dfir brief
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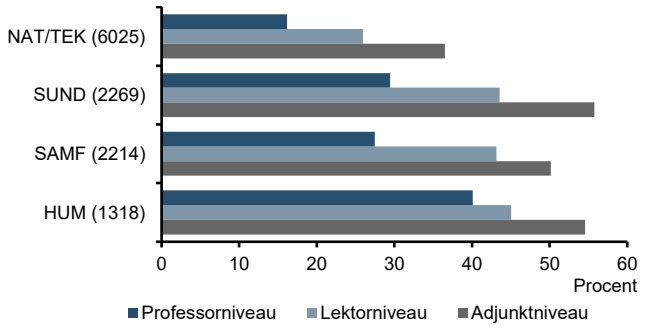
Gender Inequality: Denmark Is Losing Talent

It is in Denmark's interest that the most talented researchers have good conditions for testing their research ideas. It is therefore regrettable that the gender balance in Danish research remains skewed, especially in the natural and technical sciences and at the professor level. This means that Denmark does not recruit broadly from the entire pool of research talent and misses out on talent, diversity and new perspectives. A number of recent analyses offer possible explanations for the absence of women in Danish research and point to several courses of action. DFIR welcomes this debate and presents data on gender inequality at Danish universities to support it.

The gender balance in Danish research lags behind several EU countries. New figures from the European Commission show that the share of women in research positions at universities in the other Nordic countries is between 2.5 and 7 percentage points higher than in Denmark[1]. The skewed gender distribution in Danish research is seen across all universities but is especially pronounced at the professor level and within the natural and technical sciences, which together employ more researchers than the other fields combined, cf. Figure 1.

Figure 1 Share of women by position level and main fields. 2022. Percent.



Note: Figures in parentheses indicates total number of academic staff
Source: Ministry of Higher Education and Science. and calculations

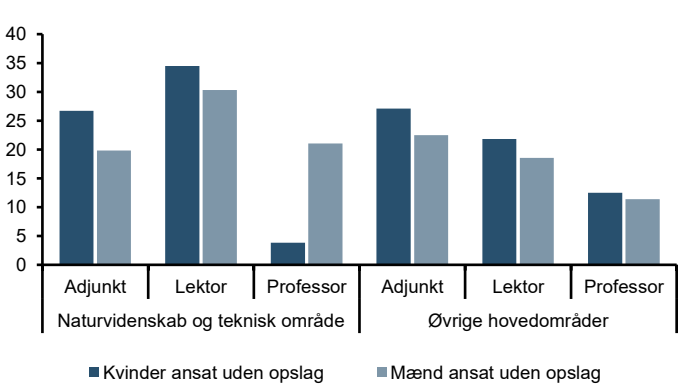
The share of women in professor positions has increased on average by 0.8 percentage points per year over the past decade. If this trend continues, women will not constitute half of all professors until 2055. In the natural and technical sciences, this point will not be reached until after 2080. It takes time to change the gender balance, since it depends on natural turnover in the research workforce. But it also depends on whether women are passed over in open competition, bypassed through direct appointments or simply do not apply.

Women win more in open competition with men
Women who apply for assistant or associate professorships in open competition with men are more often offered the position than their male colleagues. In 2022, women across all fields had a success rate of 16 percent, compared to 10 percent for men applying for the same positions. Women thus had a 60 percent higher chance of being hired. For professor positions, however, men and women had the same success rate of 23 percent. The difference is particularly pronounced in the natural and technical sciences. Here, the success rate for women was 15 percent in 2022, compared to 8 percent for men, meaning women had nearly 90 percent higher odds of being hired.

This may indicate that the qualified female applicants constitute a more selective group of particularly strong candidates, several of whom are clearly the best qualified. Others argue that this reflects that hiring committees actively try to improve gender balance when choosing between qualified candidates of different genders.

Are women bypassed through direct appointments?
The slow improvement in the gender balance may also be due to women not being given the chance to apply if positions are filled without an open call. At the assistant and associate professor levels, women are more often hired without a job posting than men. At the professor level, the pattern is reversed in the natural and technical sciences, cf. Figure 2.

Figure 2 Share hired through direct appointment or designation, by gender, position level and main fields. 2022. Percent.



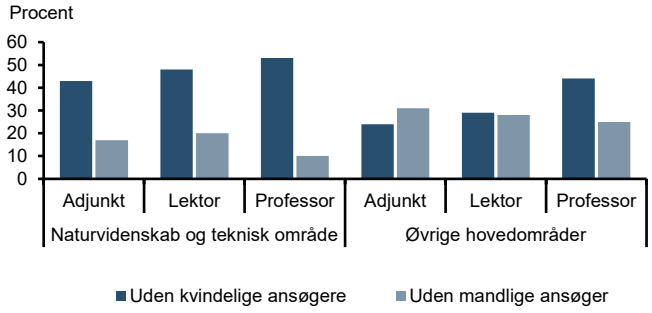
Kilde: Ministry of Higher Education and Science, and calculations

DFIR has previously pointed out that the use of direct appointments limits open competition[2]. This is reinforced by the significant concentration of competitive research funding among male grant recipients. Women made up just 34 percent of grant recipients, received 29 percent of the

grants and only 22 percent of the total grant volume in the period 2004–2016.[3]

Fewer women than men apply for academic positions
The slow improvement in gender balance may also stem from women not applying for positions. In 2022, 48 percent of advertised professor positions received no applications from women, compared to 19 percent with no male applicants. At the associate professor level, the figures were 38 percent and 24 percent, and at the assistant professor level 36 percent and 22 percent. Again, the imbalance is strongest in the natural and technical sciences, cf. Figure 3 on page 2. At all three levels, however, the share of positions without female applicants has declined by 12 to 14 percentage points since 2013.

Figure 3 Share of positions without female and without male applicants, by position level and main fields. 2022. Percent.



Kilde: Ministry of Higher Education and Science, and calculations

We do not know the exact share of female and male researchers at the PhD, assistant and associate professor levels in Denmark who actually apply for open positions at the next career stage. Still, the gender distribution at each level and among qualified applicants suggests that female associate professors apply for professor positions to the same extent as their male colleagues, while female researchers at PhD and assistant professor levels are considerably less likely to apply than their male colleagues.[4]

Complex causes of gender imbalance
There are structural, institutional and cultural explanations for gender imbalance in the research world, including the fact that fewer women apply for academic positions[5].

One recent study finds that women are more often than men asked to take on administrative tasks, such as service on councils, committees and boards. These tasks are essential for institutions but not career-enhancing for the individual. They reduce the time available for research and thereby limit the opportunity to qualify for higher positions. Women also more often accept these tasks without negotiating counterbalances. To the extent that men take on service tasks, more of them do so with minimal effort. Women also more frequently experience social scrutiny regarding clothing, language and similar aspects in student evaluations. Women therefore spend more time preparing teaching than men[6].

Another study finds that the persistent narrative of the solitary research genius does not resonate with most women's motivations. Women more often prefer collaborative research environments, which may help explain why some seek careers in other sectors[7].

A third study shows that the working environment at Danish universities is marked by hierarchical culture, widespread use of short-term contracts, small research groups and competitive hiring processes. Several female PhD students have also experienced derogatory language, unwanted sexual comments or physical contact[8]. An international study recently found that women leave academia due to a "toxic" work environment[9]. It may also be the case that many women feel they can better fulfil their professional ambitions outside the university.

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Notes

[1] European Commission. (2024) SHE FIGURES 2024: Gender in Research and Innovation: Statistics and indicators
[2] DFIR. (2019). Karrierer i forskningen.
[3] DEA. (2019). Koncentration af konkurrenceudsatte forskningsmidler.
[4] I 2022 var 32 og 35 pct. af ansøgningerne fra kvalificerede ansøgere til stillinger på adjunkt- og lektorniveau indsendt af kvinder. Kvinder udgjorde dog godt 50 pct. af de fuldførte ph.d.'er og 43 pct. af de ansatte på adjunktniveau samme år. Til stillinger på professorniveau var 35 pct. af ansøgningerne indsendt af kvinder, mens kvinder dog også udgjorde 35 pct. af de ansatte på lektorniveau. Forskelle i kønsfordelingen for ansatte på et karrieretrin og ansøgere på næste trin, som indikator for forskelle i søgeadfærd, skal dog betragtes med varsomhed, da ansøgere kan indsende flere ansøgninger og komme fra eksterne miljøer.
[5] DEA. (2021). Diversitet i forskning og forskningsfinansiering
[6] Järvinen, M. & Mik-Meyer, N. (2024). Køn og karriere i akademia. København.
[7] Schjelderup, J., Pers, M., Stuhr, E.B. & Jensen, L.V. (2023). Paving the path for a diverse STEM-research environment. Villum Fonden og Novo Nordisk Fonden
[8] VIVE. (2024). Sexisme og karriereforløb på danske universiteter
[9] Sadik, S. (2023). Toxic workplaces are the main reason women leave academic jobs. Nature (623).