GENDER QUOTAS IN SCIENCE ARE COUNTERPRODUCTIVE: Evidence from Italy and Spain

Gender quotas on scientific committees are failing to get more women hired or promoted, while forcing those who have overcome the glass ceiling to spend more time in meetings than on research. These are among the findings of a study by Manuel Bagues, Mauro Sylos-Labini and Natalia Zinovyeva, to be presented at the annual congress of the European Economic Association in Mannheim in August 2015.

On the principle that male evaluators can be biased against women, many countries have introduced a quota of at least 40% women on hiring and promotion committees in academia. Analysing data on approximately 100,000 applications in all scientific disciplines and 300,000 individual evaluation reports, the researchers find that:

- There is no evidence that a larger presence of female evaluators on evaluation committees has a positive effect on the chances of success of female candidates.
- The presence of women on evaluation committees can even have a negative impact on the chances of success of female candidates. This is partly due to the impact on male evaluators’ voting behaviour, who become tougher on female candidates.
- There is no evidence that committees with a relatively larger proportion of women promote better candidates.

The authors conclude:

‘A higher representation of women on scientific committees neither increases the number of promoted female candidates nor helps to promote candidates that prove to be more productive in the future.’

‘What’s more, gender quotas might be detrimental for the few female researchers who have managed to overcome the glass ceiling. They have to spend a disproportionate amount of time sitting on evaluation committees at the expense of the time they can devote to their own research.’

More...

The under-representation of women in academia remains a cause for concern among universities and policy-makers around the world. In Europe, women account for 46% of PhD graduates, 37% of associate professors and only 20% of full professors.

The slow progress made by women has been sometimes attributed to the existence of gender discrimination by the (mostly male) evaluators who decide on hiring and promotions. In recent years, a number of countries have introduced quotas requiring the presence of at least 40% of women (and men) on all scientific committees – for example, Finland in 1995, Spain in 2007 and France in 2015. Many universities and institutions all around the world, including the European Commission, also have internal guidelines requiring the presence of a minimum number of women on committees.

In principle, if male evaluators are biased against women and female evaluators are more objective, the introduction of gender quotas for hiring and promotion committees
should improve the chances of success of female applicants. But despite the increasing popularity of gender quotas, the empirical evidence on their effectiveness has been so far scarce, typically based on small samples and rather inconclusive.

This paper analyses the role of evaluators’ gender in academic evaluations using the exceptional evidence provided by two large-scale randomised natural experiments in two different countries, Spain and Italy. In these countries, in order to be promoted at the university level to an associate or full professorship, researchers are required first to obtain a qualification granted by a centralised committee at the national level.

During the period considered, the members of these committees were selected through a random draw from a pool of eligible professors. The random assignment of evaluators to committees makes it possible to estimate consistently how variations in the gender composition of committees, unrelated to the quality of male and female applicants, affect their chances of success.

The database includes information on approximately 100,000 applications in all scientific disciplines and 300,000 individual evaluation reports. The study finds no empirical support, either from the average in the two countries or from the majority of sub-samples analysed, to suggest that a larger presence of female evaluators on the evaluation committees has a positive effect on the chances of success of female candidates.

In some cases, the presence of women on evaluation committees can even have a negative impact on the chances of success of female candidates. For example, in the Italian sample, an additional woman on the committee decreases the chances of success of female candidates by 2.6 percentage points. Evidence from individual voting reports suggests that this is partly due to the impact of having women on the committee on male evaluators’ voting behaviour, who become tougher on female candidates.

The researchers also examine whether committees with a relatively larger proportion of women promote better candidates, using as a proxy of candidates’ quality their research output before the evaluation and during the following five years. They do not observe any significant difference in the observable quality of candidates who have qualified on committees with different gender compositions.

These findings have direct policy implications for countries and institutions that encourage female representation on hiring and promotion committees. A higher representation of women on scientific committees neither increases the number of promoted female candidates nor helps to promote candidates that prove to be more productive in the future.

Moreover, gender quotas might be detrimental for the few female researchers who have managed to overcome the glass ceiling. They would have to spend a disproportionate amount of time sitting on evaluation committees at the expense of the time they can devote to their own research.

ENDS
Manuel Bagues (Aalto University, Finland), Mauro Sylos-Labini (Pisa University, Italy) and Natalia Zinovyeva (Aalto University, Finland)

Contact:
Manuel Bagues, Assistant Professor at Aalto University, Helsinki
Phone: (+358) 504104065
Email: manuel.bagues@aalto.fi