# Gender and Coauthorship at the Federal Reserve Board

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The views expressed in this paper do not necessarily reflect those of the Banque de France or the Eurosystem.

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Discussion of « Gender and Coauthorship at the Federal Reserve Board »



#### SOME STRIKING FIGURES FROM THE PAPER

- Rich dataset combining 3170 FRB working papers (1971-2018) and 663 FRB economists (2003-2018).
- In total, 2007 authors over the 2003-2018 sample (internal + external).
- Women = 22% of total authors and 26% of FRB authors.
- Productivity (average # of WP) is higher for male FRB economists (4.47) than for female economists (3.63).
- > 23% of FRB economists (150) have no publications over the sample.
- In 2007, out of the FRB economists with at least 3-years of experience (307), ≈15% of women have 0 papers vs. ≈7% of men. These percentages are inversed for economists with 11 or more papers.
- Co-authorship is increasing over time: single-authored WP passed from 57% pre-1990 to 26% since 2010. WP with 3 authors from 6% to 27%.

#### **MAIN QUESTIONS AND TAKEAWAYS**

- Q : is there any evidence of gender bias in the distribution of coauthorship groupings at the FRB?
- A : YES. The observed distribution of co-authorship grouping across genders is different from the predictions based on random assignment.
- Q : is the lower observed productivity of women a conditioning variable or an outcome of co-authorship interactions?
- A : DIFFICULT TO SAY. The paper suggests that gender bias in coauthorship selection may result in lower productivity among women. But alternative explanations due to other driving factors are not explored.
- Overall, a very interesting paper and an ambitious work programme for the next few years to explore more in depth gender bias at the FRB using this database!

## **COMMENT 1: COAUTHOR OR NOT COAUTHOR?**

- Factors other than gender may influence the choice of a coauthor and are not yet explored in the paper. A few examples:
  - At the beginning of the career: PhD supervisor(s) is/are often coauthor(s) => 85% of full professors are men!
  - Other possible factors: gender of FRB hierarchy or teams (for policy papers); prob. of publishing in good journals (for research papers), correlated with a measure of the "quality" of coauthors (university background, reputation in the field, publication records...).
  - Ex: taking the ranking of FRB economists on RePEc as proxy of "quality", it is worth noting that, out of 182 registered FRB authors, 19% are women, <u>but only</u> <u>14% of authors ranked in top 10% are women, and only 12% in top 5% (4!).</u>
- It would be good to explore some of these characteristics in the paper and depart from the hypothesis of random choice of coauthors in the models.
- The ultimate question should be: after taking into account these characteristics of my pool of potential coauthors, do final co-authorship groupings are rational or (gender) biased?
- In the next slides, I focus on observed differences in productivity among genders at the FRB and sketch some possible policy recommendations.

## **COMMENT 2: A GENDER PRODUCTIVITY PROBLEM?**

- One striking fact is that 38% of FRB women economists hired between 2003 and 2012 did not write any paper in the first 3 years of career (vs. 19% of men). After 6 years: 19% vs. 8%.
  - This suggests that low productivity, at least at early stage of career, may be a factor that conditions later co-authorship decisions.
  - There are two possibilities: either this low productivity can be explained by observable factors (differences in university background, previous working experiences, maternity leaves, research vs. policy allocated time), or is driven by unobservable factors (women are found to be less confident than men in the early stage of career (Zenger and Folkman, 2019), lack of female role models in most central banks...).
  - Low female productivity can be party corrected by effective and proactive HR actions. To understand the relative role of observable vs. unobservable factors in driving the low observed productivity of women is hence important to be able to design the best policy responses.

## COMMENT 3: ARE COAUTHORS' DECISIONS (REALLY) GENDER BIASED?

> A sketch of a possible complementary analysis of FRB co-authorship:

- Test whether some observable factors can explain differences in productivity among FRB economists in early stage of their career.
- E.g., cross-section regression of productivity of FRB economists on some plausible factors and interaction of those factors with gender. Ex: economists who obtained their PhD from top economic department are more productive than others and women economists come on average from less-prestigious universities.
- Assess whether these factors can also explain persistence in productivity gaps among sexes in later stage of career and whether this low productivity is associated to lower "quality" of authors on average.
- Show that, once you take into account these possible factors that can influence co-authorship choices beyond gender *per se*, co-authorship grouping decisions are still gender biased?

## **COMMENT 4: WORK WITH HR!**

- Include in the paper some policy recommendations and work with HR to design effective policies to reduce gender gaps.
  - According to the results on the reasons of lower FRB female productivity and gender bias in co-authorship, help designing good HR policy responses to eliminate or mitigate F/M gaps.
  - A few non exhaustive examples: hiring more senior women researchers to create positive role models; favoring female interventions by imposing quotas in research conferences and policy panels; promoting reconciliation between personal and professional life; proposing a mentorship program to new joiners to enhance self confidence; modifying promotion and recruiting procedures if needed (e.g. ECB)...
  - Examples of actions ongoing at the BDF: appointment of a workplace equality officer devoted to diversity and gender equality and of a group of "equality ambassadors"; creation of an active diversity network (735 members); increase in the number of women in positions of responsibility (% women in senior positions is now 26, up from 21% in 2012, with 30% target in 2020); experimental mentoring program to support employees in their career paths; signature of a charter in 2019 on the principles of diversity in the events and publications of the BDF.