The European Research Council

Why and how we evaluate research? Some insights from the ERC experience

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Ex ante evaluation: competition for funding requires quality and fairness for allocation decisions

"The ERC is dedicated to advancing frontier research through a competitive, pan-European competition that places the utmost importance on impartiality and transparency in the selection process. (...) The ERC's peer review is designed to identify exceptional proposals across the entire range of scientific disciplines, guided by a focus on scientific excellence.

In 2024, the Work Programme of the ERC introduces changes to the evaluation process, with a greater emphasis on project quality and the ideas behind a project than an applicant's CV and track record. The CV and track record templates are merged and simplified, allowing applicants to include brief narratives for more clarity. The scoring system is adjusted to ensure promising proposals are not hindered by resubmission restrictions. Scientific excellence remains the sole criterion for ERC frontier research grant evaluation." *Eystein Jansen, ERC Scientific Council*

https://erc.europa.eu/news-events/magazine-article/ensuring-excellence-ercsdedication-rigorous-evaluation



Peer review and its alternatives

"I'd say peer review is not perfect but it's still the best system that we have. We as a community take on the responsibility to provide review, to seek out and fund meritorious proposals. I think, at the end of the day, we need to do everything we can to make it better by adhering to our principles and talking to each other." *Ted Hewitt, SSHRC*

<u>https://erc.europa.eu/news-events/magazine-article/peer-review-not-perfect-still-best-</u> <u>system-we-have</u>





Evaluation of research proposals: The why and what of the ERC's recent changes 21 February 2024

ERC President Maria Leptin explains the background and rationale to the recent changes in the evaluation process of ERC grant proposals.

https://erc.europa.eu/news-events/news/evaluation-research-proposals-why-andwhat-ercs-recent-changes



Novelties I – Research Assessment

- No prescriptive **Principal Investigator profiles**
- New Curriculum Vitae and Track Record template (4 pages):
 - Personal details: education, employment
 - Research achievements (<=10):
 - demonstrating advancement in the field
 - emphasis on more recent achievements
 - short narrative on significance of achievements
 - Peer recognition: prizes, fellowships, academy membership, etc.
 - Additional information:
 - career breaks, diverse career paths, life events
 - other contributions to research community



Novelties II – Research Assessment

- Evaluation primarily focused on the proposed research project:
 - Ground-breaking nature, ambition, and potential scientific impact
 - Feasibility of the scientific approach
- Intellectual capacity, creativity, and commitment of the PI also evaluated
- Streamlined evaluation questions



Monitoring – e.g. equality and diversity

- GDWG (Gender and Diversity Working Group)
- Gender equality plan 2021-2027 (GEP)
- Monitor gender balance
- Eligibility window extensions
- Accommodate diverse career paths
- Diversity of panel members
- Widening Working Group
- Monitor participation from widening countries (applicants and peer reviewers)
- Mentoring and Fellowships schemes
- Outreach activities

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- ERC annual workshop 2020: Sex and Gender dimension in frontier research
- ✓ ERC Annual Conference 2023: Research on Diversity & Diversity in Frontier Research

- Main objectives of the ERC GEP 2021-2027
- raising awareness about the ERC gender policy among potential applicants;
- working towards improving gender balance among ERC candidates and within ERC-funded research teams;
- identifying and removing any potential gender and other biases in the ERC evaluation procedures;
- embedding gender awareness within all levels of the ERC processes - while keeping focus on excellence;
- ✓ striving for gender balance among the ERC peer reviewers and other relevant ERC bodies.

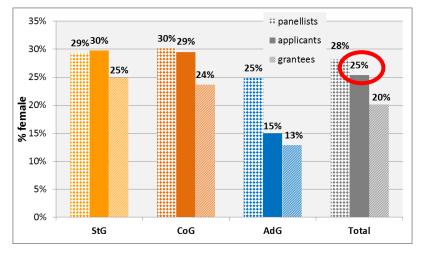
Peer review (and beyond): some types of biases

- Affinity bias
- Attribution bias
- Confirmation bias
- Halo and horns effects
- Conformity bias

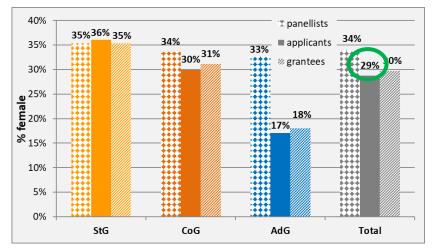


Monitoring example: Women participation by call

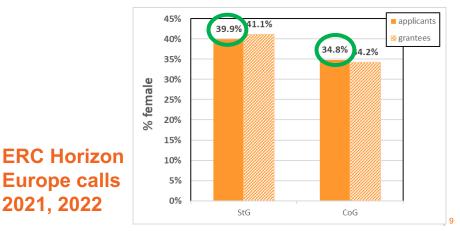
ERC Calls FP7 2007-2013



ERC calls H2020 (2014-2020)



2021, 2022





Ex post assessment: Scientific Assessment of Projects (SAP*)

Scope

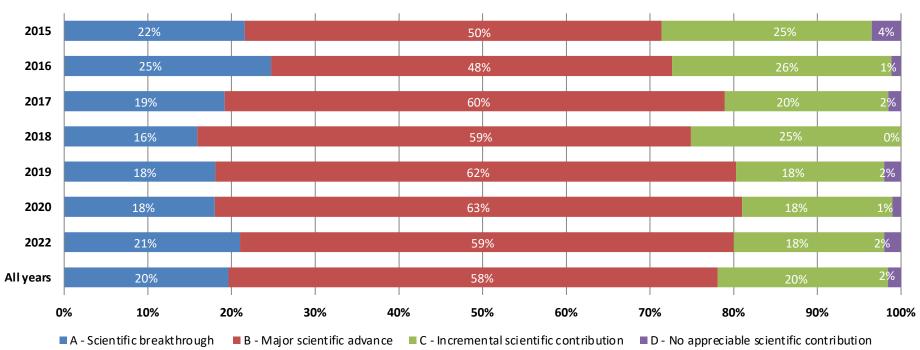
- SAP is an ex post evaluation of the ERC programme
 - through a <u>peer-review</u> assessment of finished projects
 - focusing on <u>qualitative</u> and <u>quantitative</u> analyses
 - Not based on bibliometrics, but on the scientific content of projects' outputs

Status

- SAP to evaluate Framework Programme 7 (FP7) is finished: the 'pioneering years' of ERC !
 - 7 exercises were organized from 2015 to 2022
 - 40% of ERC FP7 (StG, CoG, AdG) projects were assessed
 - 471 panel members and 434 external evaluators participated

Ex post assessment of ERC-FP7: Historical results

Results of the exercises

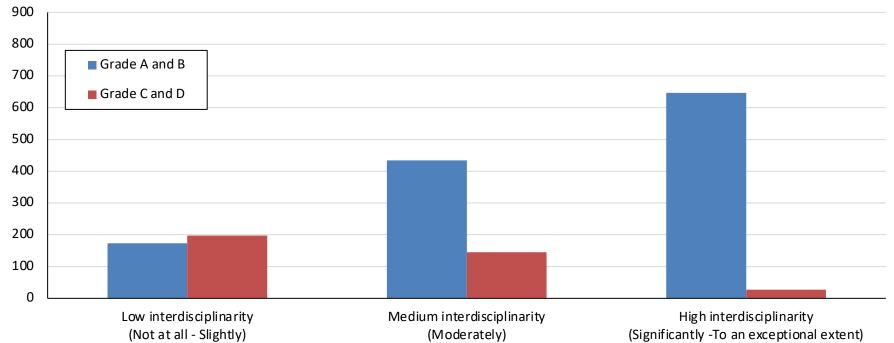


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Ex post assessment – Grade and interdisciplinarity

Overall grade and interdisciplinary nature of projects (Q4)

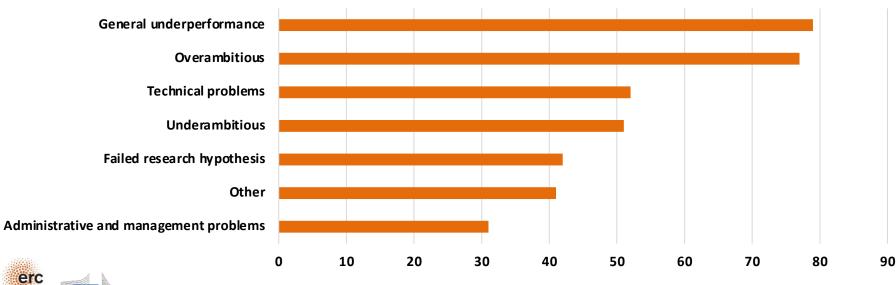


Q4: Has the research performed found recognition or applicability outside its main field?

Ex post assessment: Main reasons for low performance

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Reasons for the lower level or results produced by the projects classified as C or D



Number of projects

What next? Evaluation in times of fake news...



