## Research Similarity and Women in Academia

## **Abstract**

We investigate the extent to which research similarity between senior and junior researchers influences promotion in academia and study its implications in terms of gender diversity among faculty. Using data on the universe of job applications for tenure-track assistant professor positions in economics in Italy and exploiting NLP techniques (i.e., document embeddings) on the abstract of each publication of the scholars in our dataset, we propose a novel measure of research similarity, which capture closeness can in research methodologies or policy relevance between candidates and members of selection committees. We show that the level of similarity is strongly associated with the winning probability. Moreover, while there are no gender differences in average similarity, maximum similarity with members of the selection committee is lower for female candidates. This gender gap disappears when similarity is calculated only focusing on female members of the committee. The results suggest that similarity bias in male-dominated environments can have implications for gender and research diversity.

This paper is joint work with Alessandra Casarico e Debora Nozza (Bocconi University)

## Piera Bello

Assistant professor of Economics at the University of Bergamo and Research Associate at ZEW-Leibniz Centre for European Economic Research