

Women in Economics

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Federal Reserve Board

13 January 2020

Disclaimer. The views in this talk are mine and are not necessarily those of the Federal Reserve Board. Thanks to Amanda Bayer for inspiring many of the ideas and to Kathy Bi and Jackie Blair for being my test audience.

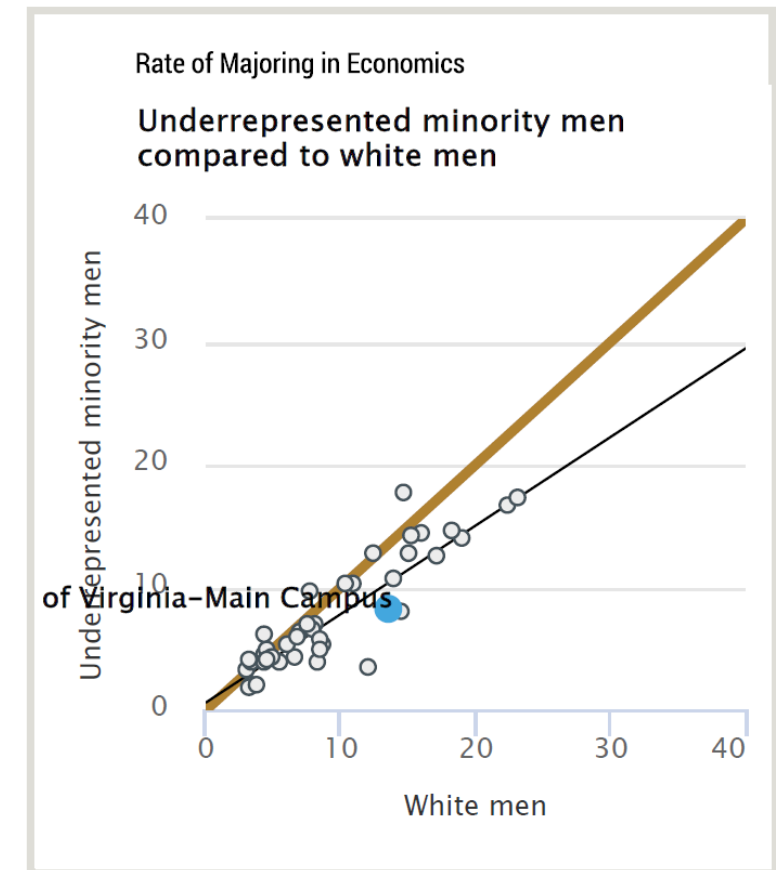
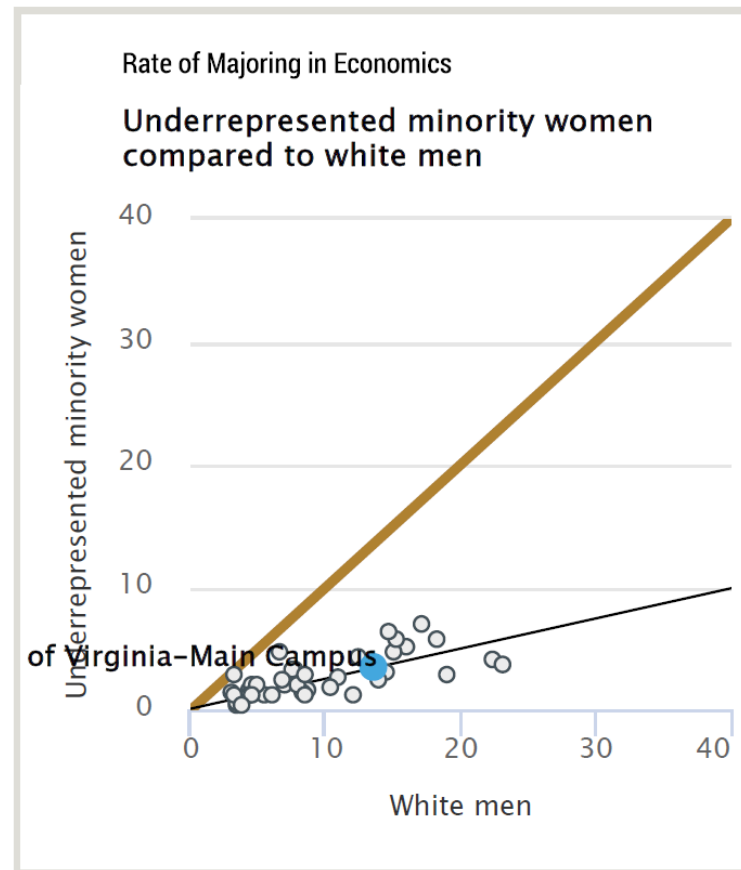
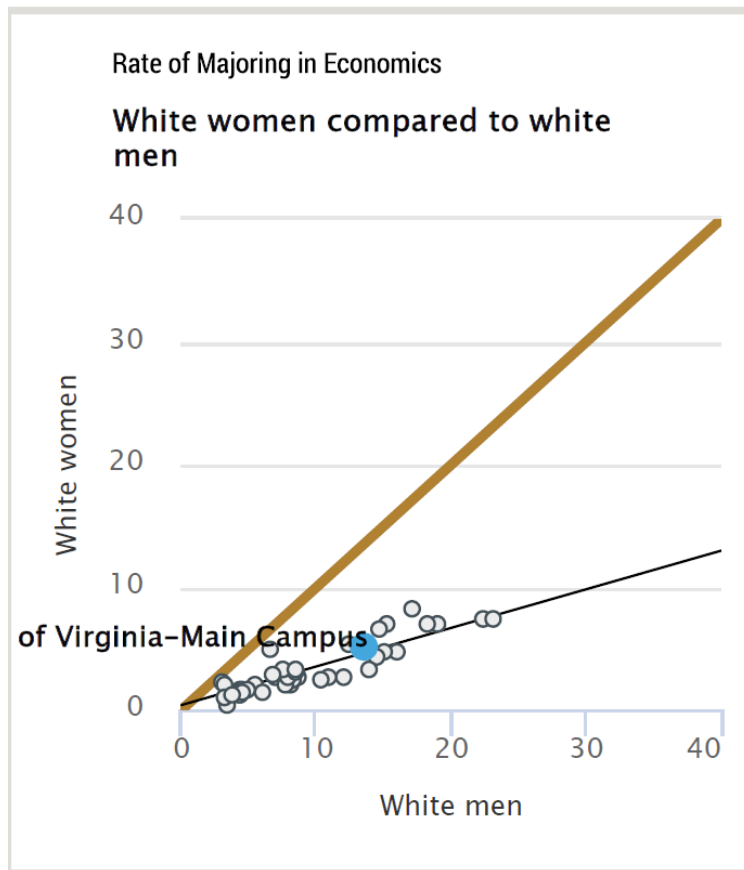
Women in Central Banking Panel, AEA 2020



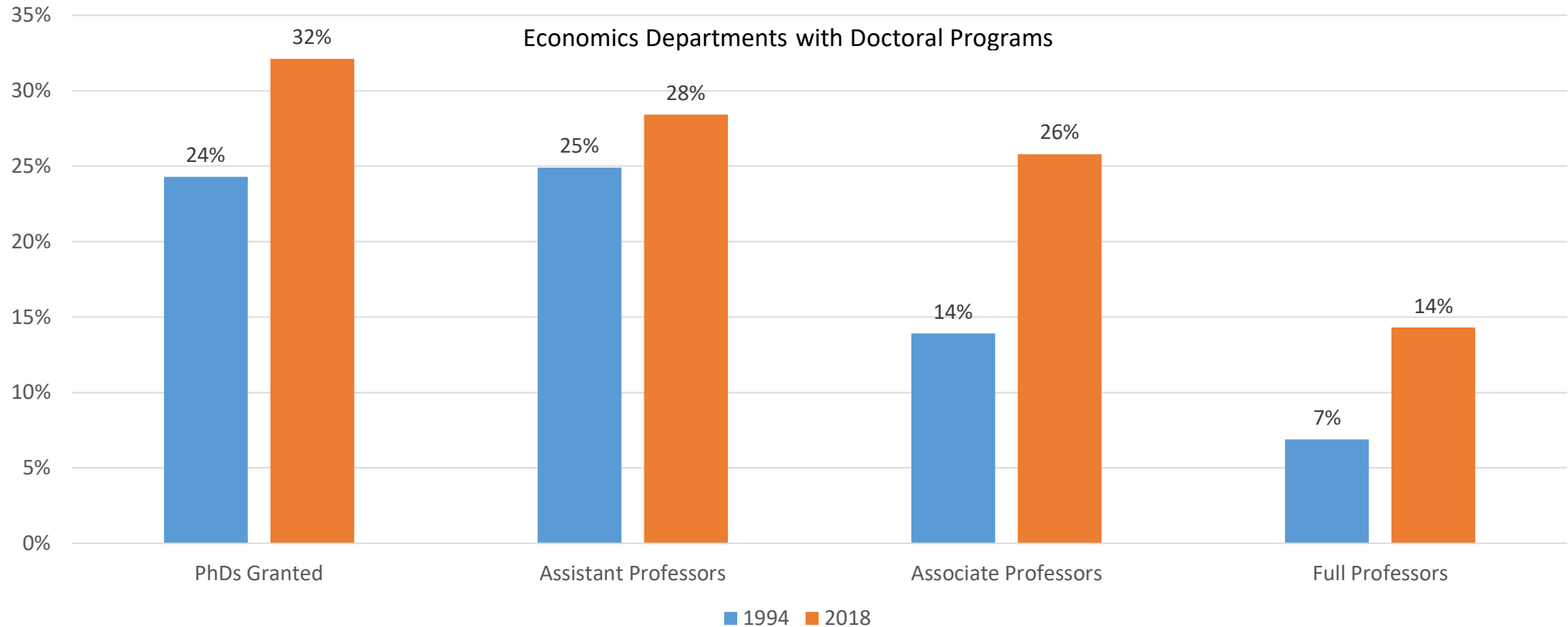
Statistics

White men are a disproportionate share of economics majors at UVA (data: 2011-15)

— Fitted values for all U.S. institutions — Proportionate representation (45-degree line) ● Selected institution ○ Universities with top 40 economics Ph.D. programs

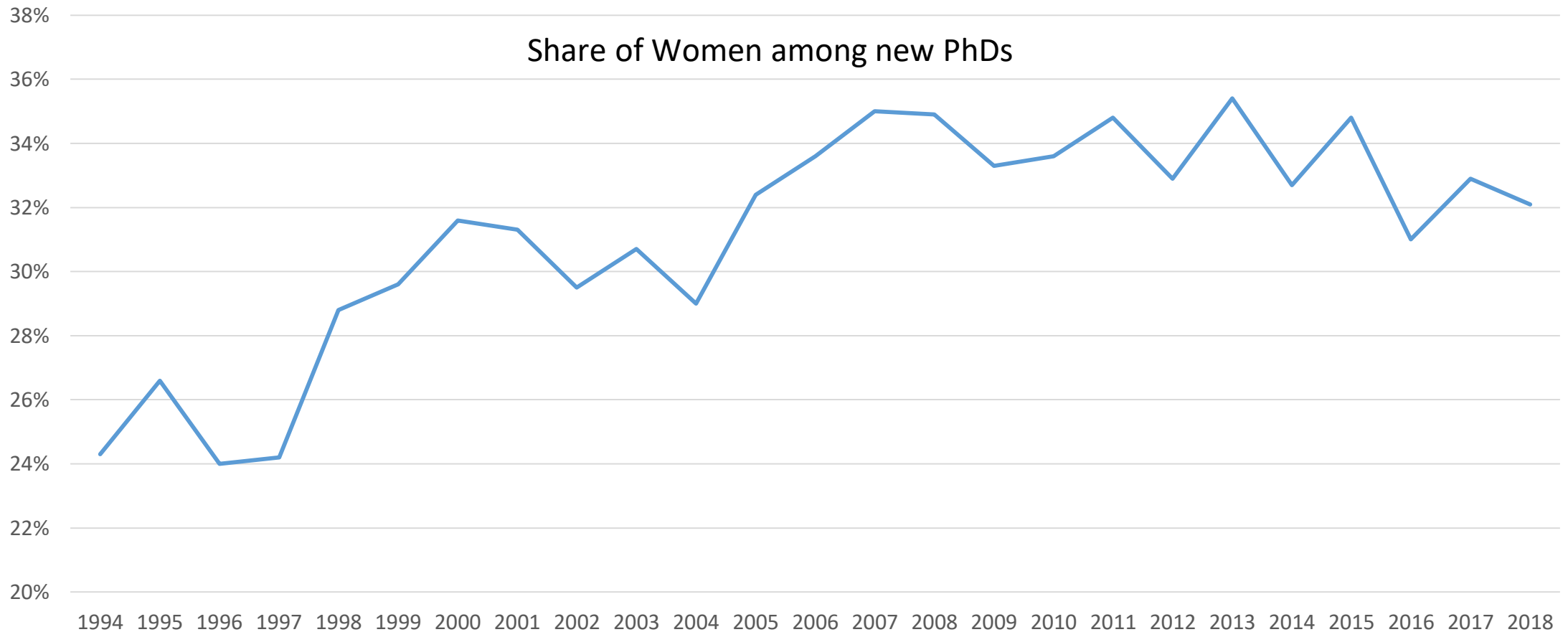


Women are more under-represented as they advance in their careers



Source. Committee on the Status of Women in the Economics Profession Annual Report, 2018.

Progress for new PhDs has stalled since 2006



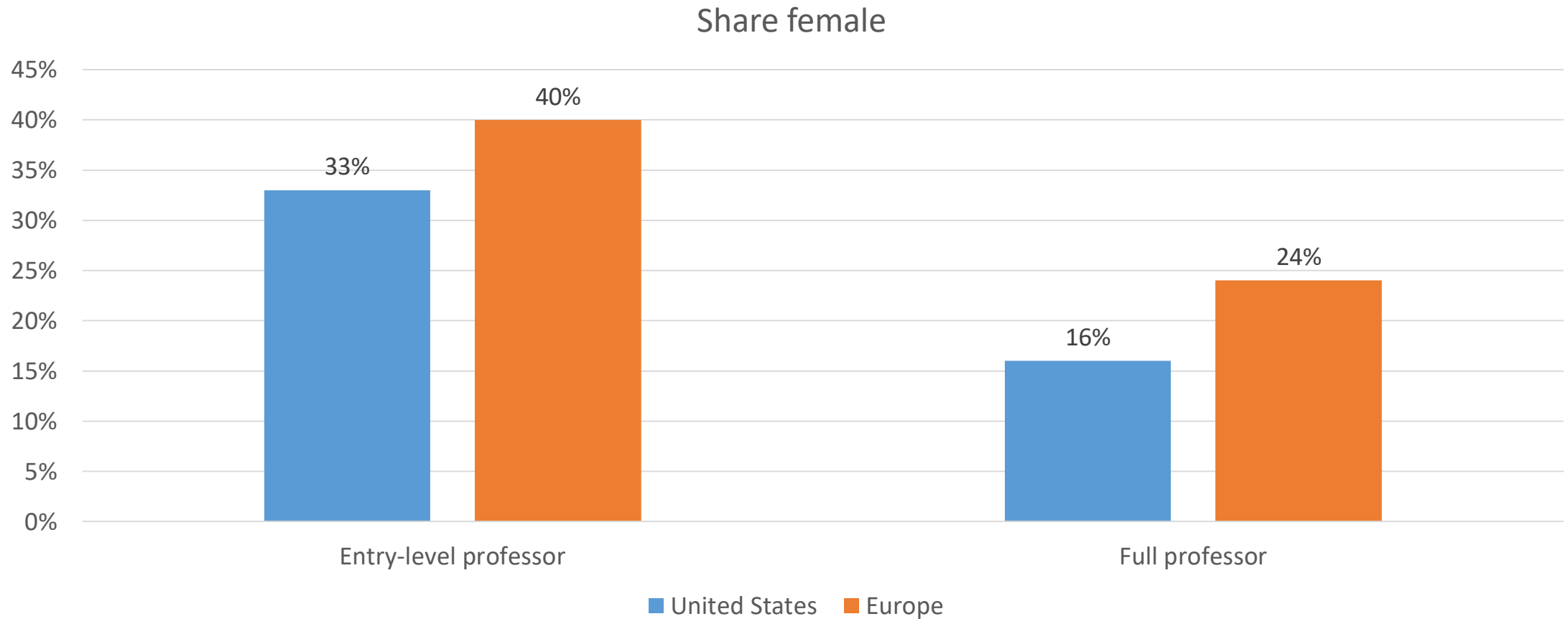
Source. Committee on the Status of Women in the Economics Profession Annual Report, 2018.

Black, Latinx, and American Indian numbers are abysmal

Recipients of PhDs in Economics from US Institutions, 2016-17 Academic Year	Number
All women	380
U.S. Citizen or permanent resident	148
American Indian or Native Alaskan	0
Black or African-American	7
Hispanic or Latina	4

Source. Committee on the Status of Minority Groups in the Economics Profession Annual Report, 2018

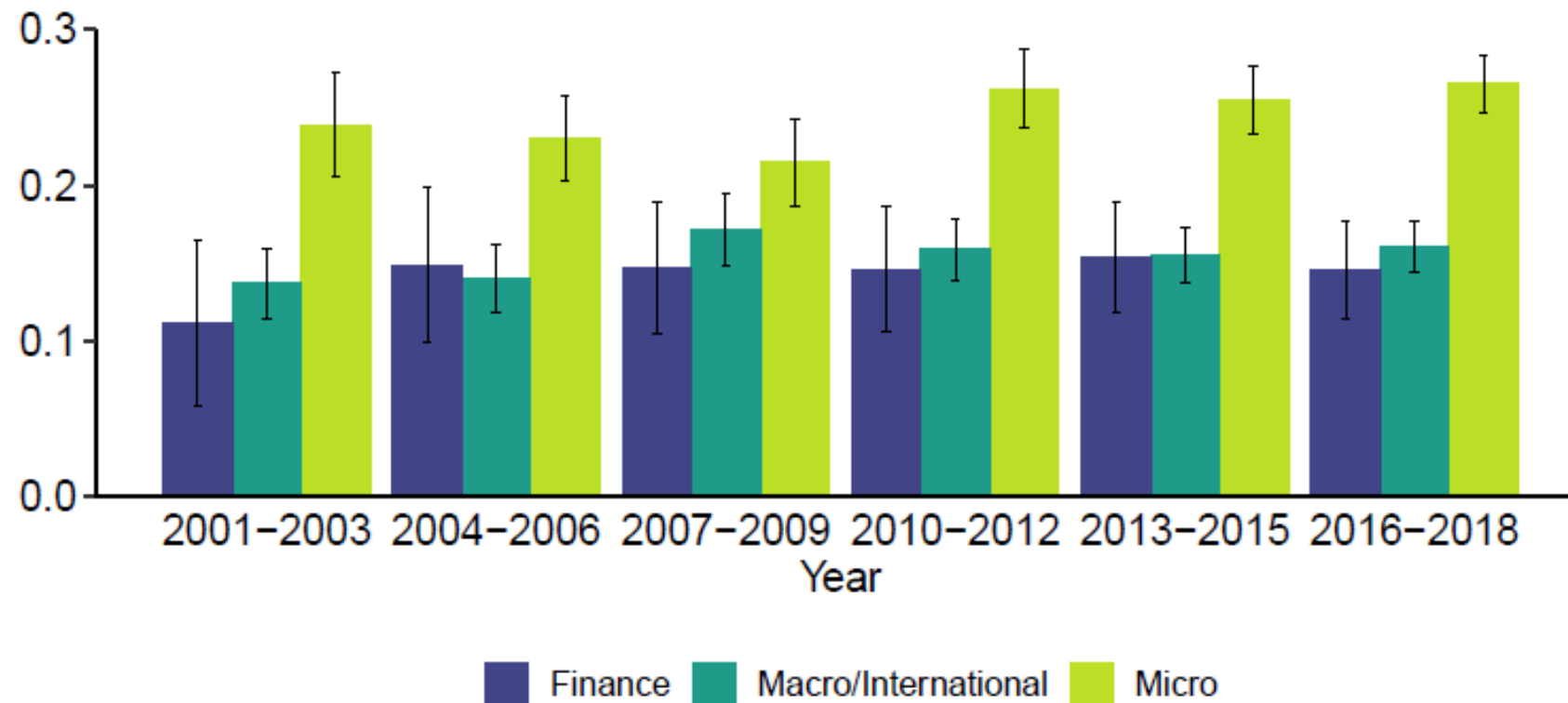
US looks worse than Europe



Source. Auriol, Friebe, Weinberger, and Wilhelm (2019) on behalf of European Economic Association.

Women are especially under-represented in finance, macro, and international economics

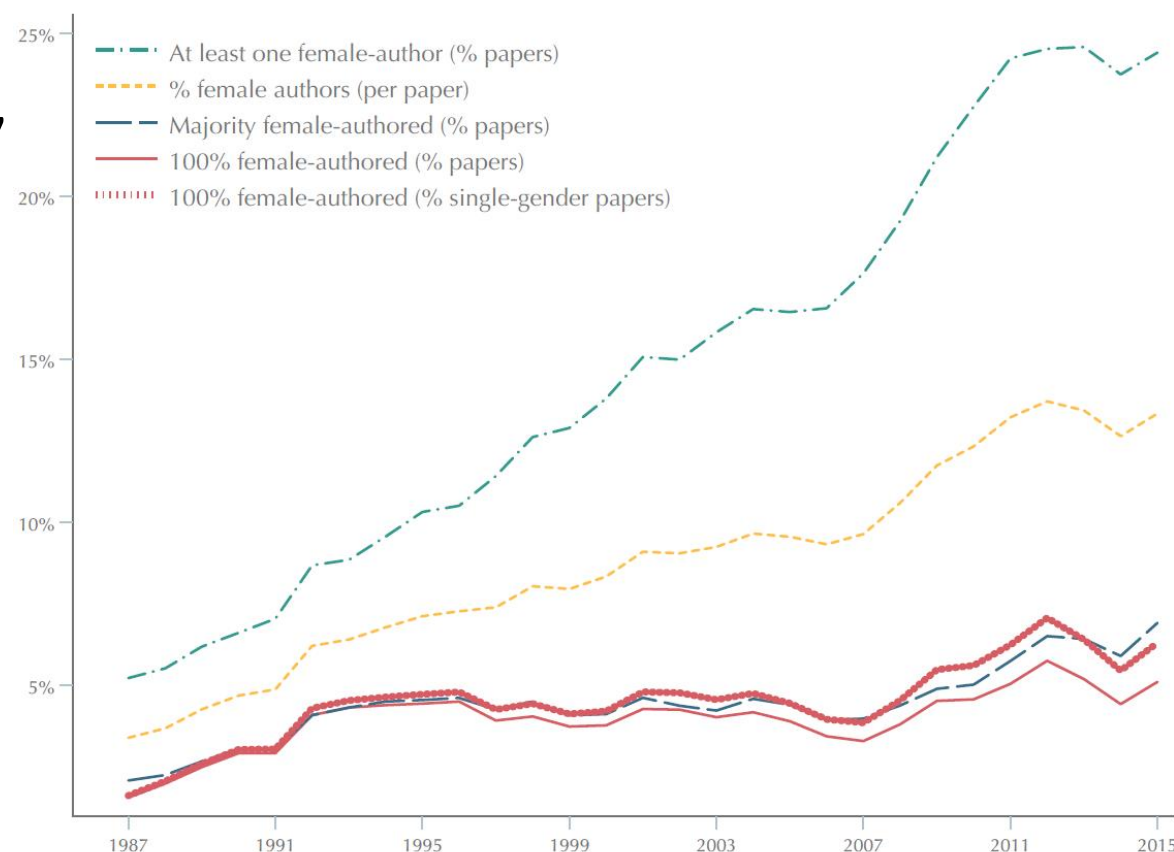
Share of authors of papers presented at the NBER Summer Institute who are female



Source. Chari and Goldsmith-Pinkham (2018).

Female authors are under-represented at top journals

- The share of papers in the *AER*, *QJE*, *JPE*, and *ECA* written only by women rose from 1% in 1987 to 6% in 2015
- The *QJE* did not publish a single exclusively female-authored paper between 2015-17
- In several recent years, *ECA* and the *JPE* did not either



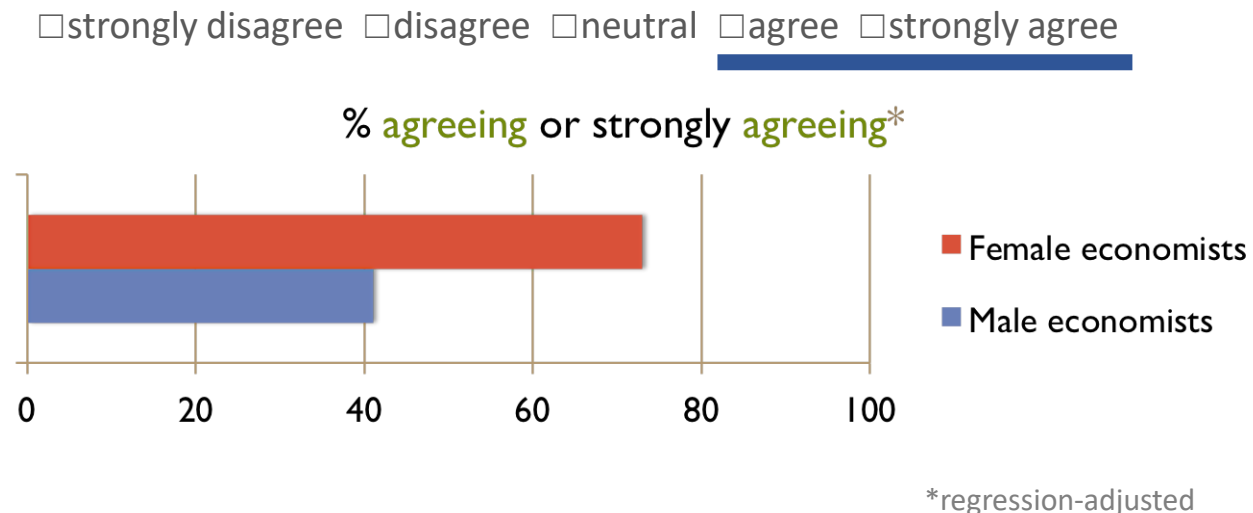
Source. Erin Hengel, "Publishing while female: Are women held to higher standards? Evidence from peer review."

Why does it matter?

Men and women have different views on the economy

From a survey of economists:

“The distribution of income in the US should be made more equal.”



Source. May, McGarvey, and Whaples (2013).

Economic policymaking is shaped by personal experiences

The Making of Hawks and Doves*

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University of Michigan

June 28, 2019

Abstract

We argue that central bankers' personal inflation experiences significantly alter their inflation forecasts, votes, and speeches. First, we show that inflation experiences have a direct impact on Federal Open Market Committee members' inflation forecasts in their semi-annual Monetary Policy Reports to U.S. Congress. Second, members with higher inflation experiences are significantly more likely to cast a hawkish dissent. Over the FOMC's voting history since March 1951, an increase in a member's experience-based inflation forecast by one within-meeting standard deviation raises the probability of a hawkish dissent by about one third, and decreases the probability of a dovish dissent also by about one third. Third, higher inflation experiences also predict a significantly more hawkish tone in speeches. Finally, aggregating over all FOMC members present at a meeting, the average experience-based forecast helps predict the federal funds target rate, over and above conventional forward-looking Taylor rule components. Our findings indicate strong and long-lasting effects of personal inflation experiences even among monetary-policy experts, and point to the importance of FOMC members' selection.

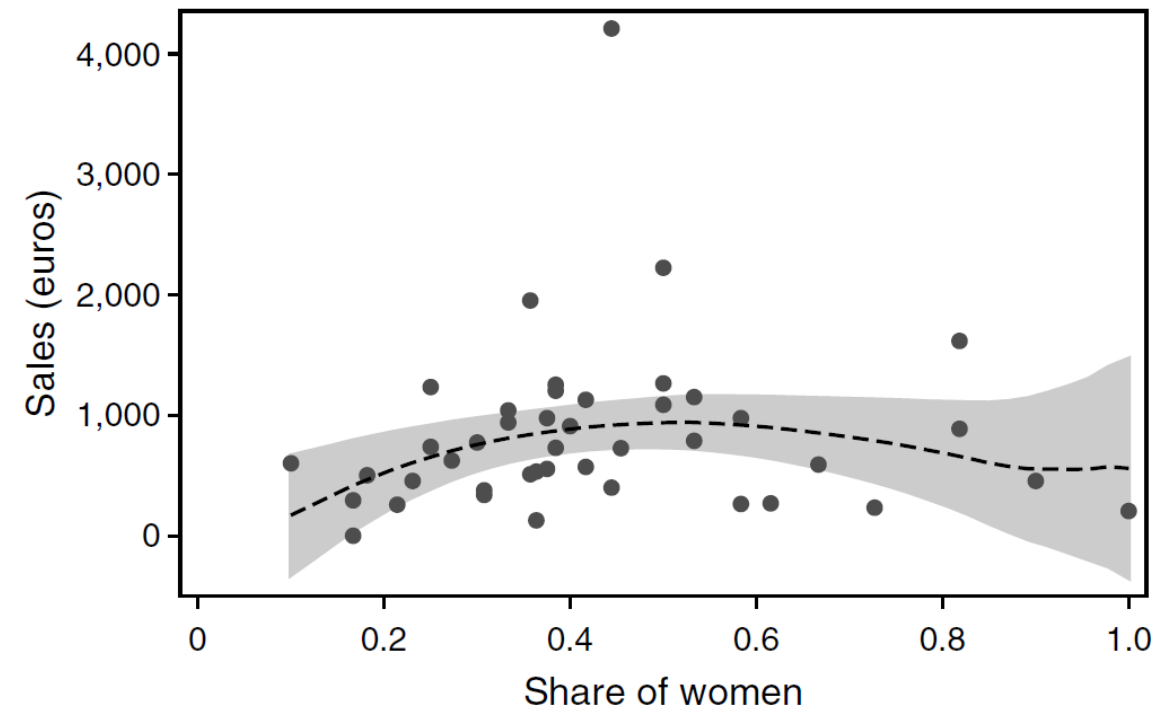
Diverse teams conduct more influential research

- A study of 2.5 million scientific papers written by U.S. based researchers from 1985 to 2008 found:
 - Papers with author teams of different ethnicities and in different locations were published in higher-impact journals and cited more often.

Diverse teams are more profitable

- An undergraduate business school class in the Netherlands required its students to work in teams to start a venture.
- Teams with an equal gender mix performed better in terms of sales and profits than male dominated teams.

Figure 1 Relation Between Share of Women and Sales



Note. Kernel = Epanechnikov, degree = 1, bandwidth = 0.21, p -width = 0.32.

Mechanisms

Preferences and ability

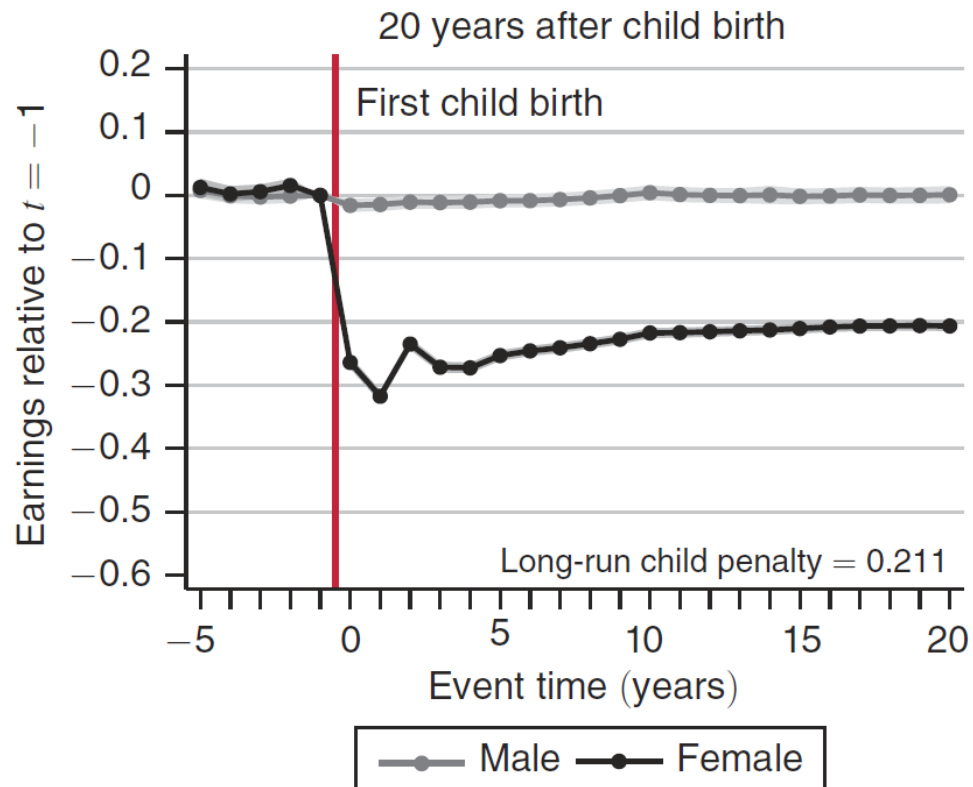
- Economists often start with the presumption that markets are efficient and so any differences across groups must result from differences in preferences or ability.
- Renee Adams, a professor at Oxford who researches gender in finance (among other issues), shared comments that she has gotten on her work (next slide). Her summary:
 - **It's always the woman's fault!**

Typical comments on papers on gender...

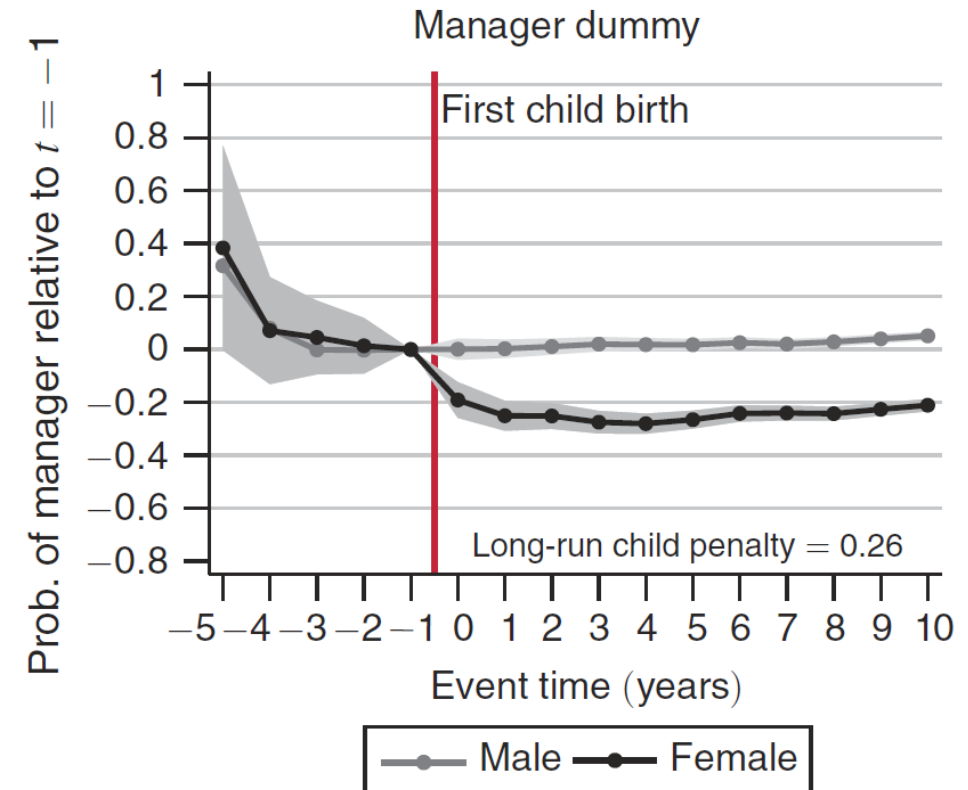
- Paintings by women sell for less:
 - “For example, it is possible that female artists were less famous because they had to take “time off” to take care of kids (and this then affects price).” JPE referee report
 - “Maybe art made by males is simply better! I know this a tricky statement but we are scientists...”
 - “After your presentation, [name suppressed]’s network comment kept me thinking about what possibly could better explain the gender gap. Then I remembered a paper that shows fundamental differences in the way males and females network, what risks they are taking, and how they perform.”
- Labor force participation explains board leadership patterns:
 - “Based on my observations of my wife and her friends, women seem to prefer to stay home.” JFQA referee report
- Women hold fewer board seats in STEM firms:
 - “Women prefer less math-intensive jobs because they are more social.”
- Women hold fewer board seats in Finance:
 - “Women are more risk-averse and shy away from competition.”
 - “Women do not like math.”
- Female finance professors earn less money:
 - “they are not as productive as the male professors.”

Women's careers are more affected by child birth

Panel A. Earnings



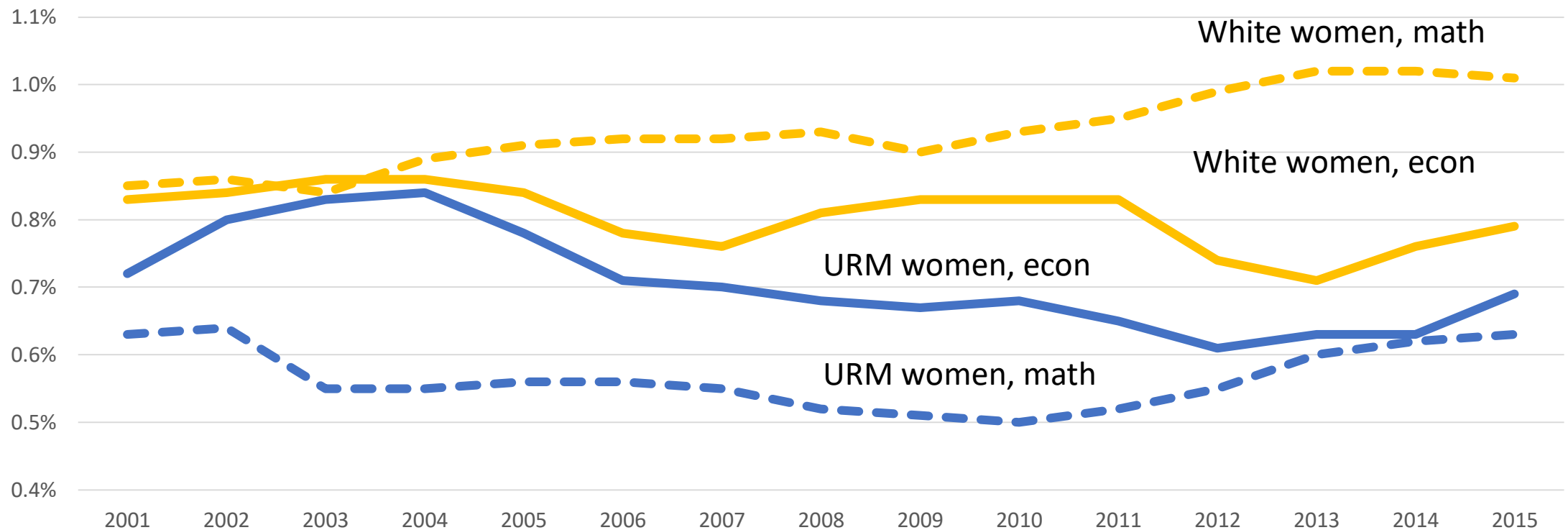
Panel B. Probability of being manager



Gender-neutral parental leave widens the gap

- From Antecol, Bedard, and Stearns, “Equal but Inequitable: Who Benefits from Gender-Neutral Tenure Clock Stopping Policies?,” *AER*, 108(9):2420–2441.
 - Gender-neutral clock stopping policies decrease female tenure rates in top-50 economics departments by 19 percentage points while increasing male tenure rates by 17 percentage points.
 - Primary mechanism driving the results appears to be that men publish more in top-5 journals after the policies are implemented, but women do not.
 - Because women do not similarly increase their productivity, fewer are granted tenure in their first job.
 - We find no evidence that gender-neutral clock stopping policies reduce the fraction of women who eventually earn tenure in the profession.

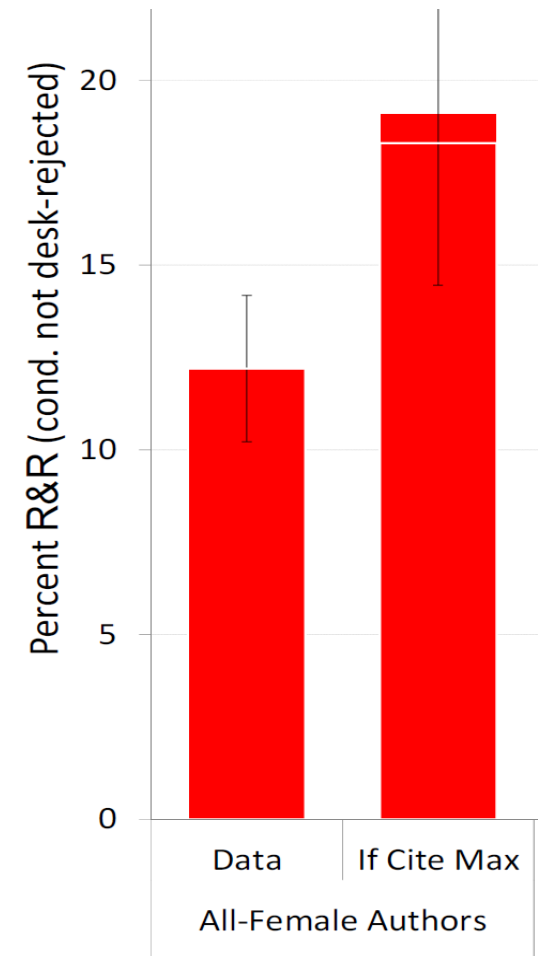
The share of white women majoring in math has increased in the past 15 years



Source. Bayer and Wilcox (2017) from IPEDS data on graduates from all 4-year, public or private not-for-profit institutions.

Female-authored papers are cited more

- A study of editorial decisions and referee recommendations at 4 major journals found that:
 - Accepted female-authored papers were cited 25% than observably similar male-authored papers
- Suggests a higher bar for female papers than would be implied by citation maximization



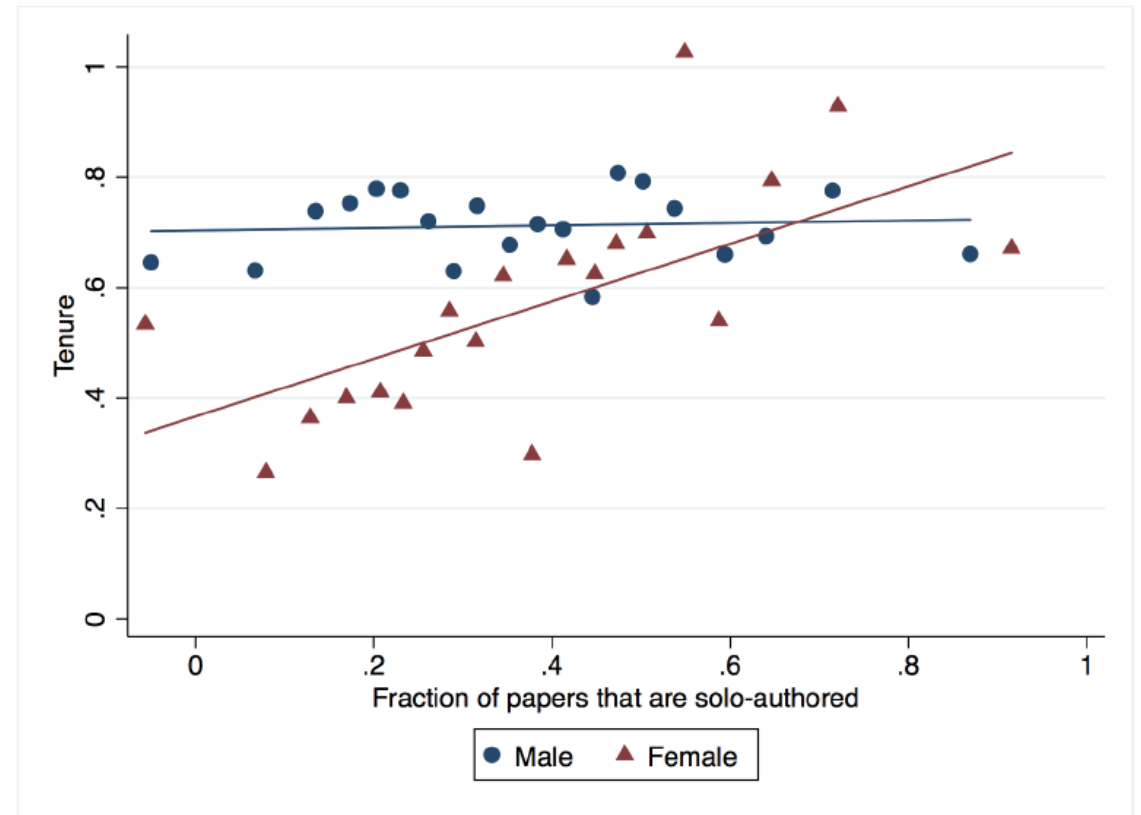
Female-authored papers are written better

- From Hengel (2019),
“Publishing while female.”
 - Using readability scores, I find that female-authored papers are 1-6% better written than equivalent papers by men
 - The gap widens during peer review
 - Tougher editorial standards are most obviously consistent with authors’ observed choices.



Women get less credit for co-authored work

- From Sarsons, Gërxhani, Reuben, and Schram (2019), “Gender Differences in Recognition for Group Work,” conditionally accepted, *JPE*:
 - Men are tenured at roughly the same rate regardless of whether they co-author or solo-author.
 - Women are less likely to receive tenure the more they co-author, especially when they co-author with men.
 - Stereotypes surrounding a task and the evaluators’ gender are factors.



Women do more service work

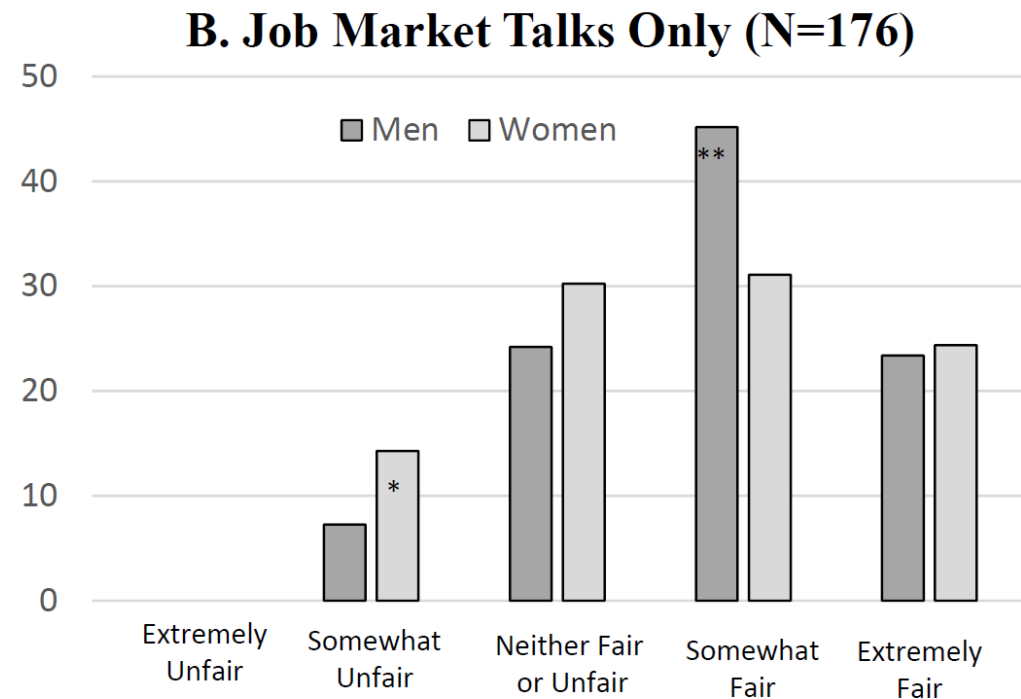
- From Babcock, Recalde, Vesterlund, and Weingart (2017). “Gender Differences in Accepting and Receiving Requests for Tasks with Low Promotability.” AER, 107(3):714-747.
 - Examines the allocation of a task that everyone prefers be completed by someone else
 - Finds evidence that women, more than men, volunteer, are asked to volunteer, and accept requests to volunteer for such tasks.
 - Beliefs that women, more than men, say yes to tasks with low promotability appear as an important driver of these differences.

Female and nonwhite instructors are evaluated more harshly by students

- From Boring (2017), “Gender biases in student evaluations of teaching,” *Journal of Public Economics*, 145:27-41.
 - Male students express a bias in favor of male professors.
 - Men are perceived by both male and female students as being more knowledgeable and having stronger class leadership skills (which are stereotypically associated with males), despite the fact that students appear to learn as much from women as from men.
- (Unfairly) poor teaching evaluations mean that women have to spend more time on their teaching relative to men.
- Many professional associations have endorsed a statement that these evaluations are problematic (www.asanet.org/studentevaluations)

Women face more hostile audiences in seminars

- From Dupas, Modestino, Niederle, and Wolfers (2019)
 - Collected data on questions asked of speakers in 588 seminars at 32 institutions
 - Women are asked on average 3.5 more questions, particularly by male faculty
 - Women are more likely to be asked patronizing or hostile questions



Don't be this person

- “Despite warning the room that she was running out of time, the questions continued. Nearing the end, one male professor insisted on an answer to a previous question with which he was unsatisfied, continued to speak over her for a time when she tried to move on, and instigated an entire corner of the room to talk over her. There was no time left at the end for Q&A, and despite cheery responses and confidence throughout interruptions, this closing “question” (disruption) seemed **especially demoralizing**.”

Source. Dupas, Modestino, Niederle, and Wolfers (2019).

Toxic attitudes toward women persist

- From Wu (2019), “Gender Bias in Rumors among Professionals,” *REStat*
 - Collected 100,000 posts on Econ Job Market Rumors that discuss women (female posts) and 300,000 that discussed men (male posts)
 - Female posts on average contained 42% less academic or professional terms but 196% more personal or physical terms than male posts
 - True for women at all levels of the profession
 - A female post has a significantly higher chance of triggering a deviation from professional topics than a male post
 - Recent publicity about EJMR has not substantively changed behavior on the site

AEA professional climate survey

- In the winter of 2018-19, the AEA surveyed its members on their views on and experiences in the profession
- 10,406 economists responded, for an overall response rate of 23% (33% among current members)
- The responses revealed that women, nonwhite men, LGBTQ individuals, individuals with disabilities, and Muslims have worse experiences in the profession and are subject to more harassment
- Nonwhite women suffer pervasive sexism and racism
- <https://www.aeaweb.org/resources/member-docs/final-climate-survey-results-sept-2019>

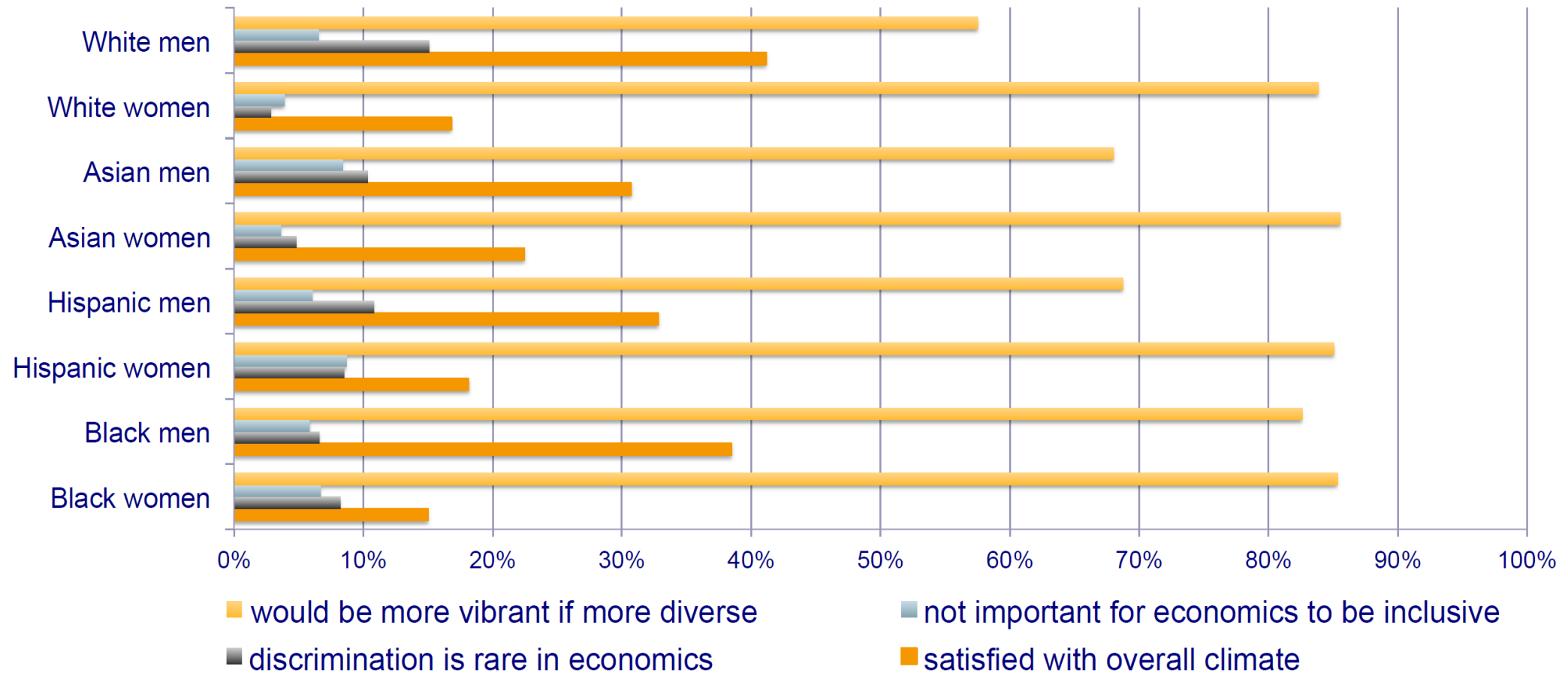
Selected climate survey responses by gender

	Men	Women
Satisfied with overall climate in economics	40%	20%
Feel valued within the field of economics	46%	25%
Ever been discriminated against or treated unfairly on the basis of sex	4%	48%
Experienced discrimination or unfair treatment in service assignments	9%	43%
Experienced discrimination or unfair treatment in course evaluations	8%	47%
Witnessed discrimination or unfair treatment on the basis of sex	33%	44%
Not spoken at a conference or seminar to avoid harassment	19%	46%
Felt disrespected by economist colleagues	38%	62%
Another economist or economics student made inappropriate or sexual jokes, remarks, or gestures	13%	43%
Another economist or economics student made unwanted romantic or sexual overtures despite your effort to discourage it	3%	23%

Resources

Widespread agreement: economics has a problem

Views on the economics profession



Percentage agreeing or strongly agreeing

Best practices



Best Practices for Economists

Building a More Diverse, Inclusive, and Productive Profession

Source: <https://www.aeaweb.org/resources/best-practices>

Some representative best practices

1. Conducting research
 - Organize conferences, seminars, and visitor programs that are inclusive.
2. Serving as colleagues
 - Be an effective bystander.
3. Working with students
 - Use outreach to counter stereotypes about economics and close other information gaps.
4. Leading departments and workplaces
 - Conduct promotion, tenure, and annual performance reviews in a transparent and equitable manner.

Diversifying seminar speakers in economics

Diversifying Economics Seminars - Speakers List

URM Economists List: Any economist who is a member of a historically underrepresented racial/ethnic minority group in economics (African American, Hispanic/Latinx, or Native American) is eligible to enroll on this list.

Women Economists List: Any woman economist is eligible to enroll on this list.

LGBTQ Economists List: Any LGBTQ+ economist is eligible to enroll on this list.

Choose Group Association

Women Economists ▼

JEL Code Research Area

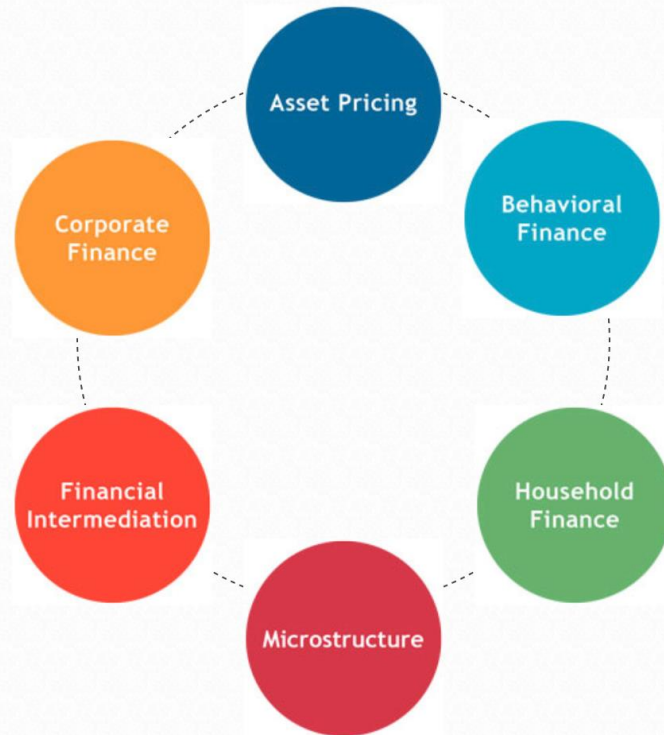
G Financial Economics ▼

If you would like your name added to this list, then

[Click Here!](#)

<https://econspeakerdiversity.shinyapps.io/EconSpeakerDiversity/>

And in finance



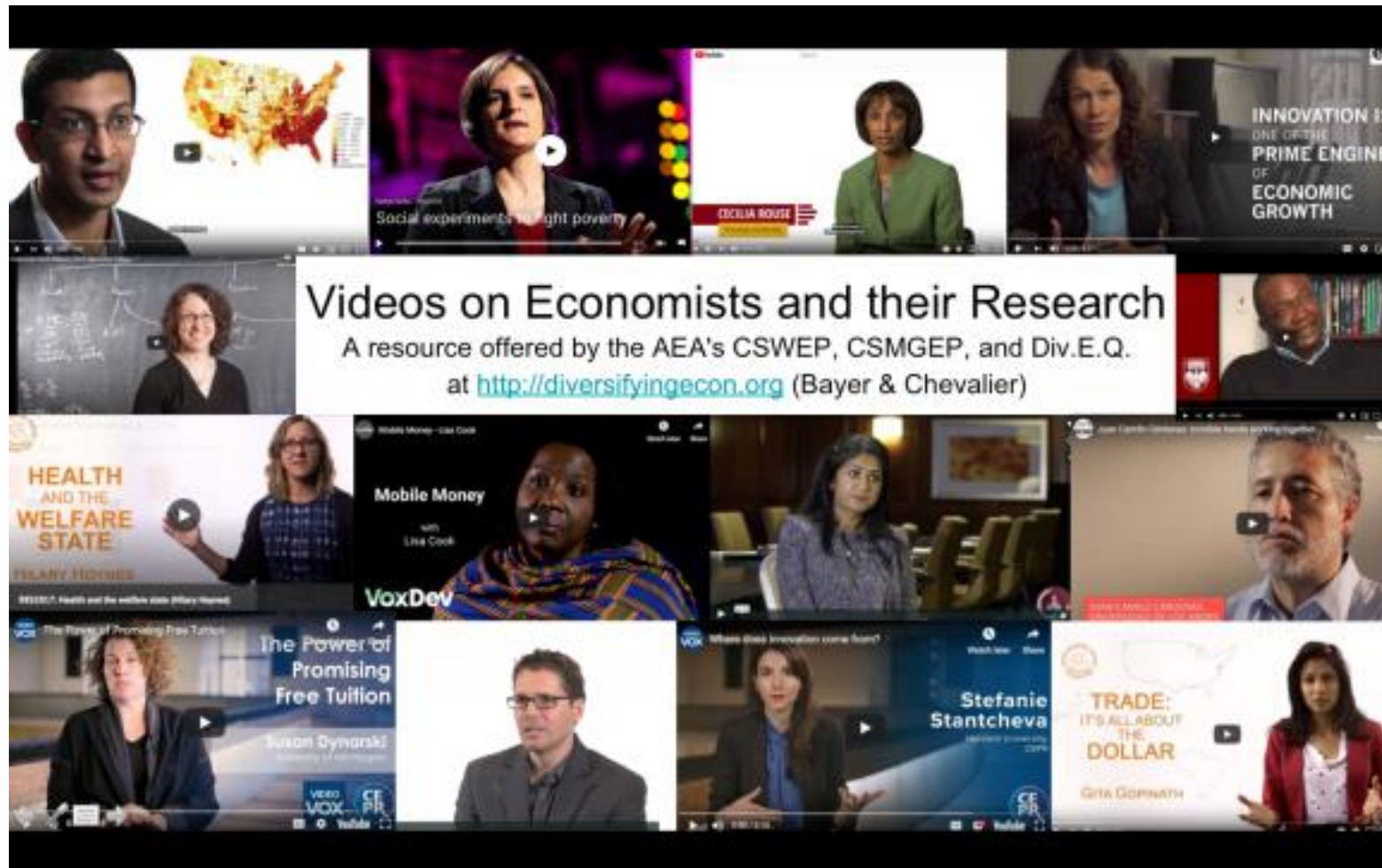
[Click here to add your name to the Women in Finance database](#)

[Click here](#) to view the list of women in finance across all areas

Open to women with PhDs, serving as full time academic faculty or as research staff at non-academic institutions




Engaging students




Sadie Collective for Black Female Undergrads






Diversifying Economics

We address the pipeline and pathway problem in economics and related fields with regards to Black women



Honoring Sadie Alexander

We honor the legacy of Dr. Sadie Alexander, the first African-American to earn a Ph.D in Economics in 1921



Empowering Black Women

We promote community and professional development among through our conferences and events



See Banks, Nina (2005). "Black Women and Racial Achievement: The Economics of Sadie Tanner Mossell Alexander." *Review of Black Political Economy*, 33(1):89-124 for more information on Sadie Alexander.

Opportunities at the Federal Reserve

- Spring RA recruiting deadline for the Board is January 31
- Visit fedeconjobs.org for info on RA positions across the Federal Reserve System
- Contact Quentin Johnson (econoutreach@frb.gov) about Exploring Careers In Economics (save the date coming soon)



Ombudsperson

Provides informal, confidential assistance to individuals who need advice about work-related ethical issues, discrimination, or harassment.

Leto Copeley, AEA Ombudsperson

Contact Form:

<https://www.cjglawfirm.com/aea-contact-form/>

Email:

aeaombuds@cjglawfirm.com

Phone:

919-937-9382



Francine Montemurro

AFA Ombudsperson

ombuds@afajof.org



Reflections

Discrimination has existed for thousands of years

- You are not going to solve these problems overnight
- But there are a lot of things you can do, individually and collectively, that will improve the situation

Discrimination flourishes in discretion

- One of the most important things you can do as an organization is boring and tedious.
- For important decisions:
 1. Write down your process – your goal, criteria, and procedure.
 2. Publicize your process to all stakeholders.
 3. Follow your process.

Be curious

- Explore the resources on the AEA website and the references in this presentation.
- Listen to the experiences of people different from yourself.
- Diversify your Twitter feed – CSWEP; CSMGEP; @LGBTQ_Econ; Div.E.Q.; Sadie Collective; NEAEcon; Lisa Cook; Jennifer Doleac; Claudia Sahm; Jacob Vigdor; Martha Olney; Sue Dynarski; Erin Hengel

Accept that you will make mistakes

- You will say or do things that hurt or offend other people.
- The goal is *not* to never do this.
- The goal is to build relationships with other people where they will tell you, you can discuss it, and you can learn.

Be an ally

- “In the end, we will remember not the words of our enemies, but the silence of our friends.” (Martin Luther King, Jr.)
- There are many valid reasons why bystanders don’t intervene in disturbing situations: shyness, awkwardness, power imbalances
- But there are many ways to be an ally while respecting the obstacles
 - You can tell someone else
 - You can check in with the person afterwards
 - You can change the topic or be a distraction

Take collective responsibility

- Diversity and inclusion is the responsibility of everyone in an organization
 - Women are not responsible for solely solving sexism; minorities are not responsible for solely solving racism.
- Living out the value that it is a collective responsibility
 - Relieves an enormous burden on under-represented groups.
 - Leads to better outcomes for the organization.
- The problem is big: it needs the ideas and creativity of everyone

Thank you!