

# Gender Gaps in Representation and Productivity in the Federal Reserve System

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Federal Reserve System

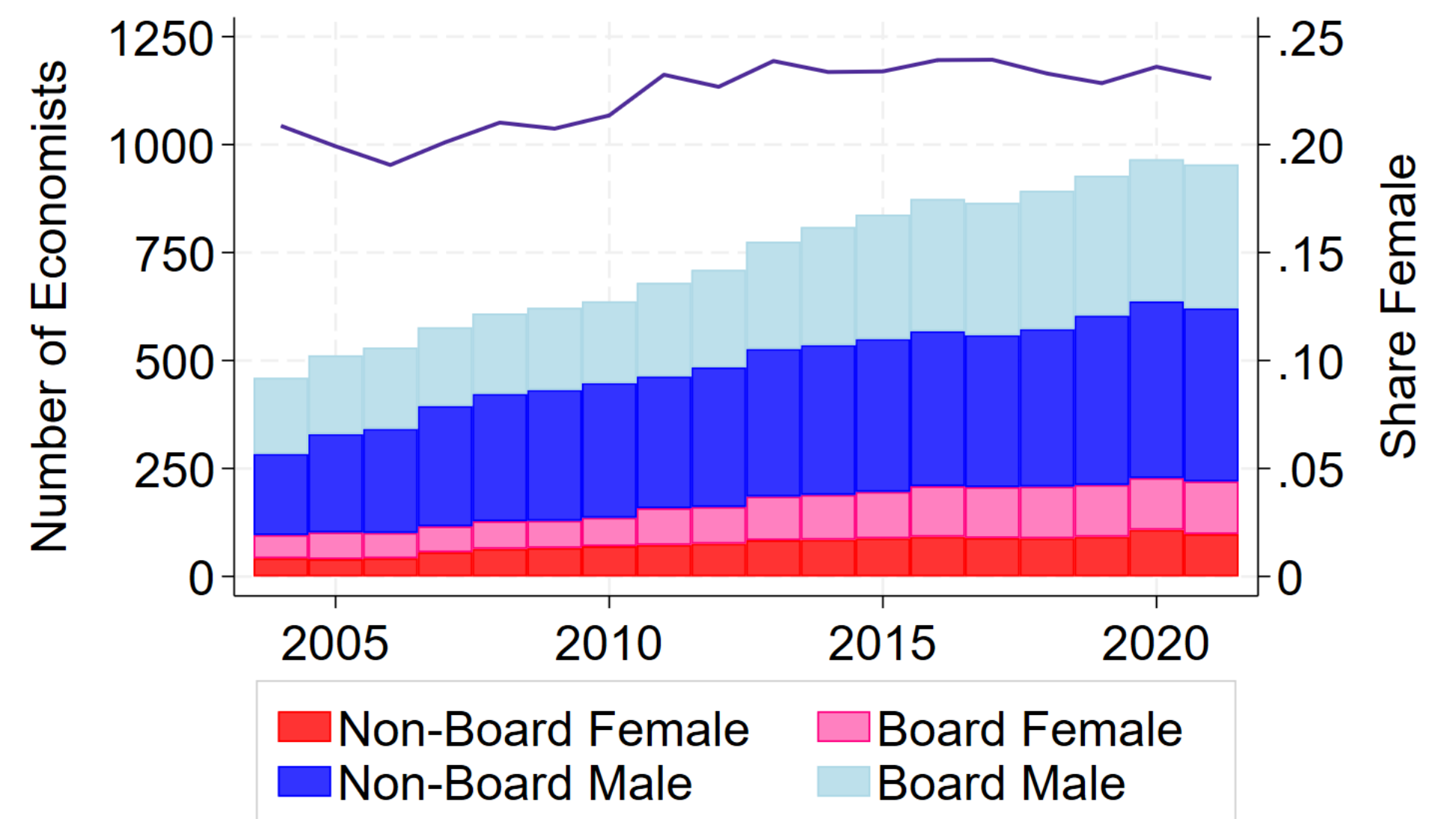
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## Motivation

- Substantial recent evidence suggests that women face systematic barriers in the economics profession
- Research documenting “stalled progress” of women in economics largely focuses on academia
- This paper investigates women’s representation, and research and policy productivity in the Federal Reserve System

## Why Focus on Policy Institutions?

- Policy institutions rank among the largest and most productive research departments
- Greater diversity among System economists brings varied perspectives, backgrounds, and experiences to policy making.

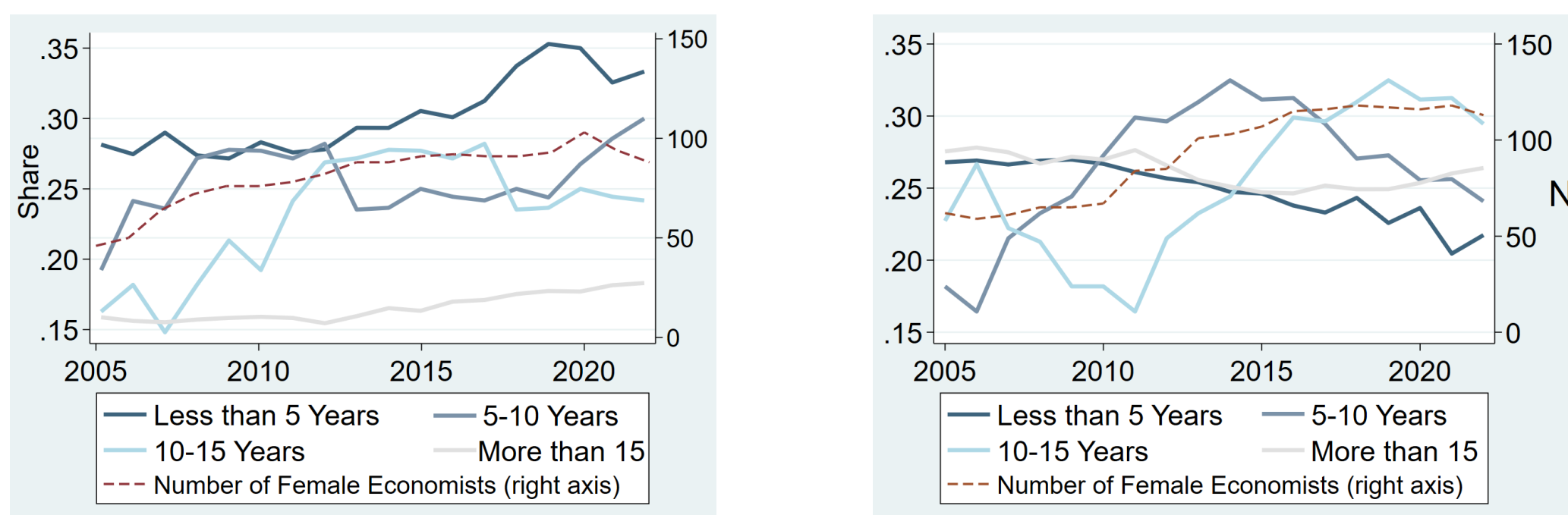


FR System shows little increase in female representation over time, similar to academia.

## Data: Gender and Career Progression

- Data from public websites of 12 regional Banks and Board
  - Historical website captures from Wayback Machine
  - Gender tagging of System economists and coauthors
  - 1550 economists: 1200 men and 350 women
- Data from RePEc on working papers, publications, System research, and policy reports

### Female Share of Economists, by Years since PhD

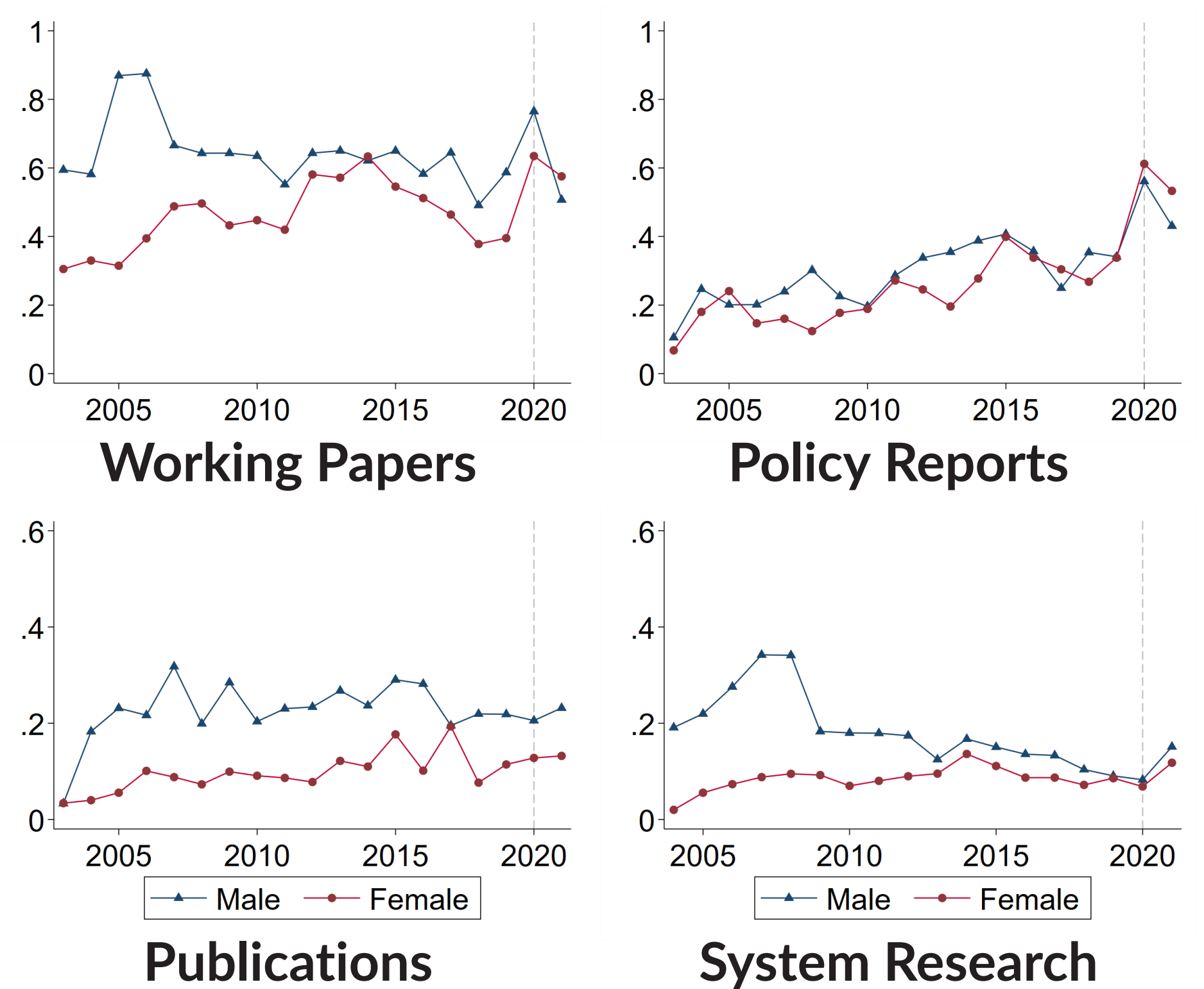


Federal Reserve Banks:  
"Leaky pipeline" pattern

Federal Reserve Board:  
No "leaky pipeline"

## Data: Productivity over Time

### Average Paper Production per Year, by Gender



Large gender gap for working papers and publications.  
Gap is nearly absent for policy reports.

## Main Results: Gender and Productivity

	1 Total Papers	2 Working Papers	3 Peer-reviewed Publications	4 System Research	5 Policy Reports
Female	-4.87*** (1.23)	-2.67*** (0.40)	-0.31** (0.11)	-0.31 (0.35)	-0.19 (0.51)
Tenure	1.65*** (0.48)	0.67*** (0.09)	0.02 (0.04)	0.12 (0.10)	0.33* (0.17)
Policy Reports		0.08 (0.06)	0.01 (0.01)	0.07 (0.05)	
System Research		0.48*** (0.11)	-0.00 (0.03)		0.15 (0.16)
Working Papers			0.43*** (0.02)	0.21*** (0.07)	0.08** (0.04)
Obs.	1,536	1,536	1,536	1,536	1,536
R-squared	0.36	0.36	0.77	0.35	0.26

$$Papers_i = \alpha + \beta_1 Female_i + \beta_2 Tenure_i + \beta_3 X_i + Institution_i + \epsilon_i$$

- Output measures show complementarities:** Individuals who produce more working papers also produce more peer-reviewed publications, System research, and policy reports.
- Publications gender gap persists when controlling for WPs.**

## Main Results: Productivity per Year

	1 Total Papers	2 Working Papers	3 Peer-reviewed Publications	4 System Research	5 Policy Reports
Female	-0.11*** (0.03)	-0.10** (0.04)	-0.06*** (0.01)	-0.02 (0.01)	0.03 (0.02)
Tenure	0.01 (0.01)	-0.00 (0.00)	0.01* (0.00)	0.00 (0.00)	0.01 (0.01)
Policy Reports		0.09*** (0.01)	0.01* (0.01)	0.05** (0.02)	
System Research		0.16** (0.07)	0.06* (0.03)		0.11* (0.06)
Working Papers			0.20*** (0.04)	0.05** (0.02)	0.06* (0.03)
Obs.	14,635	14,635	14,635	14,635	14,635
R-squared	0.14	0.07	0.17	0.12	0.18

$$Papers_{it} = \alpha + \beta_1 Female_{it} + \beta_2 Tenure_{it} + \beta_3 X_{it} + Institution_i + Year_t + \epsilon_{it}$$

- Complementarities among outputs also exist year-by-year.**
- Encouraging working paper production, especially among women, may reduce gaps and raise all types of productivity.**

Note: The views expressed in this paper are solely those of the authors and do not necessarily reflect the views of the Federal Reserve Board of Governors, the Federal Reserve Bank of Dallas, or the Federal Reserve System.