

The Hidden Potential: Gender in research funding of three strong innovators

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המכללה האקדמית בית ברל
الكلية الأكاديمية بيت بيرل
Beit Berl College



Fraunhofer
IFAM



The project CHANGE



Consortium:

- IFZ – Interdisziplinäres Forschungszentrum für Technik, Arbeit und Kultur (Austria, COORDINATION),
- Rheinisch-Westfälische Technische Hochschule Aachen (Germany),
- Beit Berl College (Israel),
- Nacionalni Institut za Biologijo (Slovenia),
- Universidade De Aveiro (Portugal),
- Zilinska Univerzita V Ziline (Slovakia),
- Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM (Germany)



The project CHANGE

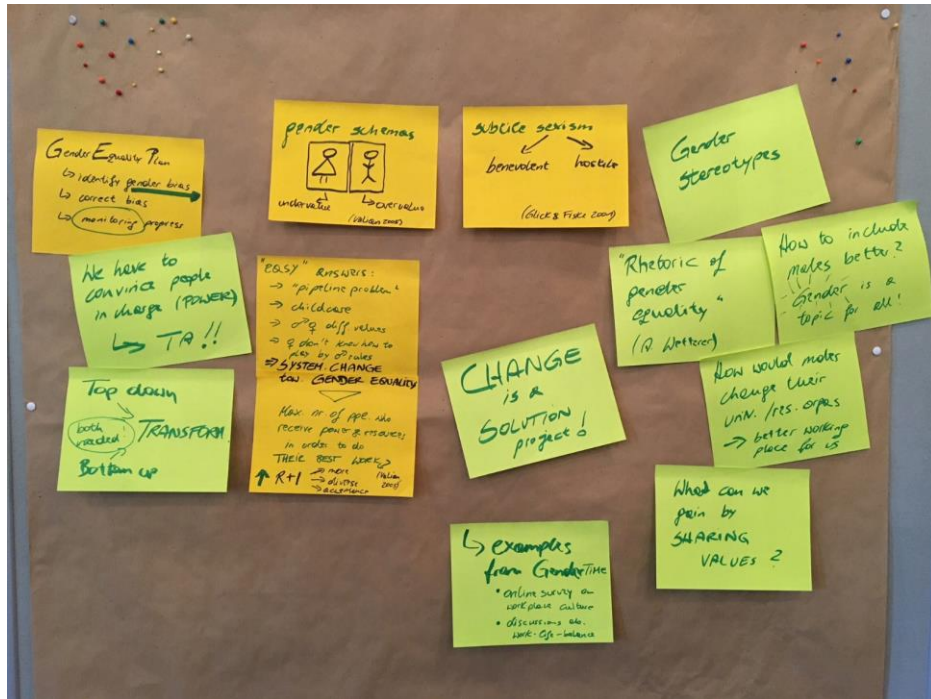


CHANGE contributes to a

- structural change towards gender equality in the European Research Area by
- stimulating institutional cultural change towards gender equal work environments in RPOs and
- fostering the importance of gender dimension inclusive research and innovation programmes in RFOs.

• Duration: 2018-2022

<https://www.change-h2020.eu/>

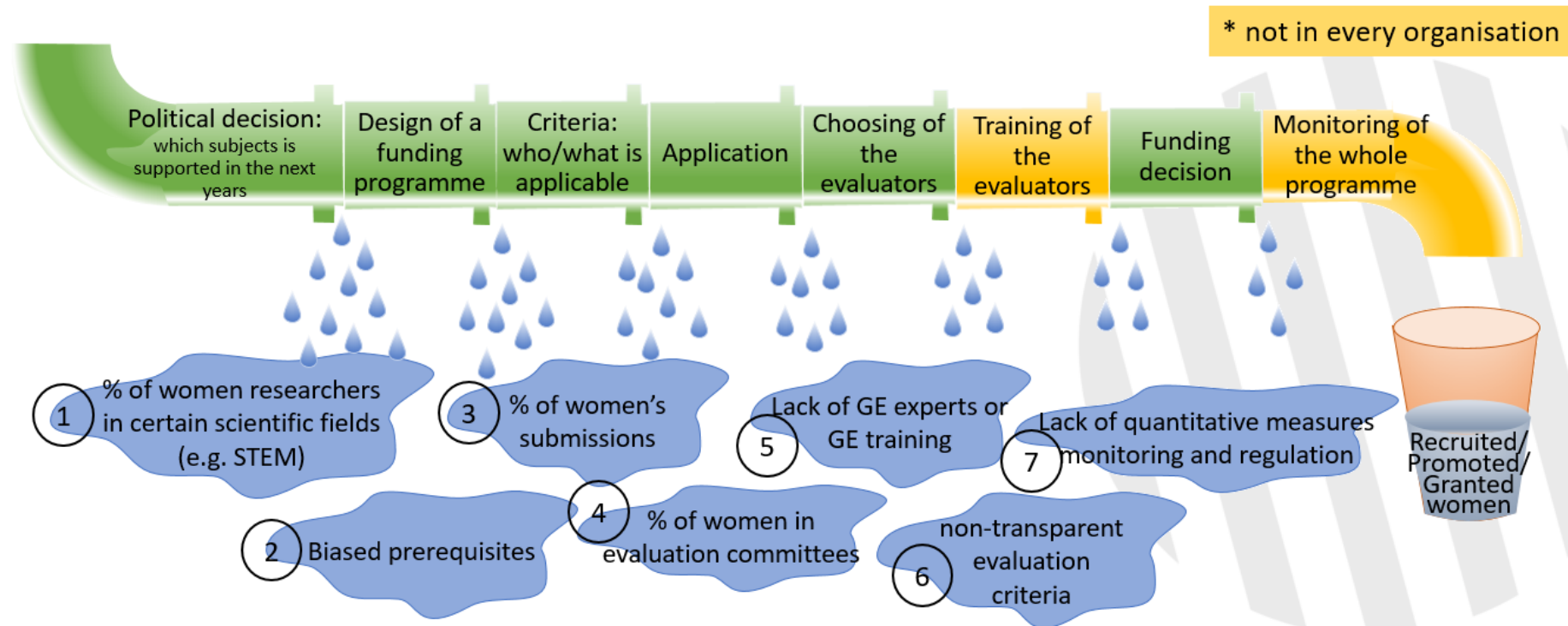


“...the problem needs to be tackled directly, trying to fight and change the system itself, starting from gender inequalities to other types of inequalities, such as those based on sexuality, class and ethnicity. In short, it is about changing the very roots of the system.”

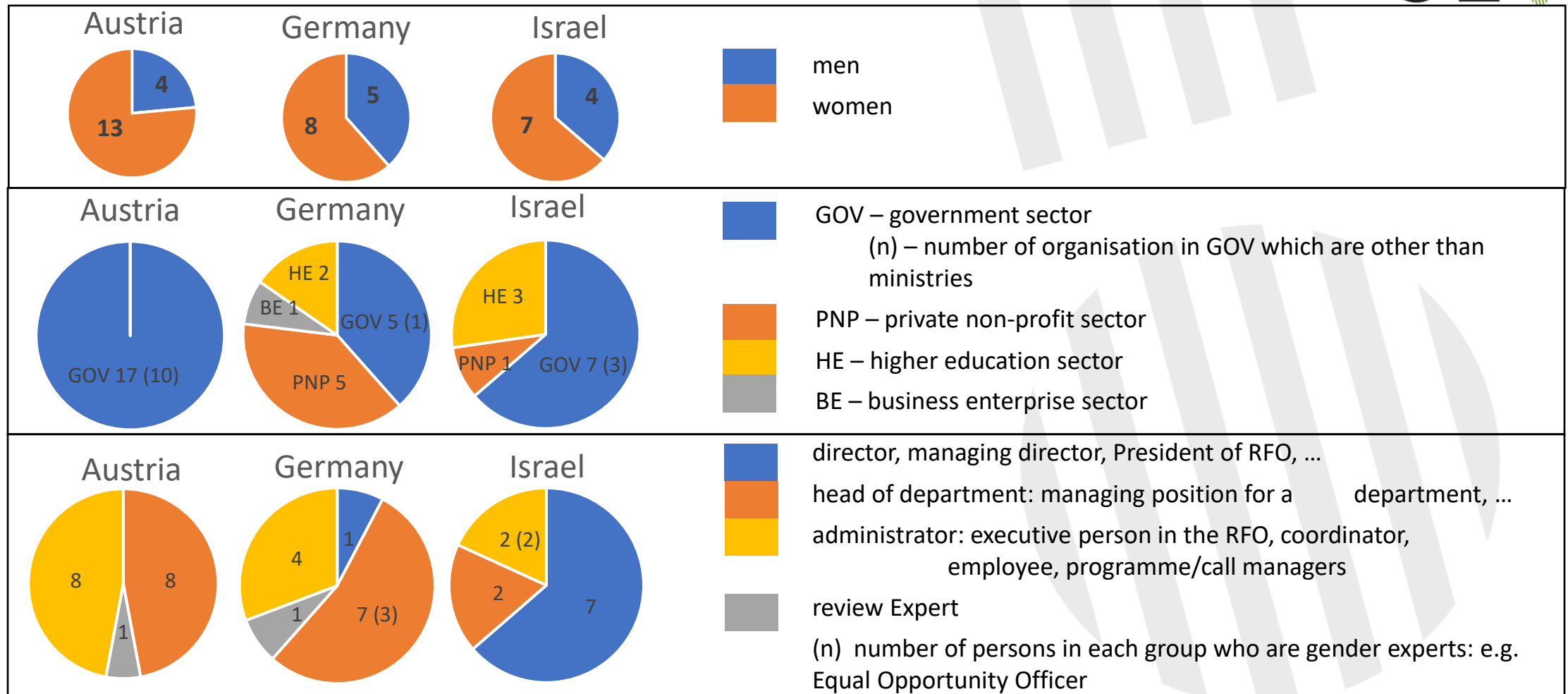
(Murgia & Poggio, 2019)

Exploring the leaky people in RF

- 41 experts in Austria, Germany and Israel were interviewed exploring gender in research programmes and funding and to get information about their policy especially regarding gender
- The questions were based on the research funding process



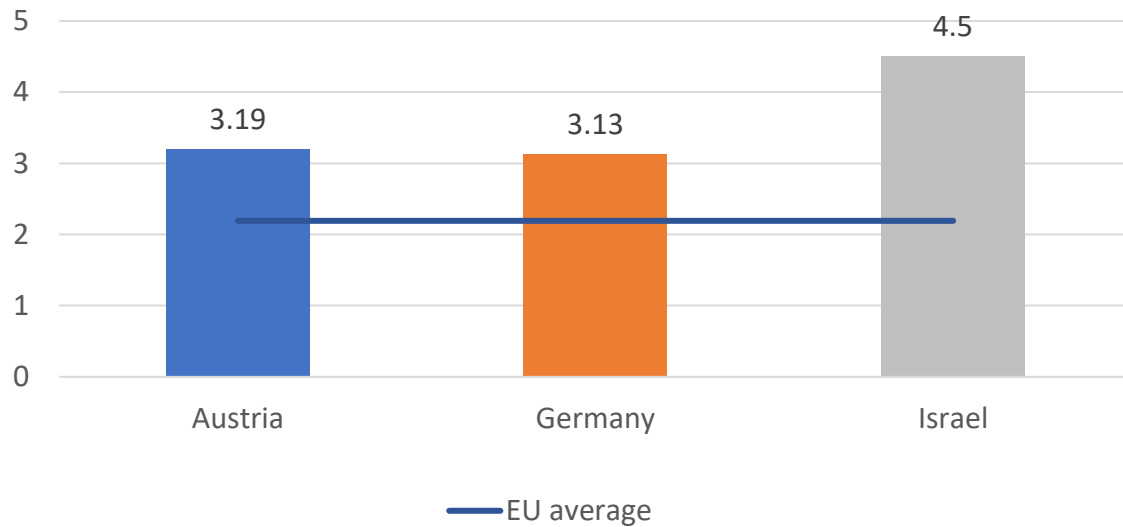
Data Collection



Strong innovators of CHANGE

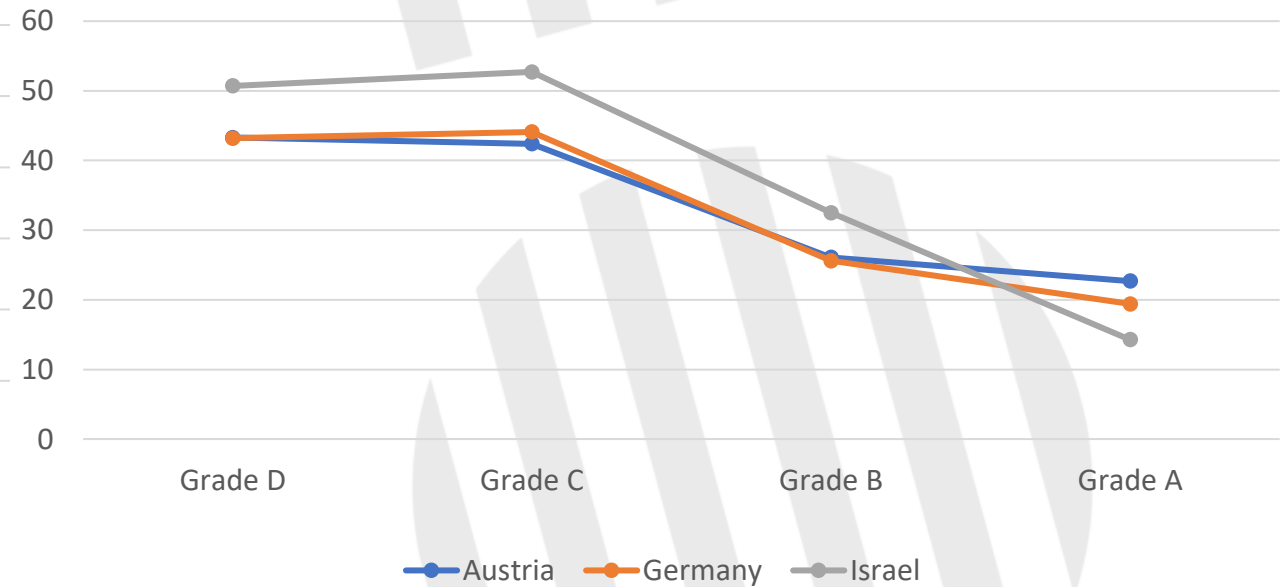


Gross domestic expenditures on R&D as percentage of their GDP



ERAC 2018

Proportion (%) of women among academic staff, by grade and total, 2016



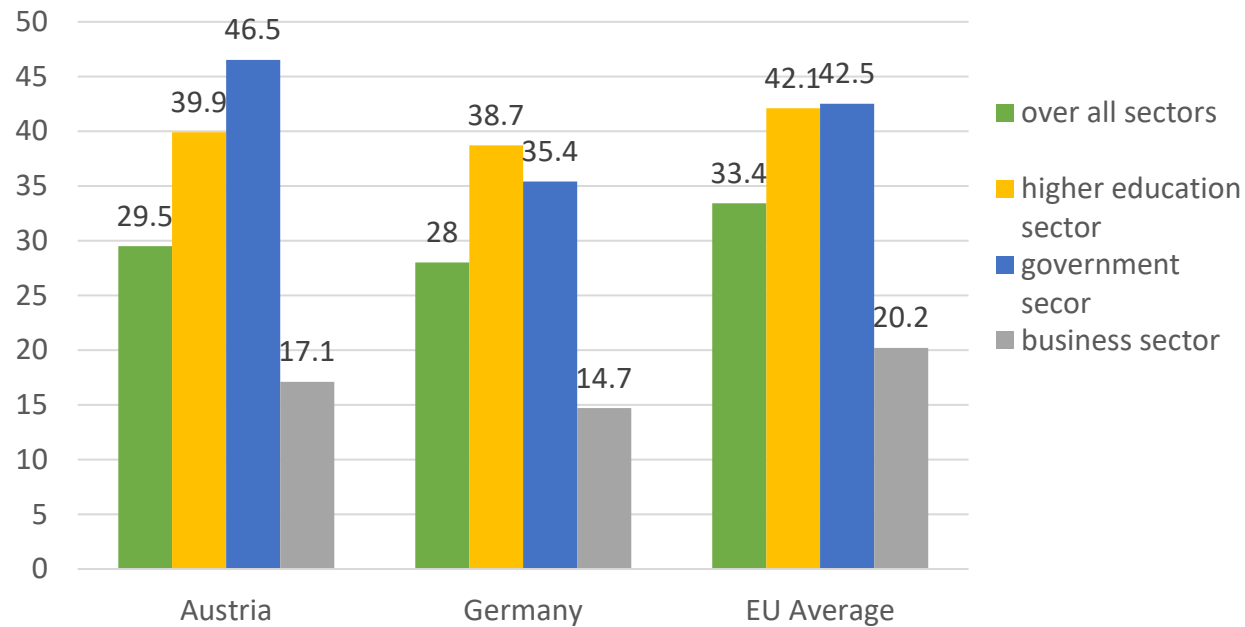
SHE Figures 2018



Gender inequalities

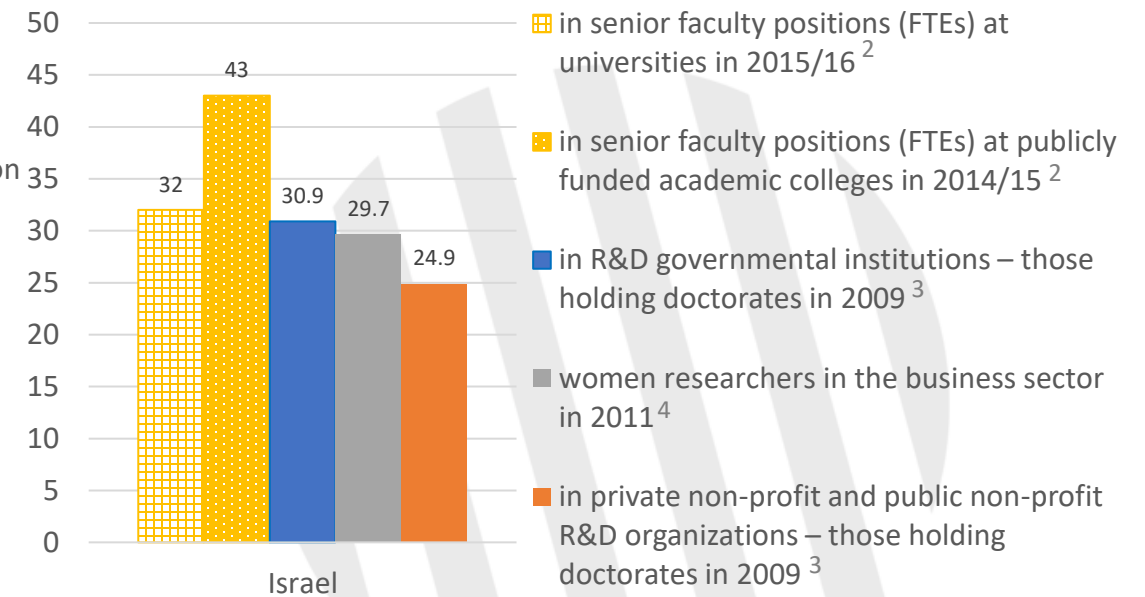
Even though in terms of women's presence in research and research funding these strong innovators manifest gender imbalances

Share of women researchers ¹



¹ Source: European Commission: She Figures 2018, Figure 4.1, 4.5, 4.6, 4.7

Share of women



² Source: <https://m.knesset.gov.il/EN/activity/mmm/me040618.pdf>

³ Source: https://www.cbs.gov.il/he/mediarelease/doclib/2011/292/12_11_292e.pdf

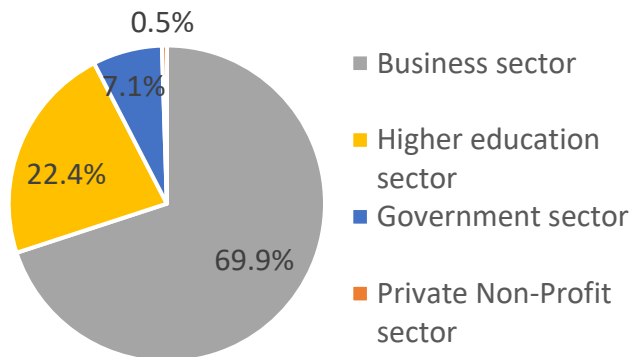
⁴ Source: <https://www.cbs.gov.il/he/publications/DocLib/2014/1550/excel/t25.xls>



Research budgets

Where is the money going?

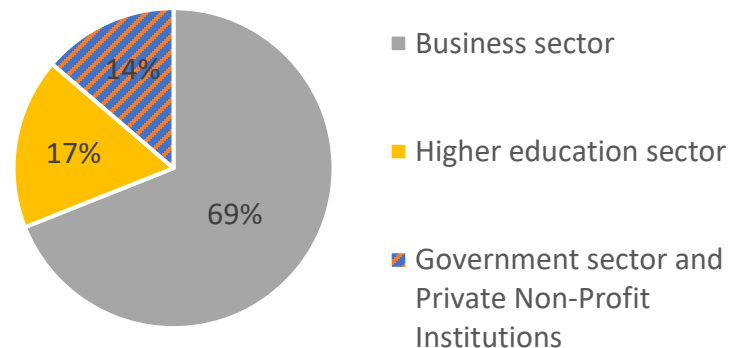
Proportion of research expenditure in Austria by sector in % ¹



¹ Source: Federal Ministry of Education, Science and Research et al. 2020

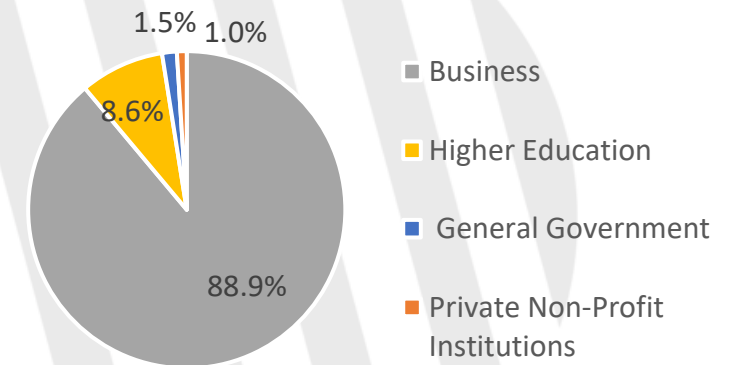
Where are the gender policies?

Internal expenses for research and development 2019 in Germany by sector in % ²



² Source: Statistisches Bundesamt, www.destatis.de, 2020

National Expenditure on Civilian R&D in Israel, by Operating Sector 2019 ³



³ Source: State of Israel, Central Bureau of Statistics (2020), https://www.cbs.gov.il/he/mediarelease/DocLib/2020/345/12_20_345e.pdf



Gendered technology & innovation



- Although much effort is put in research in the examined strong-innovator countries
 - Most gender policies are aiming at public and higher education sectors
 - RFOs funding business research (mostly technology & innovation) are the most powerful lever
- Technology and innovation are gendered!
- Good, robust technology is developed for actual users:

„If the user representations incorporated into the artifact fail to match the actual users, it is very likely that the technology will fail.“

(Oudshoorn et al. 2004, p. 32)

<http://genderedinnovations.stanford.edu/what-is-gendered-innovations.html>

GEECCO video
„Humans & Computers“:
<https://youtu.be/vrWx91RdmGo>



Gender-Inclusive Good Practices



1

Special support instruments
for researchers

2

Gender balance in decision-
making bodies

3

'Fair play': organisational
transparency

4

Gender mainstreaming and
sensitisation

5

Gender experts and
trainings

6

GE Policy, budget,
regulation and monitoring



Good Practice Example: Germany



- High education sector: Involvement of **unconscious bias** trainings for **evaluators**
- Some RFOs **align** their standards at the **EU standards**.
- But: As soon as business sector is involved, mainly technology factors are taken into account and no longer the socio-social factors.
- National ministries are strictly **obliged by laws** and therefore forced to have a distribution of **50:50 between women and men**.
- The majority of the funding organisations are **monitoring their numbers** regarding the distribution of women and men.
- Information especially from the monitoring of public funding organisations: in the past 10 years the numbers have changed a lot and more women are present.

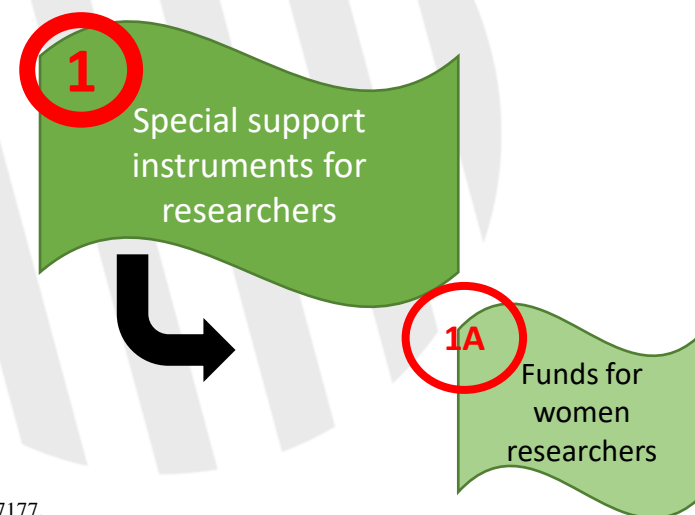
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GE Policy, budget,
regulation and
monitoring



Good Practice Example: Israel

- Main focus on the postdoc phase – as being the entrance point to senior academic positions in universities,
- Special post-doctoral funding programmes for young excellent female researchers in the field of Life Sciences.
- The aim of these programmes is to assist young women by allocating extra funding for their families thus supporting their relocation abroad.
- This good-practice is identified as category no. 1A – special funds for women



Good Practice Example: Austria

- Legal framework and gender policies are in place:
 - 2000: the Austrian government committed to gender mainstreaming
 - 2002: gender equality is a leading principle for all universities (“Universitätsgesetz 2002”)
 - 2009/2013 budgeting reform: gender included as one of five impact goals for the public sector.
- Gender imbalance in industrial research is seen as huge issue and not as easily governed as gender mainstreaming in universities.
- Exemplary good practices in Austrian RFOs (focus on applied research):
 - Gender in technology & innovation calls (FFG: FEMtech, Vienna Business Agency: Fempower, Women’s bonus)
 - Gender experts in the organisation and in the evaluation (FFG, Vienna Business Agency, Austrian Chamber of Labour)
 - Gender as standard evaluation criterion in all calls (FFG, Vienna Business Agency)

„And I believe remembering, the actual impulse happened at an event in the ‚Haus der Forschung‘ about gender budgeting and a head of department of the finance ministry gave the talk, and he was very euphoric, because he received the news immediately before or during the event that gender budgeting has been accepted. ... And as far as I can remember, I was not in our organisation back then, but the anecdotal evidence is that the head of our basic research programme said ‚No, we have to do something!‘, and so they started with the gender criteria in the basic research programmes. And based on that we developed that further. Yes.“ (AT_RFO02_F_EI02)



Conclusions

Although ...

- Significant gender policies in HE (quotas & initiatives raised women's shares)
- > 2/3 of national research budgets are allocated in BE

However

- < 40% women researchers in HE
- < 1/3 of women researchers are in BE

One of the main challenges is to transfer policies and gender-inclusive good practices from the HE & GOV to the BE and PNP sectors!

The hidden potential ...

- Connecting research budgets to gender policies
- Momentum of Horizon Europe (including GEPs as eligibility criterion), if:
 - Eligibility criterion would be applicable for BE
 - GEPs are not only a ‚ticking box exercise‘
 - GEPs are regularly and qualitatively monitored (e.g. during the project reviews)
 - Additional fundings and incentives can be used for GE activities

Conclusions



- More than two thirds of national expenditures on research in all three countries is allocated in the BE sector. However, the share of women researchers in BE is less than one third (AT-17.1, DE – 14.7, IL- 29.7).
- Women researcher's share in HE is higher than in BE, but still less than 40% (AT- 39.9, DE-38.7, IL-32). Therefore, it seems that despite significant regulative measures taken in HEIs, academia is still gender biased or gender imbalanced. This fact has no doubt an impact on women's career progression, including their chance to be funded and supported for their research studies.
- Gender inclusive regulation and budgeting prevails more in the public HE national sector, and less so in the regional/private/BE sectors and levels. Therefore, one of the main challenges is to transfer knowledge and gender-inclusive good practices from the national to the regional level and from HE or GOV to the BE and PNP sectors.
- Based on the expert interviews, it seems that much action is still needed to raise awareness through GE trainings and professionalism in RFOs, in order to foster a sense of necessity and commitment to promote the GE cause within the organisations and to mitigate the 'leaky pipeline' locations along the funding process.



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This project has received funding from the European Union's Horizon 2020 Research & Innovation Programme under Grant Agreement no. 787177.