrity](#). The ANR also supports women wishing to engage in scientific careers and encourages the young generations to join all fields of research.

The Agency has also analysed the issue of unconscious gender bias in review processes and has thus set up a training and awareness process for committee chairpersons focusing on the issue of parity within committees and consortia and on the question of gender in selection bias.

All the data in the section 2 and following are only for ANR.

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

AAPG 2015-2019 - JCJC/PRC/PRCE	BS		EERB		NuMa		SHS		SPICE		Multi Dept		Total		
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women									
nb of applications (first stage)	7349	4184	3259	1520	3132	643	1148	1061	7036	2321	1554	850	23478	10579	34057
nb funded	947	481	424	190	499	97	173	159	961	284	225	133	3 229	1 344	4 573
success rate (nb funded/nb applications)	12.9%	11.5%	13.0%	12.5%	15.9%	15.1%	15.1%	15.0%	13.7%	12.2%	14.5%	15.6%	13.8%	12.7%	13.4%

The figures include the 3 main categories of calls (young researchers “JCJC”, Public Research Only “PRC”, Public research with private partnership “PRCE”).

BS :	Biology and Health
EERB :	Environnement and Biological Resources
NuMa :	Digital sciences and Maths
SHS :	Social sciences and humanities
SPICE :	Physics, Engeniering, Energy
Multi Dept :	Cross-cutting domains

	BS		EERB		NuMa		SHS		SPICE		Multi Dept		Total		
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women									
% by gender (nb of applications)	63.7%	36.3%	68.2%	31.8%	83.0%	17.0%	52.0%	48.0%	75.2%	24.8%	64.6%	35.4%	68.9%	31.1%	100.0%
% by gender (nb funded)	66.3%	33.7%	69.1%	30.9%	83.7%	16.3%	52.1%	47.9%	77.2%	22.8%	62.8%	37.2%	70.6%	29.4%	100.0%

Statistics show that nearly a third of ANR projects submitted and funded between 2015 and 2019 were coordinated by women (31, 1 percent of projects submitted, and 29.4 percent of selected projects). This proportion has very slightly increased over the years but remains under to the proportion of women in higher education and research.

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants (the fields are different from the template and cover only a part of the scientific fields in French HEI)

	Biology		Eng. and Technology		Medical sciences		Earth and environment		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants	52%	48%	81%	19%	66%	34%	71%	29%	55%	45%	37%	63%

Sources:

Chiffres clé de l'égalité femmes-hommes 2020 <https://www.enseignementsup-recherche.gouv.fr/cid150061/esri-chiffres-cles-de-l-egalite-femmes-hommes-parution-2020.html>

L'état de l'emploi scientifique en France 2020 https://cache.media.enseignementsup-recherche.gouv.fr/file/2020/87/8/Etat_emploi_scientifique_2020_1341878.pdf

Even though in 2016 the public research performing organisations cumulate approximately 45'000 full-time researchers eligible for research project funding and individual grants, including 40 percent of women, there is no data available by broad scientific field.

Transparent/opaque procedures/systems

Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	ANR
Please mark with Y for Yes and N for No on the statements below	
Does the funding organisation do the following?	
Monitors composition of selection committees	Y
Monitors composition of evaluation panels	Y
Uses (national and) international evaluators	Y
Publishes evaluation criteria	Y
Has ethical guidelines preventing nepotism, etc.	Y
Publishes ethical guidelines (preventing nepotism, etc.)	Y
Applicants can find out evaluators' names during the evaluation process	N
Evaluators know applicants' names or sex	Y
There is a right of reply or a complaint procedure	Y

Transparency of outcome

Name of funding organisation (if more than one, fill in the name in separate columns)	ANR
Please mark with Y for Yes and N for No on the statements below	
Does the funding organisation do the following?	
Calculates gendered success rates	Y
Publishes gendered success rates	Y
Compares applicants to pool of potential applicants	Y
Monitors amounts of funding awarded per sex	Y
Other quality checks (eg. nepotism)	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y
Applicants can find out evaluators' names after the evaluation process	Y

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

Names of committee members are published at the end of the evaluation process. However, names of external reviewers are not published.

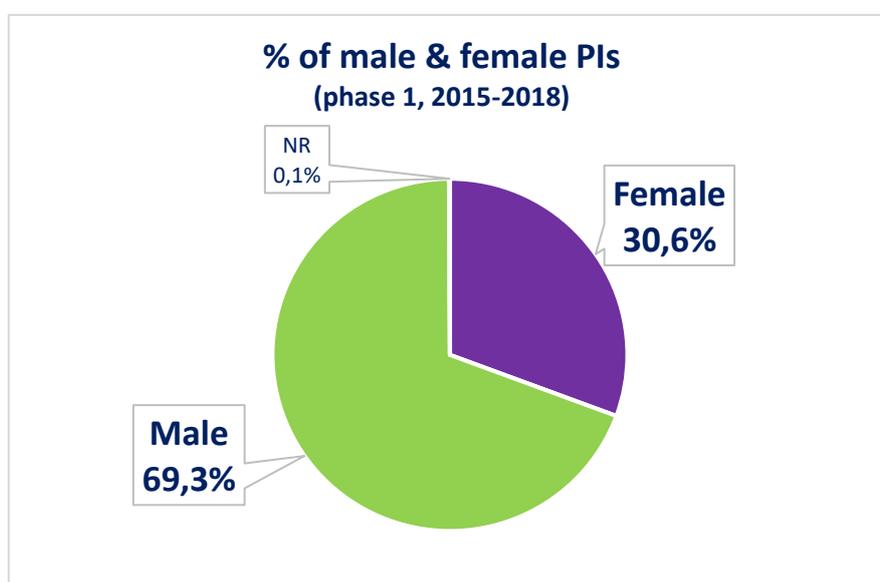
Differences between disciplines

Differences (if any) of the success rates between main research areas

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

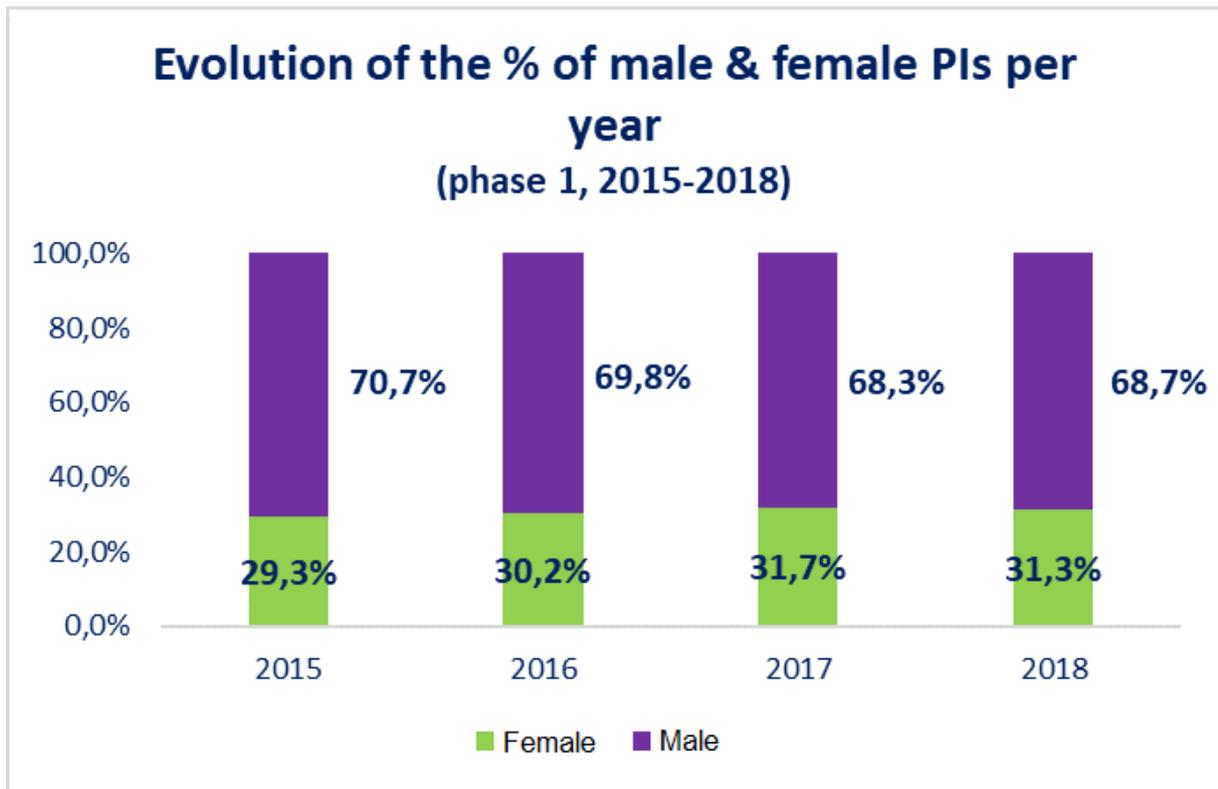
Differences in funding instruments between main research areas, and if these have implications for gender.

Stage 1 of the generic call, 2015 – 2018



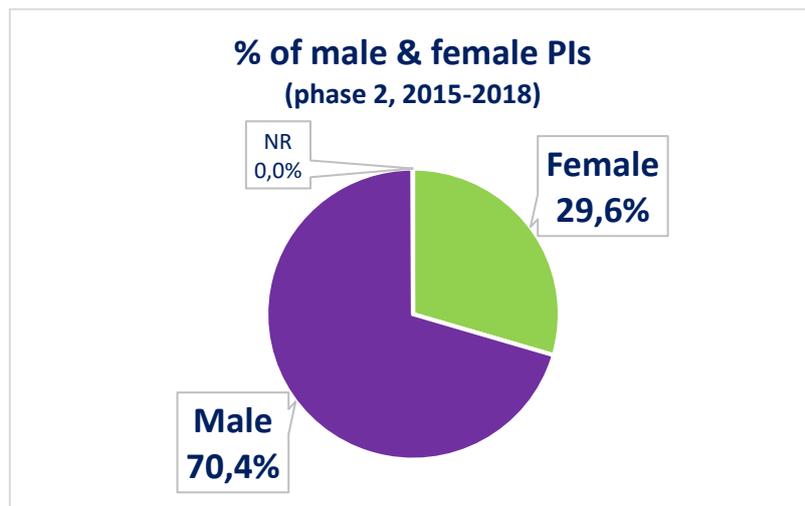
Among the projects submitted to the generic call for proposals from 2015 to 2018, women conducted only 30.6 percent of projects, whereas men conducted 69.3 percent of projects. As we said before, these results under slightly under the proportion of women among researchers and teachers-researchers in France.

These analyses highlights the general evolution from submitted projects led by women throughout the different editions of the generic call for proposal. It also shows that this evolution is positive. Indeed, the proportion of projects led by women increases slightly.

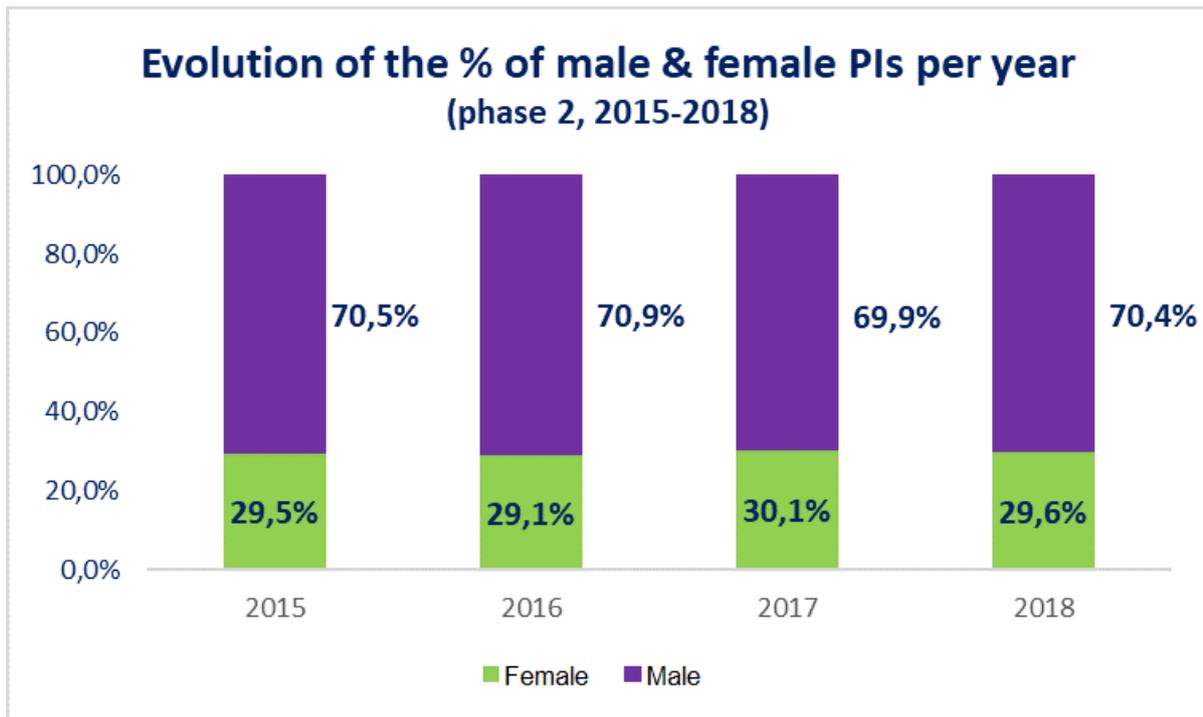


Stage 2 AAPG 2015 – 2018

For all the editions from 2015 to 2018, the percentage of projects conducted by women invited to stage 2 is slightly inferior to the percentage of the submission. This result leads us to think that the evaluation could be more favorable for men than for women, which suggests the existence of a gender bias in the evaluation of projects.

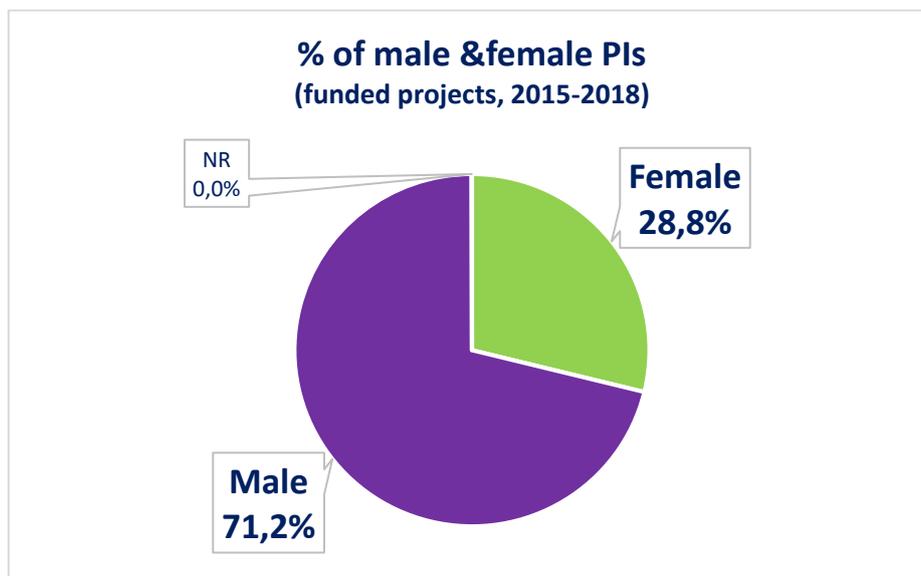


The proportion of projects led by women invited to submit a second detailed proposal at stage 2 is relatively stable since 2015 whereas we noticed a slight increase of the submissions over time.

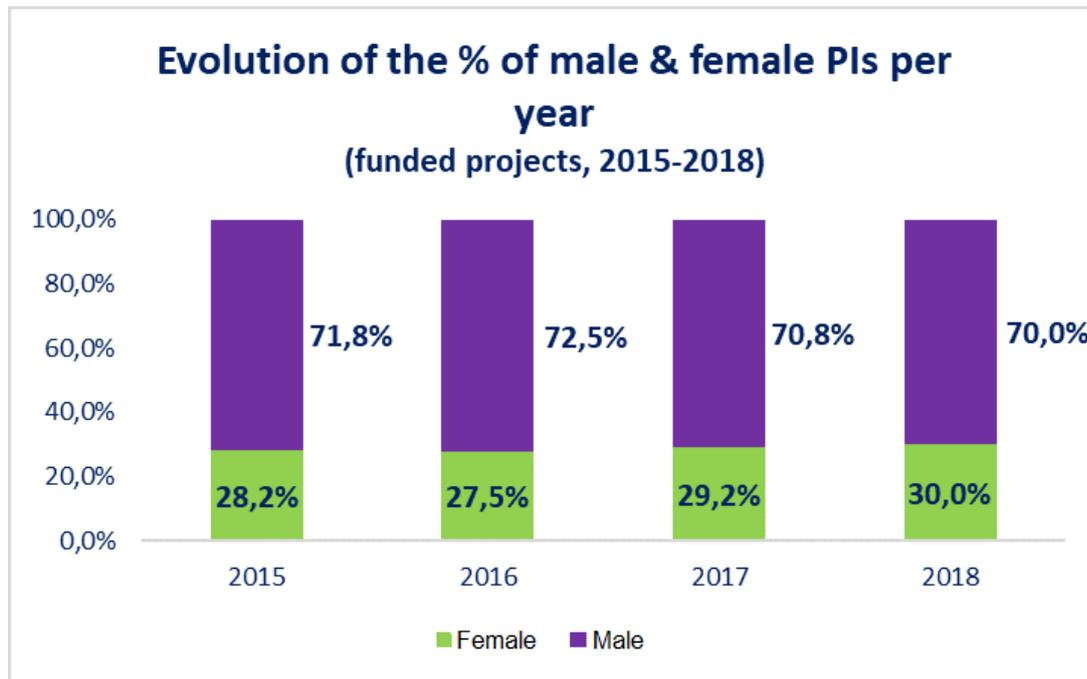


Funded projects

For all the editions from 2015 to 2018, at the end of the process, the percentage of projects conducted by women selected for funding is only 28.8 percent whereas at the end of stage 1 the percentage is 30.6 percent. At the end of stage 1, the percentage of projects conducted by men is 69.3 percent, it then turns to 71.2 percent at the end of stage 2.



However, the results of the selection regarding projects conducted by women increases slightly. They represent 28.2 percent in 2015, and 30 percent in 2018.



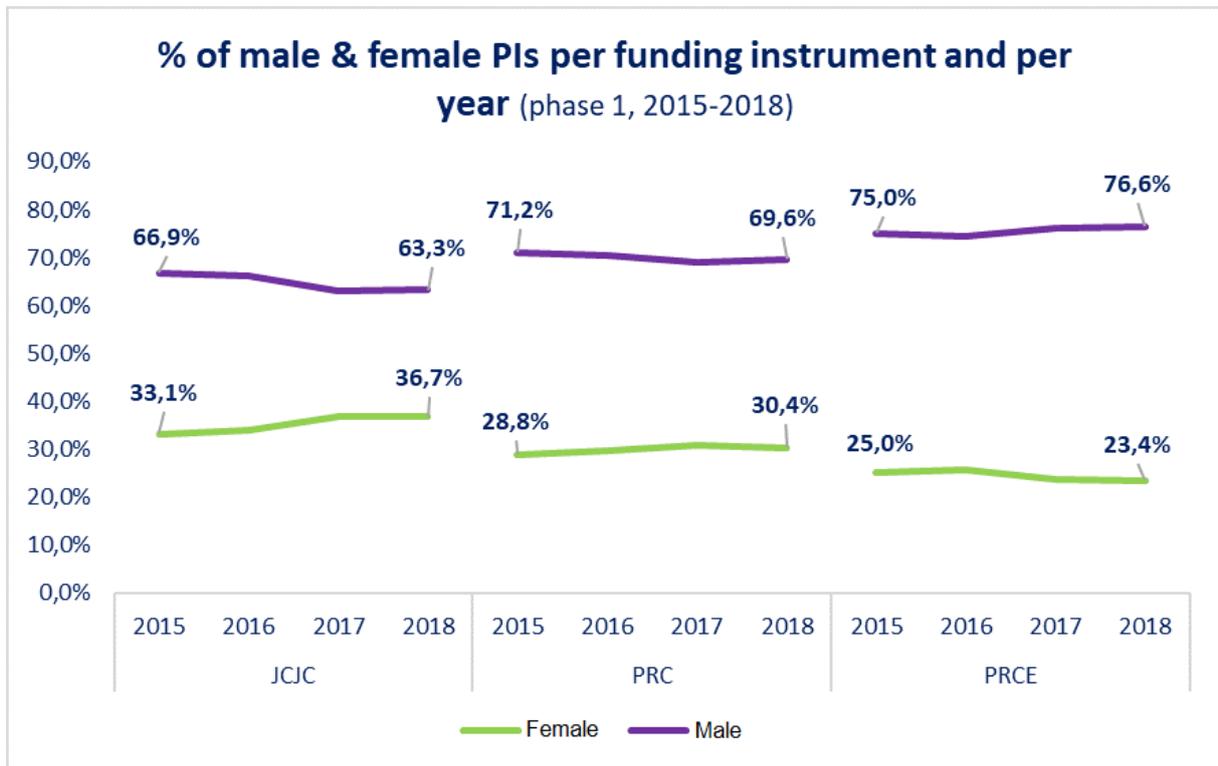
Evolution based on funding instrument

The analysis based on the funding instrument covering the 2015-2018 period is very informative, and allows tweaking our comprehension of the ongoing processes.

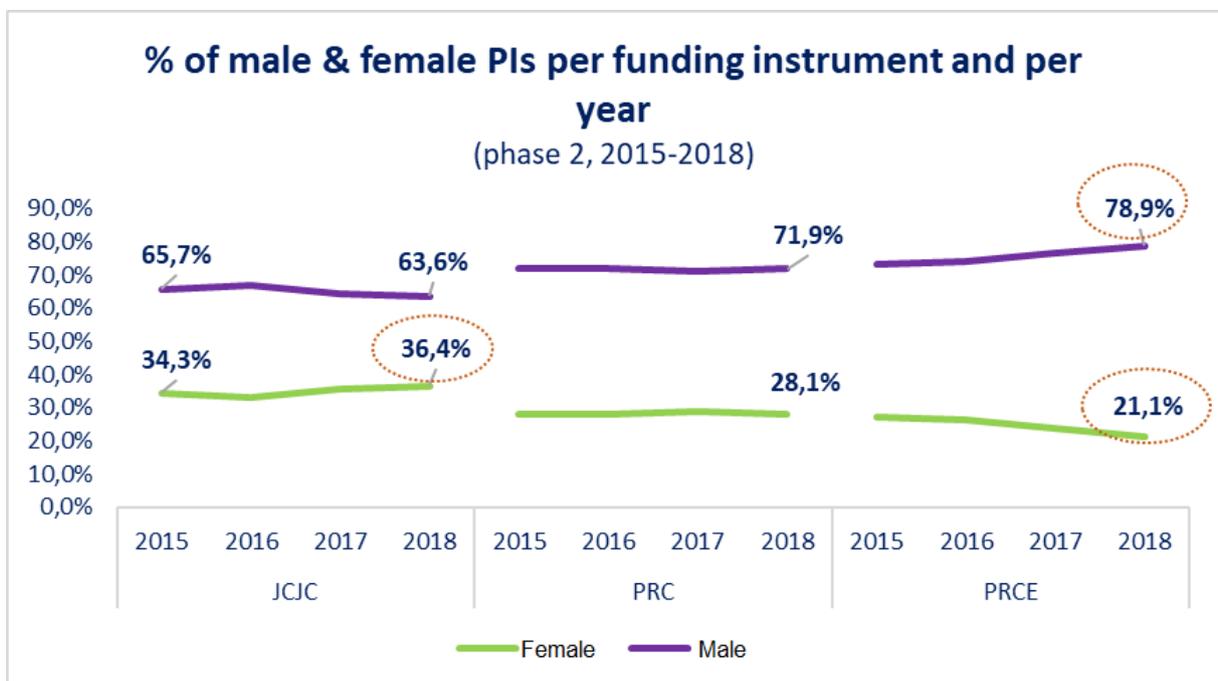
The general call includes 3 funding instruments: JCJC (young researches, “jeunes chercheurs & jeunes chercheuses”), PRC (collaborative projects in the public sector, “projets de recherche collaboratifs”), and PRCE (public-private collaborative projects, “projets de recherche collaboratifs – entreprises”).

Indeed, although the proportion of projects conducted by women is steady overall, it varies depending on the funding instrument. More precisely, increasingly more women submit projects to the JCJC instrument: it turned from 569 projects to 700 projects between 2015 and 2018 and a proportion of 33.1 percent in 2015 and 36.7 percent in 2018, in comparison to projects conducted by men which progression weakens: from 1148 submitted projects in 2015 to 1200 projects in 2018. Even though men abandon the JCJC instrument, they still invest a little bit more the PRCE instrument, whereas women favour the JCJC instrument. However, men and women move away from the PRCE instrument.

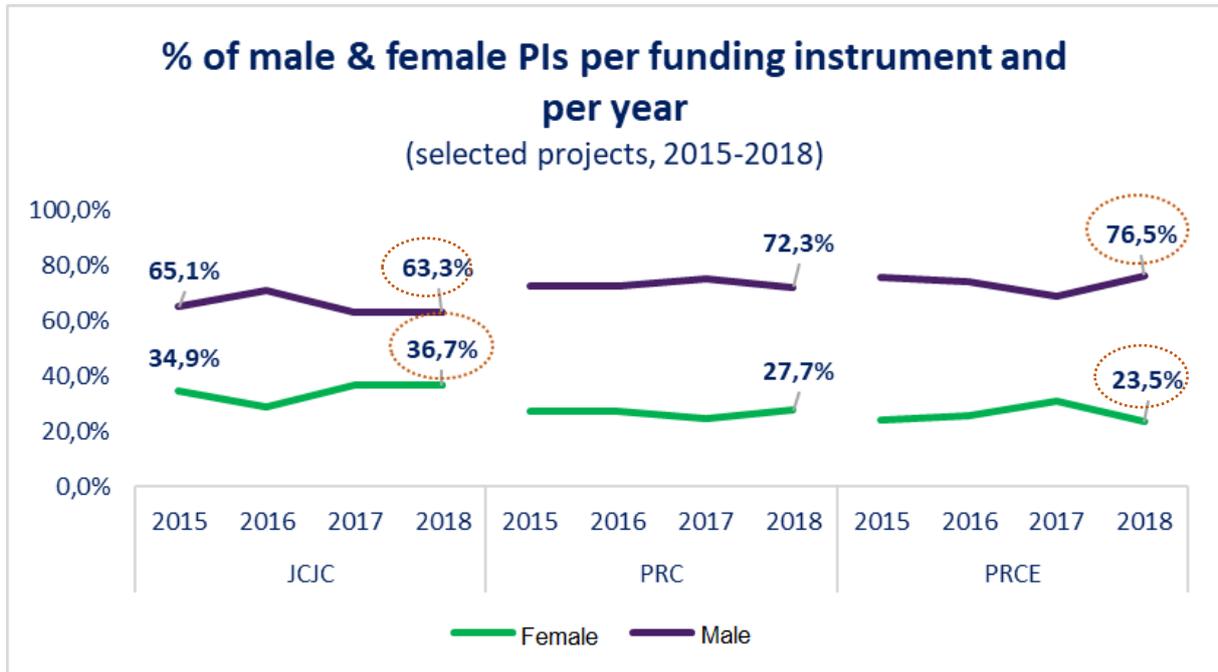
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Among the projects invited to stage 2, the percentage of projects conducted by women is significantly inferior to the submission percentage, regardless of the funding instrument.



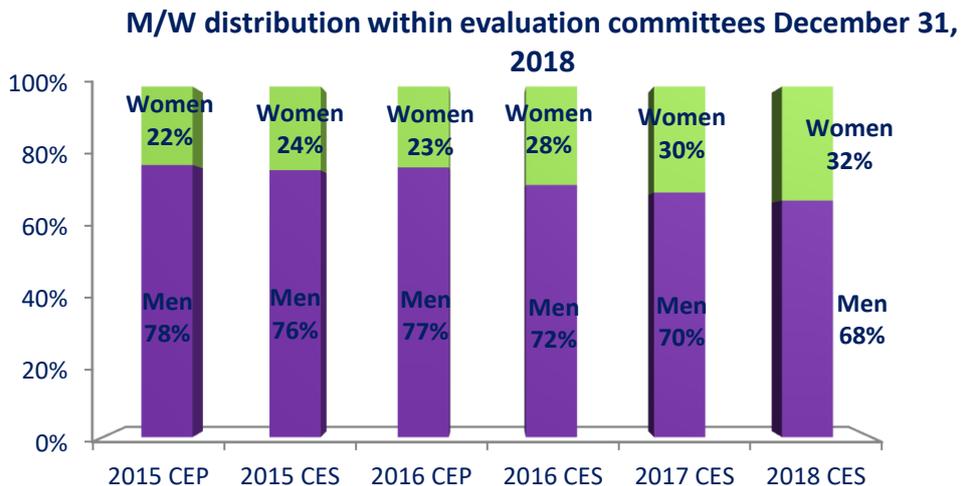
Seeing the results related to the projects selected for funding, one can note in 2018 a proportion of projects conducted by women equal to the proportion of submission for the JCJC and PRC instruments. However, the PRCE projects conducted by women are less well evaluated than those conducted by men.



Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender.

External female and male contributors



CEP: committee evaluating pre-proposals

CES: scientific evaluation committee

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The proportion of women within the scientific evaluation committees of the ANR represents a third. One can compare this number with the proportion of women among research staffs of the European Union and several countries members of the OCDE, which also represents a third.

Data relating to proportion of women in evaluation committees according to scientific disciplines, or their status within committee (chairperson or member) are not available in a format that could be used for a more precise analysis. This statistics must be integrated to the action plan.

Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
ANR	Executive Committee	2	4
ANR	Board	8	11
ANR	Scientific Steering Committee	4	3

Ireland

Reporting organisation(s):

Irish Research Council

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), specific measures taken for promoting gender balance in the funding system

- There are three predominant funding organisations where researchers apply for government research funding: the Irish Research Council (IRC), Health Research Board (HRB) and Science Foundation Ireland (SFI).
- Several charities and charity groups also provide funding through fundraising schemes.
- The core grant made by the Higher Education Authority to all publicly funded Higher Education Institutions in Ireland provides a foundation-level investment to research in Ireland.
- Universities provide direct funding for small awards, infrastructure, travel, conferences etc
- A number of field-specific agencies provide funding for targeted research: for example, Teagasc funds agriculture and food research, the Marine Institute (MI) funds marine research, technology, development and innovation.

Some significant developments in relation to gender equality in higher education in Ireland are outlined below.

A [report](#) commissioned by the Higher Education Authority (HEA) in 2016 revealed stark inequalities in Irish higher education institutions and put forward a series of recommendations regarding gender equality and implementation of the Athena Swan Charter. The IRC, HRB and SFI chose to amend their eligibility criteria by making Athena Swan accreditation a requirement for funding, and from 2019 an institute that had not achieved a Bronze Award was removed from the eligibility list. The Higher Education Authority has responsibility for determining whether a HEI is deemed eligible or ineligible for an Athena Swan award and updates all the research funding agencies on award status after each assessment round.

A Gender Equality Taskforce was established by the Minister of State for Higher Education and developed a [Gender Action Plan 2018-2020](#) to accelerate the rate of progress towards gender equality in Irish Higher Education Institutions.

In 2019 the Minister of State for Higher Education announced a new gender-targeted Senior Academic Leadership Initiative (SALI) to complement the wider organisational and cultural initiatives being implemented. The SALI will promote gender balance at senior academic levels in the HEIs by funding up to 45 senior academic leadership posts in HEIs across Ireland over the next three years. The initiative is specifically aimed at attracting outstanding female applicants both from within the sector in Ireland and internationally.

Main funding organisations (research councils etc.), main objectives and the funding instruments of the organisation. Specific measures to promote gender balance

The Irish Research Council (IRC) supports excellence in research talent, knowledge and engagement across all disciplines, including all areas of STEM and AHSS. In 2013, the IRC published one of the first dedicated Gender Strategy for funding research. The actions taken under this strategy include:

- The Irish Research Council requires all applicants to demonstrate that they have given full consideration to whether there is a potential sex and/or gender dimension in their proposed research. Training on this has been offered to applicants.
- Since 2014, the introduction of gender-blind assessment for the Council's calls has resulted in a significant improvement in the representation of female researchers across disciplines.
- In addition to gender-blinding of applications for evaluation, the Council has introduced a gender balance requirement in assessment panels for Council awards. In 2017, 46 percent of experts on Council panels were female.
- Where the funded researcher is involved in the organisation of conference, networking or dissemination panels connected with their research project, due regard must be given to gender balance within any such panel(s).

The IRC is currently undertaking a review of its 2013 Gender Strategy and its own Gender Action Plan. A new strategic document will arise from the review of the past and current best practice and based on the recommendation of the expert reviewers.

The Health Research Board (HRB) is a state agency that supports research and provides evidence to prevent illness, improve health and transform patient care. It is the lead funding agency for health research in Ireland.

The HRB has undertaken a number of activities in the area of gender, including:

- In 2017, the HRB underwent independent observation to identify the potential for unconscious bias in the peer-review processes and is implementing the recommendations arising from this process.
- In 2018/19, the Annual report on gender breakdown of applicants and awardees as well as panel membership was [published](#), which shows a slightly higher number of female applicants and awardees, and well-balanced panels.
- The HRB gender policy mandates that where there are more fundable applications than funding available, and applications cannot be differentiated based on the assessment criteria, the HRB will include gender balance in the leadership of the research team as a factor which may be used to rank proposals with the same scores.

Science Foundation Ireland (SFI) funds oriented basic and applied research in the areas of science, technology, engineering and mathematics. The agency provides grants for researchers from around the world who wish to relocate to Ireland and those already based in Ireland, for outstanding investigators, for conferences and symposia, and for collaboration with industry.

- In Q1 2019, SFI published a Gender Dashboard; this interactive analysis of the review process between 2011 and 2018 found that the success rates for both male and female applicants was on par (29 percent). However, 75 percent of all applications received by SFI for funding were

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from male researchers. SFI has therefore focused on initiatives to increase the number of applications received from female researchers whilst maintaining its high standards of peer review for excellence and impact.

- In 2018, the percentage of female team members in SFI teams was 37 percent. SFI’s Gender Strategy, published in 2016, sets out a target for research teams to be composed of at least 40 percent of each gender by 2020. Working towards this, the SFI Centres for Research Training Programme call was launched in Q3 2018 requiring applicants to submit gender targets for different levels of their research teams. This approach will ensure that students are embedded in an environment that promotes gender equality, supported by appropriate role models and mentors.
- In January 2019, SFI launched the Frontiers for the Future Programme, with a full complement of gender initiatives to support the SFI Gender Strategy, including using an expert in gender to review call documentation. These included the widening of eligibility criteria and allowing applicants to apply under an “Emerging investigator” category. These measures allow applicants with a non-linear career path to compete with more established researchers.
- To ensure that the agency’s review process remains unbiased, all SFI staff, including the executive committee and the SFI board, received sector-specific, data driven unconscious bias training by an external provider. Feedback and learnings from the session have been fed into process improvements within the organisation and have resulted in expanded briefing to peer reviewers and a reconsideration of the information provided to review panels. Refresher courses are being made available to staff on a yearly basis.

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

	Life sciences		Physical Sciences & Engineering		Social sciences & Humanities	
	PI – men	PI - women	PI – men	PI – women	PI - men	PI - women
nb of applications	62	54	129	20	66	71
nb funded	9	7	14	3	7	7
success rate (nb funded/nb applications)	14.5%	13%	11%	15%	10.6%	9.9%

Numbers based on review of the IRC Laureate Award 2017/2018. The 2017 call was for Starting (2 to 8 years post PhD) and Consolidator (8-15 years post PhD) applicants. The Advanced award was run in 2018 and was for established PI’s (15+ years post PhD).

Details of SFI awards can be found on their Gender Dashboard <https://www.sfi.ie/about-us/women-in-science/gender/>

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

2016	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants	2422	1466	1689	665	822	1454	224	244	1146	1254	488	515

Taken from the Survey of R&D in the Higher Education Sector 2016-2017
<https://dbei.gov.ie/en/Publications/Publication-files/HERD-2016-2017.pdf>

Transparent/opaque procedures/systems

Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	IRC	HRB	SFI
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Monitors composition of selection committees	Y	Y	y
Monitors composition of evaluation panels	Y (also unsure re difference)	Not sure of the difference	y
Uses (national and) international evaluators	Almost entirely international	Almost entirely international	y
Publishes evaluation criteria	Y	Y	y
Has ethical guidelines preventing nepotism, etc.	Y	Y	y
Publishes ethical guidelines (preventing nepotism, etc.)	Y	Y	y
Applicants can find out evaluators' names during the evaluation process	Only the names of Laureate selection committee have been published of late	N – not individual peer reviewers. Starting to publish names of selection committees	n
Evaluators know applicants' names or sex	N (almost all programmes are gender-blinded)	Y	y
There is a right of reply or a complaint procedure	Y	Y	y

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	IRC	HRB	SFI
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Calculates gendered success rates	Y	Y	y
Publishes gendered success rates	Y	Y	y
Compares applicants to pool of potential applicants	N	Don't have exact data on potential pool of applicants for most high-volume schemes	y
Monitors amounts of funding awarded per sex	Y	Y	y
Other quality checks (eg. nepotism)	Y	Y	y*
Gives information on granted projects (title, researchers, abstract, etc.)	Y	Y	y
Applicants can find out evaluators' names after the evaluation process	See above	See Above	n**

* What types of checks would you consider here (marked with*)? We do perform quality checks, but clarification would be helpful.

** Applicants can see a list of reviewers that SFI uses, but not specific to their application

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

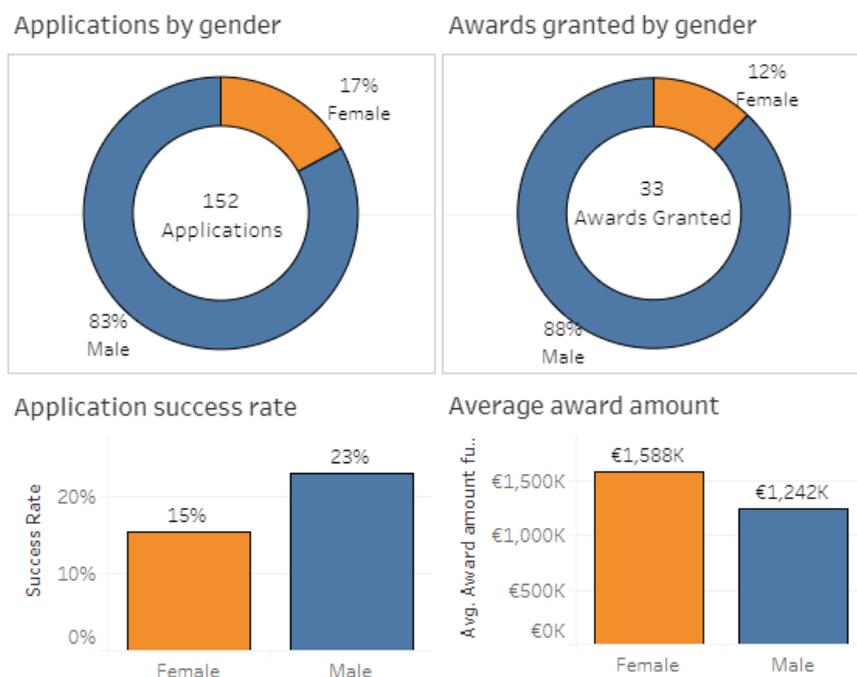
No data

Differences between disciplines

Differences (if any) of the success rates between main research areas

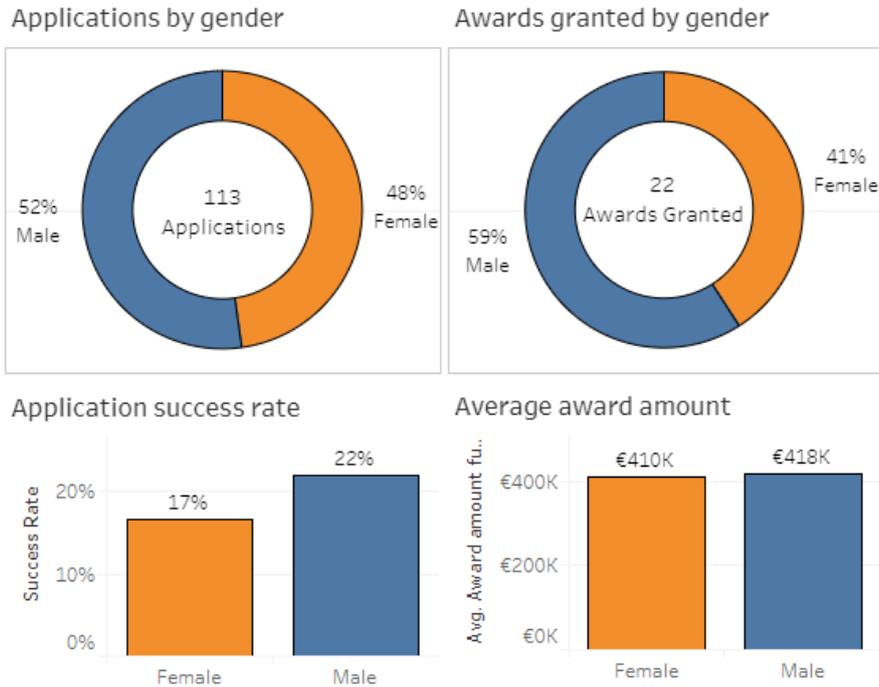
The application numbers in the table reflects the differences in numbers undertaking research in each discipline, however, the numbers receiving funding are more comparable in terms of gender. It is important to note that the Laureate awards were run in 2017/2018 when gender balance was a key focus in higher education. The numbers are also an aggregate of the starting, consolidator and Advanced awards. At the advanced level the numbers receiving funding are not as even across gender lines, an indication that it may take many years for the positive impact of gender policies to feed into the later career stages. It is also a result of a lower number of female professors within the Irish Universities and Institutes of Technology. Full details can be found in this report <https://hea.ie/assets/uploads/2018/01/Higher-Education-Institutional-Staff-Profiles-by-Gender-2018.pdf>

This can also be observed in SFI Figures for their advanced award, SFI Investigator Award (below). While success rate for women is only marginally worse than men, the numbers applying for advanced funding are 17 percent for women in comparison to 83 percent for men. Some of the older awards would not be as favourable and the dashboard for SFI awards shows the impact of the policy changes regarding gender over time.



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Improvement can be seen in the early career award, SFI Staring Investigator Research Grant, where the percentage of female applications and awards are much improved at 48 percent and 41 percent respectively.



Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender

The application processes for Laureate are the same for PE, LS and HSS. The only difference is the obvious need for a different cohort of reviewers and the smaller numbers in PE can make gender balance in panels difficult.

Differences in funding instruments between main research areas, and if these have implications for gender

The Department of Education and Skills provides funding to Higher Education Institutions (HEIs) through a block grant that is distributed by the Higher Education Authority. This includes funding allocated to the HEIs to support research and access. They also support researchers through funding disseminated by the Irish Research Council, predominantly in the form of individual awards that fund PhDs, PostDocs, and Principal Investigators across all disciplines. The Council also offers small networking/equipment/workshop awards and collaborates with a number of ERA-Net and MSCA COFUND schemes that leverage EU funding, much of which is more focused or mission orientated. The Council also runs PhD and PostDoc programmes co-funded by Industry partners.

The Department of Health provides research support to HEIs and clinical practices through funding disseminated by the Health Research Board. They fund individual researchers and support schemes such as Public Patient Involvement and a network of Clinical Trials.

The Department of Business Enterprise and Innovation supports research and innovation primarily through Science Foundation Ireland, which runs open and directed calls for individual researchers, team and clusters conducting oriented basic and applied research in the areas of science, technology, engineering and mathematics. They also support conferences and workshops, mission-led research, infrastructure calls, industry facing calls, and Education and public engagement.

[Members of selection committees and procedures for appointment](#)

Procedures for selecting committee members in research funding organisations, and if these have implications for gender

I am assuming that the term Selection Committee is the same as our Review Panels where the applications that were reviewed remotely are all discussed by a sitting panel of experts are the final awards are decided as well as a reserve list where appropriate.

Review Panels are comprised of international experts in a related field who are brought together in the IRC building in Ireland to discuss the final selection process. They are generally segregated into three domains, Life Sciences, Physical Sciences, and Engineering and Humanities and Social Sciences – although in the case of the IRC Postgraduate programme there are only two domains: Arts, Humanities and Social Sciences’ and ‘Science, Technology, Engineering and Mathematics. In each case the gender split aims to be 50:50 or at the very least 60:40 men or women.

Number of men and women in selection/funding committees in research funding organisations.

Selection Committees are appointed for each new award to be reviewed and the breakdown is typically 50:50 men: women. If this cannot be achieved the split is no more than 60:40

Israel

Reporting organisation(s):

Ministry of Science and Technology

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), specific measures taken for promoting gender balance in the funding system

no data

Main relevant funding organisations (research councils etc.), main objectives and the funding instruments of the organisation, and specific measures to promote gender balance

Below is a description of some of the major funding organizations in Israel as portrayed on their websites.

Ministry of Science & Technology research funding – hundreds of scholarships are awarded annually to promote science & technology in Israel. The scholarships are awarded to male & female students for all degrees by type. Part of these promote the continuation of the legacy of prominent Israeli figures, others are granted to minorities and women. The Ministry of Science & Technology research funds are regarded prestigious in the local scientific Israeli community. (https://www.gov.il/he/departments/general/most_scholarships)

The Israel Science Foundation (ISF) has been, for many decades, the leading force in the support for basic research in Israel. The vast majority of the ISF funding is provided by the Council of Higher Education, through its sub-committee, the Planning and Budgeting Committee (the “Vatat”). The ISF makes its support available to a broad range of research topics, including the exact sciences and technology, life sciences and medicine, humanities and social sciences, to researchers within the institutions of higher education, research institutes and hospitals in Israel. (<https://www.isf.org.il/#/>)

The U.S.-Israel Binational Science Foundation (BSF) promotes scientific relations between the U.S. and Israel by supporting collaborative research projects in a wide range of basic and applied scientific fields, for peaceful and non-profit purposes. Funding for the research derives from the annual interest on an endowment contributed in equal parts by the two countries. Grants are made on a competitive, peer reviewed basis, juried by leading scientists from the U.S., Israel and around the world. Eligible projects must demonstrate outstanding scientific merit and clear collaboration between Israeli and American researchers from institutions throughout the two countries. (<https://www.bsf.org.il/>)

GIF – German-Israeli Foundation for Scientific Research and Development. GIF supports cooperative research projects of mutual interest to the Federal Republic of Germany and the State of Israel. The projects should concern science and technology for peaceful purposes only. Both basic and applied research projects in all areas will be considered equally with no predetermined quotas. The Foundation’s governing body comprises the equal representation of trustees and includes the respective research ministers and eminent science personalities from both countries. Following the German Research Foundation’s (DFG) selection criteria, experts from Germany, Israel, and other

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countries are responsible for the assessment procedure for the allocation of funds. (<http://www.gif.org.il/>)

BARD is a competitive funding program for mutually beneficial, mission-oriented, strategic and applied research of agricultural problems, jointly conducted by American and Israeli scientists. Most BARD projects focus on increasing agricultural productivity, particularly in hot and dry climates, and emphasize plant and animal health, food quality and safety, and environmental issues. BARD also supports international workshops. BARD offers fellowships for postdoctoral research, senior research scientists and graduate students. BARD is empowered to fund scientists affiliated with public or not-for-profit, private entities and to encourage the exchange of agricultural scientists, engineers or other agricultural experts. (<http://www.bard-isus.com/>)

The Ministry of Health Israel Chief Scientist research funding aimed at supporting & promoting Medical & bio- medical research in Israel, awards funding to research in those fields, to applicants who are scientists and/or medical doctors in research institutions and hospitals, funds research that have direct contact to illness and human health.

(<https://www.health.gov.il/Subjects/research/Pages/Research-Foundation.aspx>)

Success rates in getting funding by sex

Tables 2 & 3 are based on the Israeli report " *The Current State of Gender Equality in Research Funds 2017-2018*" which presents data according to research field division that in the local HES as is presented below.

In EC "She figures 2018" report the Funding success rate differences indicator presents the gender gap in success for receiving national, publicly managed research funding. The gender gap is given as the difference in the success rate of men minus the same rate for women (Israeli institutes do not differentiate between team leaders & team members) . A positive difference means that men have a higher success rate whereas a negative difference means that women have a higher success rate. The difference between women and men in their research funding success rates in 2017 in Israel was 2.7, (pg. 173-174).(the funding success rate calculated as the number of beneficiaries of a research grant over the number of applicants), In comparison, at the EU-level the funding success rate was 3.0.

The table below (data taken from She Figures 2018, pg.174) presents the difference in research funding success between women and men across the different fields of research and development. In most fields of R&D, Israeli women are less likely to benefit when applying for research funds except for in the fields of agricultural sciences and humanities (European Commission Directorate-General for Research and Innovation, 2018).

Success rates according to sex of principal investigator, by main research field

	Natural sciences	Eng. and Technology	Medical sciences	Agricultural sciences	Social sciences	Humanities
success rate (nb funded/nb applications)	2.1	4.2	1.7	-13.3	3.1	-3.3

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

Number of Applications for research grants by research field and gender

The report "The Current State of Gender Equality in Research Funds 2017-2018" reveals that research proposals in which women are principal investigators constitute 23 percent of all applications, those in which men are principal investigators constitute 67 percent of all proposals and combined teams make almost 10 percent. In all research fields men are the majority of applicants however there is a major difference between fields as can be seen in Table 2.

The report reveals that women's application rates in Israel are lower than their rates among academic staff; women consisted 34 percent of academic staff however the sum applications for research grants that female principal researchers applied for comprised only 23 percent of all applications. Only in two fields were women's application rates greater than their proportions among academic staff: in Agriculture 27 percent of applications were lead by women whereas their rate among staff was 20 percent. In Physical Sciences 21 percent of applications were lead by women while their ratios among academic staff were 13 percent (see table 3).

The areas in which the gaps were greatest were Engineering & Medicine: in the latter the rates of female applications were 21 percent though they make 42 percent of academic staff, in engineering female application rates was 12 percent although they constitute 22 percent of academic staff (Ratzon & Herzog, 2020).

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Field	Applications by female researchers only	Applications by male researchers only	Applications of gender combined teams	Total applications
Multidisciplinary (exact sciences)	66	183	7	256
Engineering	61	392	20	473
Social sciences	350	385	132	867
Computer sciences	50	245	13	308
Humanities	161	333	33	527
Biological sciences	216	572	109	897
Chemical sciences	16	125	1	142
Physical Sciences	146	520	46	712
Mathematics	15	169	6	190
Environmental	86	300	23	409
Medicine	152	434	143	729
Agriculture	3	7	1	11
Total	1,376	3,887	534	5,797

Proportion of female applications for research grants by female rates in academic staff by scientific field

Field	Female rates of academic staff (%)	Female application rates (%)
Engineering	22	12
Social sciences	44	36
Computer sciences	20	16
Humanities	37	31
Biological sciences	25	24
Chemical sciences	13	11
Physical Sciences	13	21
Mathematics	14	8
Medicine	42	21
Agriculture	20	27
Total	34	23

Transparent/opaque procedures/systems

Transparency of evaluation process

No information is available to us regarding this topic currently.

Transparency of outcome

No information is available to us regarding this topic.

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

No information is available to us regarding this topic.

Differences between disciplines

Differences (if any) of the success rates between main research areas

As described earlier in most fields of R&D, Israeli women are less likely to benefit when applying for research funds except for in the fields of agricultural sciences and humanities.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

No information is available to us regarding this topic.

Differences in funding instruments between main research areas, and if these have implications for gender.

No information is available to us regarding this topic.

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender.

No information is available to us regarding this topic.

Number of men and women in selection/funding committees in research funding organisations.

The report " *The Current State of Gender Equality in Research Funds 2017-2018*" reveals that in every field except for Agriculture there is a majority of men in the role of committee chairperson, however the gender gap varies between fields. In the following fields women constitute over 40 percent of chairpersons- interdisciplinary, (42 percent), social sciences (46 percent). The most extreme gaps were found in computer sciences (0 percent), physical Sciences (13 percent) and Chemical sciences (17 percent). In other field women comprise 23 percent-38 percent of all committee heads. Agriculture is the only field in which women are a majority (67 percent). In most field rates of committee heads correspond to the rates of women in academic staff, in Mathematics and agriculture their rate are higher whereas in Computer sciences their rates are meaningfully lower.

Women are underrepresented as committee members in all fields however this inequality can be explained as resulting from underrepresentation of women among academic staff. Thus the inequality of women in certain areas of the academic world is copied into the funding committee composition.

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Computer science is the only field in which there is major underrepresentation of women in committees compared to their proportion of academic staff (Ratzon & Herzog, 2020).

References

European Commission Directorate-General for Research and Innovation. (2019, March 11).

She figures 2018. https://ec.europa.eu/info/publications/she-figures-2018_en

Ratzon, N.Z., & Herzog, H. (2020) *The current state of gender equality in research funds in*

Israel 2017-2018 [online]. The Council for the Advancement of Women in Science &

Technology, Israeli Ministry of Science and Technology.

https://www.gov.il/he/departments/general/gender_equality_in_research_funds

Italy

Reporting Organisation(s):

Ministry of Health - Istituto Superiore di Sanità (National Institute of Health)

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), specific measures taken for promoting gender balance in the funding system

The national systems for funding of research in Italy are described in the following paragraphs, separately for each funding organisation included in the present report, as indicated.

Ministry of Education – Ministry of University and Research (MUR)

The National Research Program (NRP) is the document that guides research policy in Italy. The NRP is a strategic architecture that coherently combines all research interventions, and plans synergistically:

- the competitive European funds (H2020);
- the national and regional structural funds (PON, S3, POR);
- the MUR direct funds (FFO, FOE, FAR, FISR, FIRST);
- research-related initiatives managed by other ministries.

To enhance the distinctive skills of the Italian research and innovation system, the NRP identifies twelve areas of specialisation of skills around which to structure effective and significant national and regional policies and instruments from the point of view of the impact on the country's social and economic development. The identification of the specialisation areas is strongly correlated with the process of defining the National Intelligent Specialization (SNSI), defined by the Ministry of Education, University and Research together with the Ministry of Economic Development as part of the programming of the Structural Funds. The SNSI identifies five priority areas for the use of skills of Italian public and industrial researchers:

- Aerospace and Defense;
- Health, nutrition, quality of life;
- Smart and sustainable industry, energy and environment
- Tourism, cultural heritage and creativity industry;
- Digital Agenda, Smart Communities, infrastructures and intelligent mobility systems.

This scheme led to the identification of the following twelve thematic areas, each one falling in the indicated categories:

- Priority: Aerospace, Agrifood, Smart Factory, Health;
- High potential: Blue Growth, Green Chemistry, Design-Creativity-Made in Italy, Cultural Heritage;
- In transition: Smart Communities, Technologies for Living Environments.

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- Consolidated: Energy, Mobility and Transport.

Ministry of Health (MoH) – Directorate General for Research and Innovation in Healthcare (DGRIH)

The Ministry of Health (MoH) is the major public organisation funding health research in Italy.

The National Health Research Plan (NHRP) establishes the strategic guidelines for health research, which are elaborated in accordance with the National Research Plan prepared by the MUR. In this context, the MoH promotes and sustains research in the structures of the National Health Service (NHS) [Healthcare and Hospitals; Scientific Institutes for Research, Hospitalization and Health Care (IRCCS); Experimental Zooprophyllactic Institutes; the National Institute for Insurance against Accidents at Work (INAIL); the Italian National Agency for Regional Healthcare Services (AGENAS); the National Health Institute (Istituto Superiore di Sanità, ISS)].

Ministry of Foreign Affairs and International Cooperation (MAECI)

The Ministry of Foreign Affairs and International Cooperation (MAECI) promotes the internationalisation of Italian research and scientific diplomacy as essential tools for developing cooperation between Italy and the rest of the world. MAECI's policy stems from the conviction that there can be no economic development without innovation and support for scientific research. Maintaining competitiveness in increasingly complex global markets requires the constant application of new technologies to production processes to make innovative, high added value products. This leads to an increasingly careful use of resources in this sector, as an investment in the growth of the country, especially in the most innovative sectors, with positive effects on economy and trade.

The following legislative measures are adopted in Italy for promoting gender balance in the recruitment, retention and advancement of researchers, including leading positions:

- **Code of Equal Opportunities between men and women** (Legislative Decree 198-2006 and on related regulatory changes over time and, particularly, in the last Budget Law (L. 205-2017 art. 1, c. 218);
- **Presidency of the Council of Ministers – Department of the Public Function - Directive 23 May 2007 (in G.U. n. 173 of 27 July 2007) - Measures to implement equality and equal opportunities between men and women in public administration.**

It is not possible to comment on the development and differences in the national systems for funding of research with respect to the 2009 report included in “The Gender Challenge in Research Funding” as for Italy. In fact, the report takes into consideration the data made available by the MUR only. With reference to the measures for promoting gender balance in the funding systems, the above-mentioned legislative decree and directive were already in place in the year 2009.

Main relevant funding organisations (research councils etc.), main objectives, the funding instruments of the organisation and specific measures to promote gender balance

Ministry of Education – Ministry of University and Research (MUR)

The financial investment of the MUR in the NRP 2015-2020 is almost 2.5 billion euros in the first three years, which are in addition to the funding that the MUR allocates to universities and public research bodies, equal to 8 billion per year. The ultimate objective of the NRP is to promote innovative programs to increase the number of researchers in Italy and from abroad. The resources made available by the NRP are allocated on a competitive basis to the following six programs:

- Internationalisation (coordinate and integrate national, European, and international resources);
- Human Capital (putting people at the centre as protagonists of research, promoting mobility, dynamism, and generational turnover);
- Research Infrastructures (selectively evaluate and support research infrastructures, the pillar of international research, in particular basic research);
- Public-Private (strengthen public-private collaboration to strengthen applied research, the capacity for innovation and the link between research and societal challenges);
- Southern Italy (focus on the potential of Southern Italy, enhancing its specificity avoiding waste of resources and overlapping);
- Spending Efficiency and Quality (strengthening monitoring and transparency of investments, simplifying procedures, strengthening administrative management).

The complex of funding directly attributable to MUR and falling within the PNR implementation tools can be divided into two main segments:

1. structural funding distributed in the budget chapters of competence of the Department for Higher Education and Research, among which the Ordinary Fund of Institutions (FOE) and the Ordinary Funding of Universities (FFO), as well as a series of other specific instruments, as described below. The first two, in turn, entail specific purposes in the annual assignments;
2. additional structural funding that can be combined with all the available instruments of the national development strategy.

The FIRST (Investment Fund for scientific and technological research) is intended to finance in particular interventions in support of fundamental research (i.e. aimed at supporting the advancement of knowledge), interventions mainly oriented to industrial research (i.e. oriented to favour the specialisation of the industrial system national), social innovation actions, integrated research, infrastructure, human capital formation, technology transfer and spin-off (aimed at the development of technology clusters), and research projects included in EU and international agreements and programs.

The FOE, i.e. the fund for public research bodies. The FOE includes the financing of Research Infrastructures that meet the priority criteria set by the National Research Infrastructure Program (PNIR), consistent with those defined by ESFRI.

The FFO, i.e. the fund intended to finance the running costs of the universities, comprises specific interventions to encourage generational turnover, integration of emerging excellence in the academic

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sphere, return of researchers from abroad, and promotion of student mobility, with the ultimate objective of increasing competitiveness on an international scale of the public research system.

FISR (special supplementary fund for research) finances specific interventions of strategic importance, indicated in the National Research Program (PNR) to achieve the general objectives of the program.

The PRIN program (Research Projects of Relevant National Interest) is intended for the financing of public research projects, in order to encourage the strengthening of national scientific base and make participation in initiatives related to the Framework Programs of the European Union more effective.

Ministry of Health (MoH) – Directorate General for Research and Innovation in Healthcare (DGRIH)

The MoH finances health research through two separate funding instruments: Current Research and Targeted Research.

Current Research is carried out within the guidelines of the NHRP, through the institutional projects of the NHS' structures mentioned under the section 1a). The financing of the Current Research takes place annually after the verification, based on competitive parameters, of the scientific research, assistance, and collaboration activities with other bodies at national and international level carried out in the previous year. As for the year 2019, the financial resources made available through the Current Research amounted to a total of approximately 148 million euros.

The Targeted Research implements the priority biomedical and health objectives of the NHRP, through the funding of research projects approved in the context of competitive yearly calls for proposals. Targeted research, funded through yearly calls for proposals, is one of the main tools for achieving the objectives of the NHS policies. It therefore has an explicit orientation towards results directly transferable to the NHS and the ambition to provide information to orient choices in strategic sectors such as:

- the development of highly innovative procedures for the prevention, diagnosis and treatment of diseases;
- the evaluation of the safety and efficacy of treatments, technologies and interventions in need of further study;
- the study of professional, organizational and systemic factors that condition the effectiveness and efficiency of the NHS and the impact of clinical or organizational-management innovations on the quality of the NHS;
- the development and application of tools and methods aimed at improving the communication and the relationship with citizens;
- the study of the care needs of the weaker social groups;
- the study of issues relating to food safety and animal welfare;
- the in-depth analysis of relevant issues in the sector of pathologies of environmental origin, as well as safety in the workplace and occupational pathologies.

The following type of projects were comprised in the Targeted Research call for the year 2018, funding successful projects from year 2019:

- ordinary projects;

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- co-financed projects (CO), i.e. research projects presented by researchers affiliated to a structure of the National Health Service (see list under section 1a) who have guaranteed private financing by companies with activities in Italy;
- ordinary projects presented by young researchers, i.e. research projects presented by researchers under the age of 40 on the submission date of the call;
- “Starting grant” projects, i.e. research projects presented by researchers under the age of 33 on the submission date of the call;
- network programs, intended to create research and innovation partnerships for the development of highly innovative studies characterized by the high impact on the National Health Service.

As for the year 2019, the MoH has funded 197 research projects and 38 fellowships (so-called Starting Grants) in the context of the 2018 call for Targeted Research, for a total of approximately 93 million euros.

The MoH also finances joint project activities carried out within the IRCCS thematic networks (approximately 2,6 million euros in year 2018) and the participations in joint European projects selected in the context of competitive calls and bilateral activities of the MAECI (approximately 8 million euros in year 2018).

Ministry of Foreign Affairs and International Cooperation (MAECI)

The Office 09 of the Directorate General for Country Promotion is in charge of the negotiation, signing Executive Programmes (EPs), implemented in the framework of bilateral Agreements between the Italian Government and the Government of a partner country; The MAECI, in collaboration with other Ministries, finances the Italian teams costs in bilateral projects selected in the research areas agreed with the counterpart. The projects are collected through a public call and selected by the network of experts of the MAECI.

The Executive Protocols list selected scientific research projects, which fall in one of the following two categories:

- "Researcher Mobility Projects", bilaterally financed projects: in particular, the MAECI covers travel expenses for Italian researchers going abroad and living expenses for foreign researchers working in Italy
- Projects of Major Importance.
- The selected bilateral EPs are financed in pursuance of the Law 401/9.
- Moreover, the MAECI is involved in the organization and financing of international scientific events.

As for the year 2019, the financial resources made available for the bilateral EPs and the scientific events amounted to a total of approximately 5.500.000 million euros.

With regard to i) the development and differences with respect to the 2009 report included in “The Gender Challenge in Research Funding” as for Italy, and ii) the specific measures to promote gender balance, please refer to the comments under 1a).

Success rates in getting funding by sex

*Success rates according to sex of principal investigator, by main research field**

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	1.362	494	1.009	229	1.972	1.167	361	142	560	269	350	206
nb funded	188	69	139	20	243	174	42	10	95	35	66	32
success rate % (nb funded/nb applications)	13,8	14,0	13,8	8,7	12,3	14,9	11,6	7,0	17,0	13,0	18,9	15,5

* Internal data from MUR, MoH, and MAECI

As for the year 2019, the results indicate that: i) women PIs were more successful than men PIs in the medical sciences field; ii) women PIs and men PIs were equally successful in the natural sciences field; iii) women PIs were less successful than men PIs in the following research fields: engineering and technology, agricultural sciences, social sciences, and humanities. Although the data reported in the table 2a are not comparable to those included in the table 14 under section 5.1 of the 2009 report, as the latter refers to the MUR data only, an increase in the proportion of successful women PIs in both the natural sciences and medical sciences fields is observed. On the contrary, a decrease in such proportion is registered in the engineering and technology as well as in the social sciences field.

Comparison to pool of potential applicants

*Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants**

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	Women	men	women	men	women	men	women	men	women	men	women
pool of potential applicants *	13904	13758	14738	7460	20.618	20.835	3640	3175	10854	8684	5244	5008
No. of applicants / Pool of potential applicants (%)	9,8	3,6	6,8	3,1	9,6	5,6	9,9	4,5	5,2	3,1	6,7	4,1
Men vs. Women pool of applicants/Total pool of potential applicants (%)	50,3	49,7	66,4	33,6	49,7	50,3	53,4	46,6	55,6	44,4	51,2	48,8

*Cumulative data from MIUR, MAECI and MoH

The comparison shown in the above table indicates that, as for the year 2019, the percentage of women applicants ranges approximately from 3 percent to 5 percent of the respective pool of applicants in the various scientific fields, whereas the same percentage in the case of men applicants

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is comprised between about 5 percent and 10 percent. The biggest differences between the rate of women applicants and that of men applicants, calculated with respect to the respective pool of applicants, are observed in the fields of natural sciences, engineering and technology and agricultural sciences. These differences appear not to be explained on the basis of the rates of men vs. women pool of applicants with respect to the total pool of applicants, with the exception of the natural sciences field in which the pool of the women applicants is approximately 50 percent of the corresponding men applicants pool.

Transparent/opaque procedures/systems

Transparency of evaluation process

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	MAECI	MUR	MoH
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Monitors composition of selection committees	Y	Y	Y
Monitors composition of evaluation panels	Y	Y	Y
Uses (national and) international evaluators	N	Y	Y
Publishes evaluation criteria	Y	Y	Y
Has ethical guidelines preventing nepotism, etc.	Y	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)	N	Y	N
Applicants can find out evaluators' names during the evaluation process	N	N	N
Evaluators know applicants' names or sex	Y	Y	Y
There is a right of reply or a complaint procedure	N	Y	N

Overall, the evaluation procedures applied by the funding organisations considered in the present report appear to guarantee transparency.

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	MAECI	MUR	MoH
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Calculates gendered success rates	N	N	N
Publishes gendered success rates	N	N	N
Compares applicants to pool of potential applicants	N	N	N
Monitors amounts of funding awarded per sex	N	N	N
Other quality checks (eg. nepotism)	Y	Y	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y	Y	Y
Applicants can find out evaluators' names after the evaluation process	N	N	N

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Consistent with the conclusion of the 2009 report as for Italy, it appears that “informed, more gender sensitive means of distributing resources are necessary to provide adequate foundations and fair competition for women.

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

In none of the funding organisations considered in the present report, barriers affecting transparency or accountability exist. Taking into consideration the overall evaluation procedures, anonymity of reviewers is not considered a barrier to achieve transparency.

Differences between disciplines?

Differences (if any) of the success rates between main research areas

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	1.362	494	1.009	229	1.972	1.167	361	142	560	269	350	206
nb funded	188	69	139	20	243	174	42	10	95	35	66	32
success rate (nb funded/nb applications)	13,8	14,0	13,8	8,7	12,3	14,9	11,6	7,0	17,0	13,0	18,9	15,5

As for the year 2019, the results indicate that:

- i) the number of applications submitted by women PIs was significantly lower than the number of applications by men PIs in all the research areas considered in this template, with the exception of the medical sciences field.
- ii) women PIs were more successful than men PIs in the medical sciences field.
- iii) women PIs and men PIs were equally successful in the natural sciences field.
- iv) women PIs were less successful than men PIs in the following research fields: engineering and technology, agricultural sciences, social sciences, and humanities. Although the data reported in the table 2a are not comparable to those included in the table 14 under section 5.1 of the 2009 report, as the latter refers to the MUR data only, an increase in the proportion of successful women PIs in both the natural sciences and medical sciences fields is observed. On the contrary, a decrease in such proportion is registered in the engineering and technology as well as in the social sciences field.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

MUR

Evaluation system – The National Committee of Research Guarantors (CNGR) exercises supervisory and guarantee functions for MUR-funded research programs, formulates the evaluation and selection criteria for research projects, appoints the selection committees and coordinates their activities, supervises the Register of Expert Peer Reviewers for Italian Scientific Evaluation (REPRISE).

The CNGR is made up of seven scientists of high international scientific qualification. The members of the CNGR are appointed by the MUR from a list made up of not less than ten and not more than fifteen people proposed by a selection committee. The composition is balanced by disciplinary areas and by gender (for the composition of the CNGR currently in office, visit: <https://cngr.MUR.it/componenti/> ; please note that in the CNGR currently in office, both the President and the Vice-President are women). The members remain in office for three years and cannot be renewed until five years have elapsed. In its current composition, the CNGR has been appointed for the three-year period 2019-2021.

REPRISE is a register of Italian and foreign independent scientific experts (<https://reprise.cineca.it/en>). The register is structured according to the different activities involved: i) fundamental research, ii) applied research, iii) scientific popularisation, and iv) auditing, and economic and financial evaluation. Experts included in the register are appointed by MUR for activities related to funding of proposals, or ex-ante, in itinere, and ex-post evaluation of research projects. For more information, visit: <https://reprise.cineca.it/en/maggiori-informazioni/>.

MoH

Targeted Research – For the type of projects comprised in the Call 2018 (funding started in year 2019), see section 1a. The application and evaluation procedures for the submitted proposals are published in the call text. These procedures are illustrated in the Annex 1 to the present report.

MAECI

The evaluation criteria of the projects collected through a bilateral call are agreed with the counterpart. For the Italian party, the projects evaluation is performed by the network of MAECI's scientific experts. Projects first are evaluated at the national level according to the agreed criteria; Following completion of the independent national assessment processes, the Bilateral joint commission, comprising representatives from the representatives from the two countries, identifies the final list of successful applications. Selected projects are included in the E.P. and will be eligible for funding.

Differences in funding instruments between main research areas, and if these have implications for gender

The differences in the funding instruments and research areas financed by the funding organisations considered in this report are illustrated in the preceding sections 1a) and 1b). The various instruments do not appear to have implications for gender.

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender

The procedures for selecting evaluation committee members are different in the funding organisations considered in this report. In no case there are implications for gender.

Number of men and women in selection/funding committees in research funding organisations.

For each organisation, add one row for each type of committee.

Name of organisation	Type of committee	# Women	# Men
MAECI - DGSP-IX*	Scientific Network	6	25
MUR**	Natural Sciences	13	32
MUR**	Eng. And Technology	4	19
MUR**	Medical Sciences	8	21
MUR**	Agricultural Sciences	1	5
MUR**	Social Sciences	9	12
MUR**	Humanities	7	5
MoH***	Medical Sciences	4	6

***Ministry of Foreign Affairs and International Cooperation - Directorate General for Cultural and Economic Promotion and Innovation**, Office for bilateral policies and activities for the internationalisation of scientific and technological research and innovation

****Ministry of University and Research**

*****Ministry of Health – Directorate General for Research and Innovation in Healthcare**

Similarly to the situation illustrated in the 2009 report included in “The Gender Challenge in Research Funding” as for Italy, the presence of women amongst evaluators in the committees established at MUR is still very limited, with the exception of the committee for selection of projects in the humanities field. A similar conclusion can be drawn regarding the committees set up by the MAECI. On the contrary, the evaluation committee established at MoH is gender balanced.

ANNEX 1

Ministry of Health (MoH)– Directorate General for Research and Innovation in Healthcare (DGRIH)

Targeted Research Call 2018

Application and evaluation procedures

1. Application procedure.

1a. General requirements for the presentation of research projects.

Each researcher can participate in a single research project, whatever the role covered. The Italian researcher residing abroad can participate in a maximum of two ordinary projects. Researchers acting as principal investigators (PI) of research projects / network programs funded under the last two previous by the MoH can participate exclusively as collaborating researchers. Researchers must submit the project, written in English, exclusively *via* the MoH web platform.

1b. Accreditation of applicants and submission of applications.

The accreditation of applicants both as PIs and as collaborating researchers is preliminary to the presentation of the project, and is allowed only *via* the web platform. Each accredited applicant will receive a specific "security code" *via* the web, to be used for the drafting of the proposal.

The proposals must be submitted in complete form within the terms indicated in the call text, using the "complete project presentation template", provided as annex to the call text. Before submission, the PI must present the proposal to the NHS institutional recipient where she/he carries out his work.

1c. Validation of the proposals by the institutional recipient.

The institutional recipient, through the validation process, adopts the research proposal in collaboration with the PI and certifies that the MoH's requirements for acceptance of the proposal, as specified in the call text, are met. The institutional recipient can request documentation and information from the PI, in order to verify the compliance with the aforementioned requirements within the deadline set in the call text for the validation of the proposal by the institutional recipient itself. The institutional recipient must validate the project proposals of each affiliated applicant. Failure to validate the project by the institutional recipient, within the deadline set in the call text, excludes the proposal from the subsequent evaluation phases. Projects are considered validated and accepted when the institutional recipient executes the send command on the web portal. This phase lasts 4 weeks from the deadline for submitting the projects.

2. Preliminary selection of proposals.

2a. Preliminary selection based on Curriculum Vitae.

All the proposals, after verification of compliance with the MoH's requirements indicated in the call text, will be subjected to a preliminary selection through the evaluation of the *Curriculum Vitae* (CV) of the PI and of the participating researchers. The CVs will be assessed considering: i) the H-index in the cumulative expertise area of the research group normalized on the number of members of the research group (PI and collaborating researchers); ii) the Citation Index of the best 10 publications in

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the thematic area of the principal investigator's research; iii) the Citation Index of the best 10 publications in the research thematic area of the other members of the research group.

The results of the automatic evaluation of the research team's expertise are used for the *Triage* procedure.

2b. *Triage.*

The triage procedure involves a preliminary selection of the proposals based on the normalisation of the data referred to in point 2a, following a procedure and calculations detailed in the call text, so as to determine a score from 1 to 10 for each proposal. The proposals obtaining at least a score of 7 are sent to the referees for the subsequent peer review phase.

3. Evaluation procedure.

The evaluation of the proposals is carried out to ensure a clear separation between the administrative phase, the evaluation and audit phase.

3a. *Subjects participating in the evaluation.*

The evaluation process is based on the coordinated action of the subjects listed below:

- i) Office 3 (IRCCS Network and Current Research) and Office 4 (Research Planning and Calls for Targeted Research) of the DGHRI;
- ii) the international auditors (referees);
- iii) a group of independent supervisors (editors), identified by the MoH-DGHRI, with the task of verifying the consistency of the peer review assessments with the assessment guidelines and to report any anomalies to the final scientific evaluation panel;
- iv) specific final scientific evaluation panel, composed by eight (8) experts (≤ 50 percent residents in Italy), appointed by the Ministry of Health, after consulting the Technical Health Committee (THC);
- v) two (2) independent experts appointed by the THC to act as observers during the final scientific evaluation panel and speakers to the THC on the progress of the work;
- vi) the THC through the audit.

3b. *Evaluation criteria for the review*

After the triage phase, each proposal is automatically associated with the potential referees through specific keywords related to the proposal's topic and sent to two international auditors (referees) for evaluation. The evaluation is based on the following criteria: i) relevance of the research problem(s) addressed and originality of the proposal in relation to available knowledge; ii) scientific validity and consistency of the methodology with the proposed objectives; iii) clarity and appropriateness of the project development strategy; iv) ability of the research group to carry out the project taking into account the expertise, the facilities, and equipment / resources available for research; v) evaluation of the time to impact of the results on the patient; vi) expertise in the sector of the PI and the collaborating researchers.

For the first five criteria, a score from 1 (maximum) to 9 (minimum) can be assigned. For the sixth criterion, a score from 1 (maximum) to 10 (minimum) can be assigned. Therefore, the overall evaluation range of the project will be between 6 (best project) and 55 (worst project).

3c. *Stages of the evaluation process*

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After completing the individual and anonymous evaluation phase, the auditors carry out a "face to face" (F2F) comparison to agree on the evaluation of the proposal. If an agreement is reached, the F2F score is considered as the definitive evaluation of the peer review phase, for the subsequent activities of the final scientific evaluation panel. This panel can modify the evaluation agreed by the auditors, only if there are evident anomalies and inconsistencies, which must be motivated and recorded. In the case of no agreement between the auditors in the F2F phase, the assessments are submitted to the final scientific evaluation panel, which operates collectively as "third arbitration reviewer" assigning the final score to the proposal. At the end of the process, the final scientific panel draws up a single list of the assessments of the proposals.

In the event that proposals achieve the same score, to establish their order in the above-mentioned single list, the final scientific panel proceeds taking into account the score achieved by the *ex aequo* proposals for each of the following criteria: i) scientific validity and consistency of the methodology with the proposed objectives; ii) relevance of the research problem / questions addressed and originality of the proposal in relation to the available knowledge; iii) clarity and appropriateness of the project development strategy; iv) evaluation of the time to final impact of the results on the patient. In the case of further equal merit of the proposals, preference will be given to those proposals in which at least one research unit operates in a Region other than that in which the PI operates, so as to encourage the development and growth of the research system.

As a result of the above-mentioned revision process, the final scientific evaluation panel proceeds with the drafting of a new single list.

The activity of the final scientific evaluation panel is supervised by at least one of the two independent observers identified by the THC. In addition, the final scientific evaluation panel is supported, in its own activities, by the editors, who, during the review phase, can access, anonymously, the opinions expressed by the auditors and the vision of the "core proposal". This to verify the quality, correctness and exhaustiveness of the review performed by the auditors during the evaluation.

Each editor can examine only one review for each proposal. The editors can report, on the available IT system, any possible anomalies found in the evaluation process with respect to the evaluation guidelines. The editors cannot express any opinion on the proposal, but they can signal the inconsistencies of the reviewer's judgment. The reports of anomalies are communicated to the final scientific panel for subsequent evaluations.

The entire procedure is monitored by the competent Offices 3 and 4 of the MoH-DGRIH, who report any anomalies to the THC.

For each meeting of the final scientific evaluation panel, minutes are drawn up and any determination leading to changes, albeit partial, to the score assigned by the auditors is reported. The minutes are sent to the THC for the audit phase and made public on the MoH's website, together with the publication of the final ranking.

3d. *Technical Health Committee (THC)*

The audit of the THC consists in the verification of: i) the minutes of the final scientific evaluation panel meetings and the ranking list drawn up by the panel; ii) the adherence of the proposals approved

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for funding to the macro-areas defined in the call text; iii) the compliance of the evaluation with the established procedures; iv) the absence of conflicts of interest.

At the end of the audit phase, the THC draws up a single final ranking list.

The THC approves the allocation of funding, until the available funds are used up, considering the distribution of the selected projects to the two macro-areas defined in the call text.

Norway

Reporting organisation(s):

Research Council of Norway (RCN)

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), specific measures taken for promoting gender balance in the funding system

The situation is in principle very similar to the description in the 2009 report.

Main relevant funding organisations (research councils etc.), main objectives and the funding instruments of the organisation, specific measures to promote gender balance

<https://www.forskningradet.no/en/about-the-research-council/Tasks-and-organisation/>

The Research Council's task is to make the best research and innovation possible. Our aim is to promote a society where research is created, used and shared, and thus contributes to restructuring and enhanced sustainability

We invest NOK 10 billion in research and innovation annually on behalf of the Norwegian government. It is our task to ensure that this funding goes to the best research and innovation projects.

Over 2 000 international peer reviewers assess and rank the grant proposals submitted to us. Funding decisions are taken by our portfolio boards, which are comprised of nearly 200 independent board members from across all sectors.

We are at the forefront in developing research of the highest quality and relevance.

We are the key advisory body to the authorities on research policy issues and carry out tasks commissioned by 15 ministries. Our activities play an important role in the Government's long-term plan for research and higher education.

- Trade and industry: Research is an important tool for Norwegian trade and industry. We have a variety of funding schemes for research-based innovation and knowledge-building.
- Public sector: We promote renewal and innovation in the public sector through a number of schemes.
- Research organisations: Research organisations may apply for funding within all relevant thematic areas and subject fields.
- International cooperation: We work to encourage increased international cooperation with and participation in EU research and innovation programmes. Ninety per cent of Norwegian grant applications for EU research funding have received support and guidance from the Research Council.
- Science communication: We reach out to the public through National Science Week, a science festival during which researchers interact with people across all of Norway, from Hammerfest in the north to Mandal in the south. Through the "Grand Prix" stage contest, we have enabled

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more than 500 researchers to communicate their activities successfully. The Research Council also promotes scientific thinking among the general public. Each year, thousands of Norwegian pupils participate in the contests known as the Norwegian Contest for Young Scientists and the Nysgjerrigper Science Knowledge Project.

RCN has a *Policy for gender balance and gender perspectives in research* and a 10-year programme (2012-2022) aiming at promoting gender balance in top positions and research management (BALANSE)⁹².

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

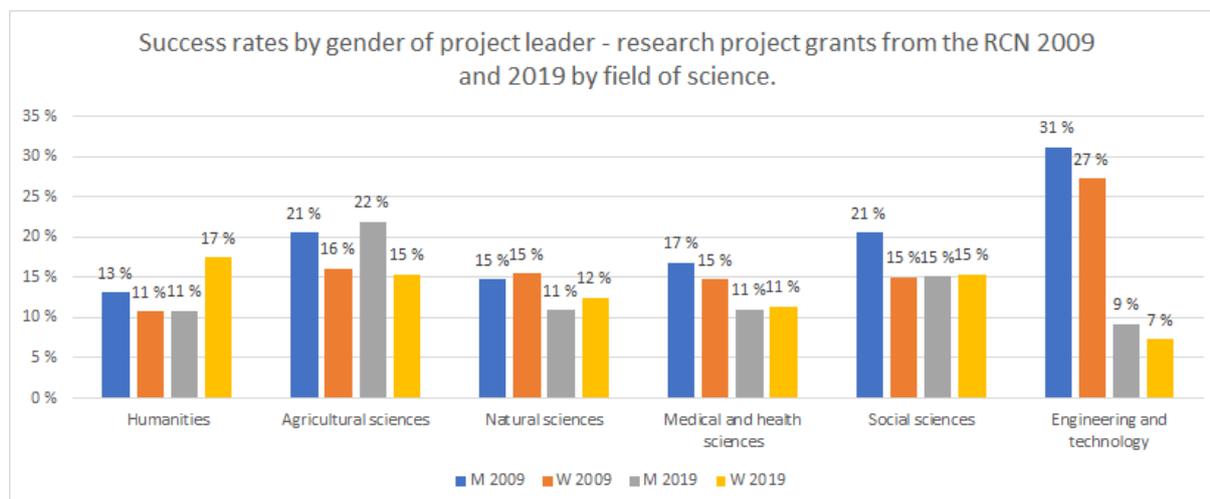
	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications	569	265	272	96	263	247	32	13	411	383	120	126
nb funded	62	33	25	7	29	28	7	2	62	59	13	22
success rate (nb funded/nb applications)	11%	12%	9%	7%	11%	11%	22%	15%	15%	15%	11%	17%

The numbers in the template above covers project-leaders in researcher projects 2019 (Application submission deadline: 10.04.2019). Source: RCN

These numbers are not comparable to the numbers in the 2009 report. The 2009 report covers all application types, not only research projects as we understand is the focus of this template. To be able to comment on the development over the last ten years, we have established a benchmark by using data on researcher projects from 2009. The development is illustrated in the figure below.

⁹² Gender balance and gender perspectives: <https://www.forskingsradet.no/en/Adviser-research-policy/Gender-balance-and-gender-perspectives/>

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The observed gender differences in most fields of sciences are in 2019 the same or slightly reduced when compared to the numbers for 2009. The numbers for humanities however, show that women have achieved a noticeably higher success rate than men in 2019 compared to 2009.

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants	1146	439	978	295	1086	1432	95	81	2012	1652	970	724

The template above show HEI R&D personnel by fields of science and gender. The numbers apply to positions that meet the requirements to qualify as a project manager in RCN research projects: Professor, associate professor and researcher. 2018. Source: NIFU (Nordic Institute for Studies in Innovation, Research and Education), the R&D statistics bank.

Transparent/opaque procedures/systems

Transparency of evaluation process

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	RCN
Please mark with Y for Yes and N for No on the statements below	
<i>Does the funding organisation do the following?</i>	
Monitors composition of selection committees	Y
Monitors composition of evaluation panels	N
Uses (national and) international evaluators	Y
Publishes evaluation criteria	Y
Has ethical guidelines preventing nepotism, etc.	Y
Publishes ethical guidelines (preventing nepotism, etc.)	Y
Applicants can find out evaluators' names during the evaluation process	N
Evaluators know applicants' names or sex	Y
There is a right of reply or a complaint procedure	Y

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	RCN
Please mark with Y for Yes and N for No on the statements below	
<i>Does the funding organisation do the following?</i>	
Calculates gendered success rates	Y
Publishes gendered success rates	Y
Compares applicants to pool of potential applicants	Y
Monitors amounts of funding awarded per sex	Y
Other quality checks (eg. nepotism)	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y
Applicants can find out evaluators' names after the evaluation process	Y

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

The applicants must submit all information in the applications in English.

Most grant applications submitted to the Research Council are assessed by referees who are experts in the relevant thematic area and subject field. We recruit experts from internationally leading research and innovation circles.

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Referees assess each grant application in relation to the assessment criteria and priorities set out in the call for proposals. Proposals are assessed by panels comprising multiple referees. All referees are reviewed for impartiality before they are cleared to assess grant applications.

The external referees assign marks for each of the three assessment criteria and may be asked to rank the individual applications in relation to one another. Applications that are assessed in relation to the assessment criterion will receive a separate mark for this.

The Research Council's scientific advisors will draw up a recommended ranking of the submitted grant proposals. Recommendations are based on the referee assessments and may incorporate an assessment of relevance and an overall assessment of all the applications submitted in response to the call.

The final decision regarding the approval or rejection of grant proposals is normally taken by one of the portfolio boards (selecting committees). The portfolio boards are responsible for ensuring that the funded proposals as a whole will lead to optimal achievement of the board's objectives.

All applicants receive the grounds for the funding decision. After application processing has been concluded, applicants will receive the referee panel's assessment. A list of all referees used to review grant applications will be published on our website. A list of all projects granted funding will also be published there.

[Differences between disciplines](#)

Differences (if any) of the success rates between main research areas

All comments are sent out in in English. There are no principal differences in procedures between main research areas. In research projects there is a standard formulation in the call text:

"We prioritize applications with a woman as the project manager when the applications are assessed to be approximately equal". This applies to all disciplines.

Similar formulations are used in other application types.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender.

[No data]

Differences in funding instruments between main research areas, and if these have implications for gender

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender

RCN restructured 2018–2019 its boards, reducing from three to two levels of boards and also reducing the total number of selecting committees (now called portfolio boards) from approximately 45 to 15. The new selecting committees (project selection is but one of their tasks) were appointed by the RCN Governing Board in a structured process. The process included nomination from research organisations, civil organisations and other private and public organisations. Based on the nominations RCN administration suggested the composition of each selecting committee/portfolio board, balancing for each committee and the total several criteria, among them representation from different parts of the research and innovation institutions, research discipline, geography, age, gender, competence in research and innovation policy etc.

Of the total number of appointees (163) to all committees, 83 were women (51 percent). For each selection committee the gender balance was maintained within a 60-40 limit, which is in line with national legislation.

Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
Research Council of Norway	Selection committees (15 in total)	83	81

Spain

Reporting organisation(s):

State Research Agency

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), . specific measures taken for promoting gender balance in the funding system

The national system for R&I funding

According to the Spanish Law on Science, Technology and Innovation (2011), among the funding agents of the State General Administration, the State Research Agency (AEI) and the Centre for Industrial Technological Development (CDTI) are funding agents attached to the Ministry of Science and Innovation. Their functions are:

- to manage the programs and instruments assigned to them
- to contribute to the definition of the objectives of the State Scientific and Technical Research Plan and the State Innovation Plan
- to carry out the scientific and technical evaluation of the actions of the State Scientific and Technical Research Plan, the State Innovation Plan, and other scientific and technological policy actions for the allocation of resources
- to monitor and evaluate funded projects and the performance of the activity and compliance with the purpose determined for the granting

Both the AEI and the CDTI will carry out their activities as funding agents in a coordinated manner and following the principles of autonomy, objectivity, transparency, accountability, effectiveness and efficiency in management.

In short, the Spanish funding system is composed of two main national funding agencies (AEI y CDTI) and the Health Institute “Carlos III” (ISCIII) for medical sciences and health issues. These three funding agencies manage more than thirty funding instruments that follow the common rules of competitive research calls. Moreover, other Ministries have smaller calls on specific fields, such as agriculture, economy, health... The funding instruments of the autonomous regions complement the Spanish R&I system.

Gender equality policies

The Spanish Law 14/2011 on Science, Technology and Innovation sets the basis of the new Spanish Science, Technology and Innovation system and thus the main features of the AEI. The preamble of this Law mentions the gender perspective as a transversal aspect that will help to situate the Spanish legislation on Science, Technology and Innovation (STI) in the European framework. Accordingly, one of the objectives of the Law is to promote the inclusion of the gender perspective as a transversal category as well as the gender balance in every field of the Spanish STI system (article 2). The principles of non-discrimination and gender balance are considered also in the regulation of the research staff. Researchers have the right to develop their functions and research career according to the principle of

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gender equality as well as the right to benefit from the work-life balance programs of their respective research organizations. In fact, the law establishes that the selection process should take measures to ensure that career breaks do not affect negatively the evaluation of curricula (article 16). Within the list of measures to be adopted by funding agents, such as the State Research Agency, the law includes gender equality measures (article 33).

Finally, a specific additional provision to the Law defines the main objectives on gender equality for the Spanish STI system:

- Gender balance in the composition of the committees and bodies of the STI system. According to the Spanish legislation on gender equality, gender balance requires 40-60 percent of both genders represented.
- Promotion of the gender perspective as a transversal category in the whole research process through the Spanish Strategy on STI and the State Research Plan. These instruments will also promote research on gender studies.
- Inclusion of mechanisms to eliminate gender bias in the selection and evaluation procedures - Development of a gender statistics system on STI
- Adoption of gender equality policies in the eight Spanish Research Public Organisms to be yearly monitored.

The Spanish Strategy of STI 2013-2020 included the gender perspective in STI policies as one of the five basic principles. The new Spanish Strategy of STI 2021-2027 insists on the need to integrate the gender perspective in order to guarantee the principle of gender equality through the whole STI system, being one of the four basic principles of the Strategy. The promotion of gender balance in attracting and retaining talent will be also part of the actions. The aim is to avoid the loss of human capital in the public and private sector due to gender imbalances and to enrich the creative process and research results through the integration of a gender perspective in the research and innovation content.

The main relevant funding organisations (research councils etc.) in your country, with brief descriptions of the main objectives and the funding instruments of the organisation, specific measures to promote gender balance?

The State Research Agency (AEI) was created in 2016 – through Royal Decree 1067/2015 – with the mission of promoting research in all areas of knowledge through an efficient and competitive assignment of public resources and the monitoring of funded programs and their impact. Moreover, the AEI gives advice on the programming of the activities on Research and Development policies of the State General Administration.

The Royal Decree 1067/2015 on the creation of the State Research Agency reiterates the principle of gender equality, the promotion of the gender perspective in the research content and the gender balance in the composition of bodies and committees of the RFO.

A Strategic Group on Gender Equality (GEI–AEI for its acronym in Spanish) has been established by the AEI at the end of 2018. The composition of this committee includes representatives of every area of the organization whose activity can affect the gender impact of the funding activity: Board, General Secretary, Division of Administrative and Economic Management and Division of Scientific Coordination, Monitoring and Evaluation. This Strategic Group involves also the Women and Science

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Unit of the State Secretariat for Universities, Research, Development and Innovation as well as the technical support for gender equality policies in the Spanish Foundation for Science and Technology.

The State Research Agency will be also involved in the specific commission that deals with gender in research calls in the new Spanish Observatory for Women, Science and Innovation.

Finally, other funding agents such as **CDTI**, (public entity, under the Ministry of Science and Innovation, which promotes innovation and technological development of Spanish companies), and **ISCIII** (public entity, under the Ministry of Science and Innovation, which main mission is the provision of scientific reference technical services aimed at the National Health System and the promotion and execution of research in Health and Life Sciences), have both gender equality plans in place and gender equality commissions. The Women and Science Unit of the Ministry on Science and Innovation monitors and coordinates the development of these gender equality policies.

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications **	73%	27%	75%	25%	58%	42%	63%	37%	56%	44%	54%	46%
nb funded	74%	26%	75%	25%	62%	38%	65%	35%	59%	41%	54%	46%
success rate (nb funded/nb applications ***	57%	52%	49%	48%	41%	34%	51%	46%	44%	40%	58%	57%

** Data available for research calls on R&I projects, 2016. Reference (Graphs 5.8 and 5.8.bis): https://www.ciencia.gob.es/stfls/MICINN/Ministerio/FICHEROS/UMYC/Cientificas_cifras_2017.pdf

*** The success rate Success rate calculated as the proportion of projects granted over applied for by each sex.

Overall there is an under-representation in the number of women submitting project proposals as PIs and a clear horizontal segregation by scientific field in the pool of researchers. While medical, agricultural, social sciences and humanities are balanced fields (the Spanish legislation on gender equality considers 40-60 percent of either sex as balanced), natural sciences, engineering and technology are still male-dominated fields. These figures have not changed substantially from 2013 to 2016.

However, when considering the pool of applicants, at least in public universities and research public organisms, the proportion of women applicants is somehow consistent with the proportion of women researchers in every field.

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Regarding the success rates, men's led proposals are more successful than women's led ones in every field. The main differences are in natural sciences, medical sciences and agricultural sciences. However, it is important to keep in mind that success rates vary often from year to year.

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	Women
pool of potential applicants **	65%	35%	72%	28%	56%	44%	60%	40%	54%	46%	53%	47%

** According to available data, the pool of potential applicants consists of the pool of researchers in public universities as well as in the research public organisms (2016). Reference (Graph 4.3): https://www.ciencia.gob.es/stfls/MICINN/Ministerio/FICHEROS/UMYC/Cientificas_cifras_2017.pdf

Transparent/opaque procedures/systems

Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	AEI	CDTI	ISCI
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Monitors composition of selection committees	Y	Y	Y
Monitors composition of evaluation panels	Y	Y	Y
Uses (national and) international evaluators	Y	Y	Y
Publishes evaluation criteria	Y	Y	Y
Has ethical guidelines preventing nepotism, etc.	Y	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)		Y	Y
Applicants can find out evaluators' names during the evaluation process	N	Yes in open calls; No in competitive calls	N
Evaluators know applicants' names or sex	Y	Y	Y
There is a right of reply or a complaint procedure	Y	Y	Y

The evaluation system has evolved since 2009, when a national agency for evaluation (ANEP) existed. Currently, the State Research Agency is in charge of the evaluation processes. According to the law, the evaluation and funding procedures will be in line with the criteria linked to good practice established at international level, and will use scientific or technical merit as an evaluation criterion for the allocation of resources. The evaluation criteria will take into account the technical or market merit and the socio-economic impact of the projects.

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Thus, the evaluation system is peer-reviewed, so it is the scientific community itself who evaluates the proposals. Applicants do not know the names of the – at least - four external experts that review every proposal at a first stage. The signature on absence of conflict of interest is required for the evaluators.

In a second stage, a scientific-technical commission made up of the AEI’s scientific panels integrates all the evaluation reports. Members of the scientific evaluation panels are published in the AEI website.

One of the policies the AEI would like to promote aims to get a greater transparency regarding the evaluation reports.

Regarding the complaint procedure, applicants could argue for procedural or discrimination issues, but there isn’t a rebuttal phase in the current system of evaluation.

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	AEI	CDTI	ISCIII
Please mark with Y for Yes and N for No on the statements below			
<i>Does the funding organisation do the following?</i>			
Calculates gendered success rates	Y	N	Y
Publishes gendered success rates	Y	N	Y
Compares applicants to pool of potential applicants	Y	N	Y
Monitors amounts of funding awarded per sex	Y	N	Y
Other quality checks (eg. nepotism)	N	N	Y
Gives information on granted projects (title, researchers, abstract, etc.)	*	Y	Y
Applicants can find out evaluators' names after the evaluation process	N	Yes in open calls; No in competitive calls	Y

* The name of the PIs cannot be published by the Agency due to data protection. There are no dissemination activities regarding the funded projects (researchers, abstracts). But PIs need to develop a data management plan and disseminate their own results.

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

There is a law on transparency in Spain that allows citizens to request information and accountability. There is a conflict between the requirements on transparency and data protection. Clarifications and clear protocols in this regard may have a positive impact on transparency in the whole Spanish R&I system.

Differences between disciplines

Differences (if any) of the success rates between main research areas

See comments in Question2.

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender

At the level of the State Research Agency, there is no difference in application procedures, evaluation processes, etc.

The Agency has included a question on the integration of sex/gender analysis in the research calls. This only applies to those research projects that deal with, imply or affect humans.

Differences in funding instruments between main research areas, and if these have implications for gender.

There are different funding instruments but they are not specific for research areas. Depending on the funding needs of the different research fields, there may be differences in the resources required and funded.

Members of selection committees and procedures for appointment

Procedures for selecting committee members in research funding organisations, and if these have implications for gender

The State Research Agency conducts a selection process for the presidency of the scientific evaluation panels among researchers of well-known reputation. Presidents of the scientific panels select their collaborators, in close cooperation with the AEI.

The AEI promotes a balanced composition of these committees, or at least an equivalent representation to that of the discipline.

Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
AEI	Scientific panels (President)	7	12
AEI	Panels composition	118	141
CDTI	Board	8	4
ISCIII	R&D Biomedicine	140	153

There are 19 areas of knowledge in the design of scientific evaluation panels of the AEI: <http://www.ciencia.gob.es/portal/site/MICINN/menuitem.8ce192e94ba842bea3bc811001432ea0/?vgnextoid=fa347440163e5310VgnVCM1000001d04140aRCRD&vgnextfmt=default>

While there is a balanced composition among “collaborators” of the scientific evaluation panels (around 45 per cent are women experts), there is an underrepresentation of women as presidents of the panels (37 per cent are women):

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Updated data (2020)	Women	Men	Total	%W
President	7	12	19	36,84
Collaborator	109	133	242	45,04
Total Scientific Panel	118	141	259	45,55

The system of evaluation committees was different at the General State Administration level in 2009. Since 2016, the structure of scientific panels and the scientific-technical commission is the rule for all the funding instruments of the AEI.

Sweden

Reporting organisation(s):

Formas

Forte

Swedish Research Council (Vetenskapsrådet)

Vinnova

Different types of grant awarding procedures or research funding systems

National systems for funding of research (e.g., funding organisations where researchers apply for grants, direct grants to universities for research), . specific measures taken for promoting gender balance in the funding system

The largest part of Swedish R&D is funded by and performed within the business and enterprise sector. Most of these activities can, however, be characterized as development rather than research. It is instead the 31 HEIs (incl. the 15 universities but excl. the arts university colleges) that are the main performers of research. The institute sector is comparatively small.

Direct government appropriations constitute 46 percent of the total research funding of the HEIs. The remaining 54 percent are funded by research councils (13 percent), government agencies (11 percent), research foundations that were originally set up by the government (4 percent), private foundations (8 percent), private companies (5 percent) and foreign sources (7 percent). Of the foreign sources, the main part (4 percent) is EU funding.

There are three research councils (Swedish Research Council, Formas and Forte) and one agency for innovation systems (Vinnova). Many other government agencies fund research at HEIs. Also, there are some 8 public research foundations, originally funded with state funds, and a number of private research foundations. All public funding bodies abide by the Swedish law of public access to information, and so any decision must be made available to any citizen on request.

Swedish Research Council funds basic research in all scientific fields and funds research infrastructures. Formas funds research about the environment, agricultural sciences and spatial planning. Formas also funds innovation which is assessed on the basis of both scientific quality and societal relevance. Forte funds research in the areas of health, working life and welfare.

Funding organisations in Sweden have a governmental assignment on gender mainstream in their organisations, which means that in their respective instructions they are expected to distribute fundings equally to both women and men. A majority of these organisations also have an assignment in their instructions to support the integration of sex and gender dimensions in the content of research and innovation when relevant.

The main relevant funding organisations (research councils etc.) in your country, with brief descriptions of the main objectives and the funding instruments of the organisation, specific measures to promote gender balance

Gender mainstreaming has long been (1994) a central feature and a main strategy of Swedish gender policies, meaning that decisions in all policy areas and at all levels are to be permeated by a gender equality perspective. Gender mainstreaming is to be implemented at central, regional and local level. The 2014 Declaration of government focused again on gender mainstreaming, defining it as a core concern together with ‘gender budgeting’, which was introduced as a new technique when formulating the State budget. Moreover, both issues are referred to in a recent government declaration on priority policies, which also sketches the mainstreaming actions that will be undertaken within the government and state authorities.

The three research councils and the innovation agency have the Government’s mission to promote gender equality in its funding activities, including gender balance in boards, committees and peer review panels.

The Swedish Research Council has since 2003 a gender equality strategy for its funding activities. An operative goal of the strategy is to achieve equal success rates for women and men, with respect to type of funding and scientific field. The gender equality work includes gender equality training for evaluators, scientific boards and staff.

Forte promotes gender balance in research funding, ensures gender balance in review panels, and promotes a gender perspective in research when applicable. A strategy for gender mainstreaming is in place. All employees at Forte are informed of the strategy and so are the review panels and evaluators in relation to their role.

Formas has no specific programs or targeted instruments for promoting gender balance. The measures are included in each call, i.e. evaluation criteria, recruitment of evaluators, etc. Formas is, as all other public Swedish agencies, commissioned by the government to integrate gender equality into its entire operations.

Formas

Formas have both open calls and targeted calls. The research or innovation that Formas funds is assessed on the basis of both scientific quality and societal relevance. For larger calls (calls for program/larger project groups) the project is obliged to report the composition of the group based on gender.

In terms of the evaluation of societal relevance, all applicants must state in their application the ways in which the project results can be relevant to different groups in society (men / women). The composition of the evaluation panels for all calls, must be at least 40 - 60 (men / women). All chairs of the panels are given training in gender/gender equality, and all members of the panel are given information on gender bias in research evaluation. Formas monitors and publish annually success rate by gender in all calls. (all individual based official statistics must be gendered).

Formas has no specific programs or targeted instruments for promoting gender balance. The measures are included in each call, i.e. evaluation criteria, recruitment of evaluators, etc. (see below). Formas is commissioned by the government to integrate gender equality into its entire operations.

Forte

Forte is a government agency under the Swedish Ministry of Health and Social Affairs. Our operations are guided by governmental directives and an annual letter of appropriation. On behalf of the government we initiate and finance research in the areas of health, working life and welfare. We evaluate the effects of research and how the results can be translated into practice, as well as working actively with dissemination of knowledge. Forte creates meeting places where research and the future are the central focus.

Funding instruments at Forte

Research: Forte Centres, Project grants, Programme grants, Junior researcher grants, Practice-oriented research fellowships, Synthesis

Dissemination of knowledge: Network grants, Journal grants, Conference grant

Internationalisation and mobility: Postdoc grant, Visiting researcher grant, Bilateral calls for proposals, ERA-NET, Joint Programming Initiatives

Specific measures to promote gender balance at Forte

By governmental directive Forte shall promote gender balance in research funding, ensure gender balance in review panels, and promote a gender perspective in research when applicable. A strategy for gender mainstreaming is in place. All employees at Forte are informed of the strategy. Review panels and evaluators are informed of the strategy in relation to their role. The outcome of funding decisions is monitored. In all calls the applicants are asked to indicate and motivate if a gender perspective is relevant.

Success rates in getting funding by sex

Success rates according to sex of principal investigator, by main research field (Vinnova is not included)

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women	PI - men	PI - women
nb of applications **	1430	624	533	183	650	583	191	152	1172	1665	256	243
nb funded	292	127	92	45	157	133	32	41	150	237	30	29
success rate (nb funded/nb applications)	20%	20%	17%	25%	24%	23%	17%	27%	13%	14%	12%	12%

Comparison to pool of potential applicants

Numbers of HEI researchers/teachers (with a PhD) who are eligible to apply for research project funding and individual grants

	Natural sciences		Eng. and Technology		Medical sciences		Agricultural sciences		Social sciences		Humanities	
	men	women	men	women	men	women	men	women	men	women	men	women
pool of potential applicants	3941	1473	2634	853	3040	3326	427	337	3105	3003	1531	1457

Transparent/opaque procedures/systems

Transparency of evaluation process

Name of funding organisation (if more than one, fill in the name in separate columns)	Formas	Forte	Swedish Research council	Vinnova
<i>Please mark with Y for Yes and N for No on the statements below</i>				
Does the funding organisation do the following?				
Monitors composition of selection committees	Y	Y	Y	Y
Monitors composition of evaluation panels	Y	Y	Y	Y
Uses (national and) international evaluators	Y	Y	Y	Y
Publishes evaluation criteria	Y	Y	Y	Y
Has ethical guidelines preventing nepotism, etc.	Y	Y	Y	Y
Publishes ethical guidelines (preventing nepotism, etc.)	Y	Y	Y	Y
Applicants can find out evaluators' names during the evaluation process	N	Y	N	N
Evaluators know applicants' names or sex	Y	Y	Y	Y
There is a right of reply or a complaint procedure	N	N	N	N

Transparency of outcome

<i>Name of funding organisation (if more than one, fill in the name in separate columns)</i>	Formas	Forte	Swedish Research council	Vinnova
<i>Please mark with Y for Yes and N for No on the statements below</i>				
<i>Does the funding organisation do the following?</i>				
Calculates gendered success rates	Y	Y	Y	Y
Publishes gendered success rates	Y	Y	Y	Y
Compares applicants to pool of potential applicants	N	N	Y	Y
Monitors amounts of funding awarded per sex	Y	Y	Y	Y
Other quality checks (eg. nepotism)	Y	Y	Y	Y
Gives information on granted projects (title, researchers, abstract, etc.)	Y	Y	Y	Y
Applicants can find out evaluators' names after the evaluation process	Y*	Y	Y	Y

*Applicants can find out the names of the whole evaluation panel, but not the name of individual evaluators per application, after the call is closed and a decision has been reached.

Barriers (legal, administrative, etc.) to achieving transparency/ accountability of procedures

Barriers that can affect the transparency or accountability of the procedures in the funding organisation(s), for example, secrecy of evaluations and grading, anonymity of reviewers, language requirements for applications, the procedures for recruitment of reviewers (open calls or internal, informal appointments), etc.

The Swedish Research Council have gender as a boundary condition, which means that if a decision is balancing between two applications from both a man and a woman, the underrepresented sex will win. The Swedish Research Council was given a gender equality task by the Government in 2006. This task includes reporting about gender equality training for evaluators, scientific boards and staff at the council.

Formas applies gender as a boundary condition (see comment from the Swedish Research Council above)

Differences between disciplines

Differences (if any) of the success rates between main research areas

Formas does not on a regular basis monitor success rates between main research areas by gender (other than reporting to She Figures).

Forte: In 2019 66 percent of all PI:s funded by Forte were women. In one of Fortes three main research areas – Welfare – the difference was even larger 72 percent were women.

The success rate 2019 at Forte by internal fields

	Women	Men
Health	9%	10%
Working Life	17%	13%
Welfare	16%	13%
Total	13%	12%

Differences between main research areas in application procedures, evaluation processes etc., and if these differences have implications for gender

Formas has no differences to report (see answer above)

Differences in funding instruments between main research areas, and if these have implications for gender.

Formas does not on a regular basis target different research area in their calls. All calls are thematically oriented and therefor (more or less) multidisciplinary or interdisciplinary.

[Members of selection committees and procedures for appointment](#)

Procedures for selecting committee members in research funding organisations, and if these have implications for gender

In Sweden, most members of the three research council’s boards, and the scientific councils of the Swedish Research Council, are chosen by the HEI researchers through an election process every three years. The Government Ordinance for the election process ensures a gender balance. A few board members are appointed directly by the Government.

Formas has no selection committee, the evaluation panel recommends applications to be decided and Formas' Scientific council makes decisions.

The Scientific Council at Formas sets the focus and determines the funding to be allocated in Formas’ open calls and targeted calls. Since the research that Formas funds is assessed on the basis of both quality and relevance, the Scientific Council consists of representatives from academia as well as other societal stakeholders. The Scientific Council consists of thirteen members. Seven members are elected by an electoral community of researchers from Swedish universities and university colleagues. The government appoints the chairman and another five members.

Forte – the procedure for appointing members to review panels etc follows the governmental directive to ensure gender balance in review panels and Forte’s strategy for gender mainstreaming.

Vinnova – the selection of committee members gender balance should be achieved. Vinnova has a pool of reviewers that people can apply for. In the pool there are have reviewers with gender expertise.

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Number of men and women in selection/funding committees in research funding organisations.

Name of organisation	Type of committee	# Women	# Men
Vinnova	Board	5	3
Formas	Board	8	5
Forte	Board	7	6
Swedish Research Council	Board	4	5
Swedish Research Council	Scientific Council for Medicine and Health	6	5
Swedish Research Council	Scientific Council for Natural and Engineering Sciences	4	5
Swedish Research Council	Committee for Educational Sciences	6	5
Swedish Research Council	Council for Research Infrastructures	5	8
Swedish Research Council	Committee of Clinical Therapy Research	5	8
Swedish Research Council	Committee for Development Research	5	4