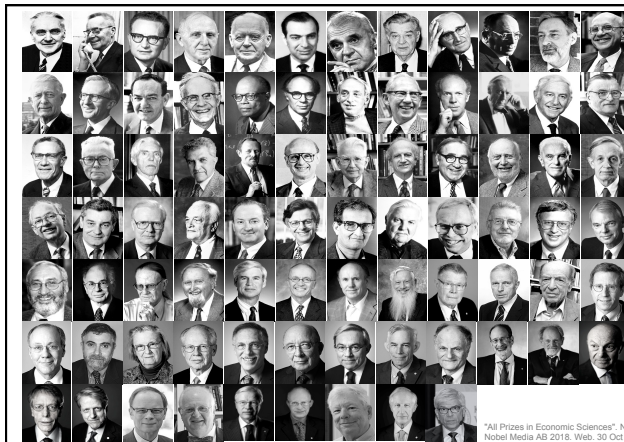


The Economics Profession's Unique Problem with Diversity and Your Unique Opportunity

Amanda Bayer
Swarthmore College, Federal Reserve Board

2019 Women in Economics Conference
Federal Reserve Bank of St. Louis

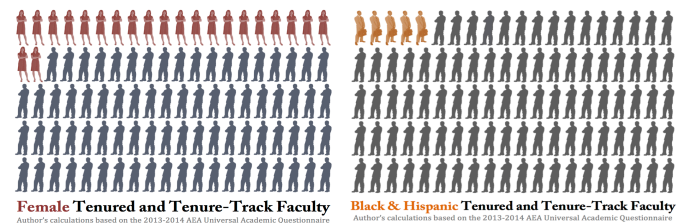
Historically, economists have been a
pretty homogeneous bunch



The 81
Laureates
of the
Sveriges
Riksbank
Prize in
Economic
Sciences
in Memory
of Alfred
Nobel,
1969-2018

"All Prizes in Economic Sciences", Nobelprize.org.
Nobel Media AB 2018. Web. 30 Oct 2018.

Economics professors, by gender and by race/ethnicity



Washington Post

Oscars 2015: No nominations for a single actor of color or female director

The Atlantic

Oscar Voters: 94% White, 76% Men, and an Average of 63 Years Old

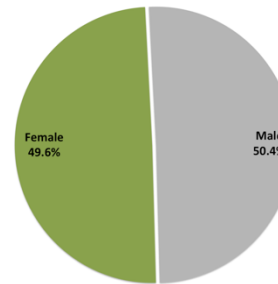
Older and more dude-heavy than just about any place in America and whiter than all but seven states



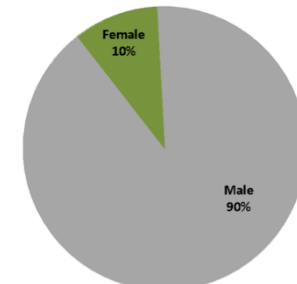
Reuters

Gender and economic knowledge

World Population, by Gender



JSTOR Authors in Economics, by Gender, 1665-2010



2016 World Population Estimates, The World Bank; West, Jacquet, King, Correll, & Bergstrom *PLoS ONE* 2013

Economics is stronger when people with different experiences and different questions contribute



Former Federal Reserve Chair Yellen

“There has been a fair amount of public debate in recent years about the health of the economics profession, prompted in part by the failure of many economists to comprehend the dire threats and foresee the damage of the financial crisis...

Did the economics profession recruit and promote the individuals best able to bring the energy, the fresh insights, and the renewal that every field and every body of knowledge needs to remain healthy?”

"I am committed to fostering diversity and inclusion throughout the Federal Reserve System..."

In my experience, we make better decisions when we have a wide range of backgrounds and voices around the table."



Federal Reserve Chair Powell

Effects on economic knowledge and policymaking

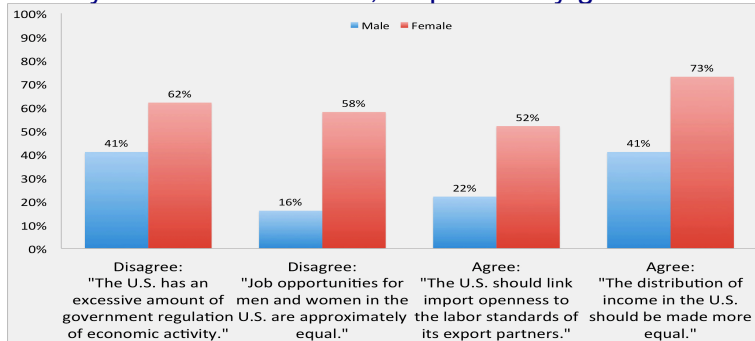
➤ Diversity brings a greater range of insights and perspectives

(e.g., Chattopadhyay & Dufo *Econometrica* 2004; Kamas, Preston & Baum *Feminist Economics* 2008; May, McGarvey & Whaples *Contemporary Economic Policy* 2013; Bordo & Istrefi 2018 NBER working paper; Owen & Temesvary *Journal of Banking & Finance* 2018)

➤ Diverse groups are more innovative than homogeneous groups

(e.g., Woolley et al. *Science* 2010; Hong & Page *Proceedings of the National Academy of Sciences* 2004; Phillips, Northcraft & Neale *Group Processes & Intergroup Relations* 2006; Hoogendoorn, Oosterbeek & van Praag *Management Science* 2013; Levine et al. *Proceedings of the National Academy of Sciences* 2014; Freeman & Huang *Journal of Labor Economics* 2015)

Survey of PhD economists, responses by gender



(May, McGarvey & Whaples 2013)

THE MAKING OF HAWKS AND DOVES*

Ulrike Malmendier[†]

UC Berkeley, NBER and CEPR

Stefan Nagel[‡]

University of Chicago, NBER and CEPR

Zhen Yan[§]

University of Michigan

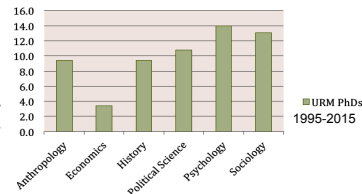
May 1, 2018

Abstract

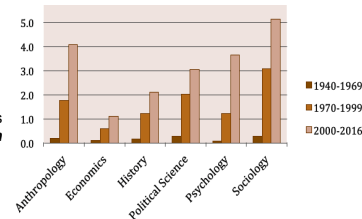
We show that central bankers' lifetime experiences of inflation significantly affect their votes, speeches, and forecasts. Using data on the Federal Open Market Committee's voting history since March 1951, we show that members with higher lifetime inflation experiences are significantly more likely to voice a hawkish dissent. An increase in 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, relative to unconditional dissent probabilities. Members with higher inflation experiences also give speeches with a significantly more hawkish tone. 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. In the early 2000s, we can attribute 50 to 100 bp to lifetime experience effects. Finally, inflation experiences affect FOMC members' inflation forecasts in their Monetary Policy Reports to Congress, suggesting a beliefs-based channel. Our findings indicate strong experience effects even among experts, and point to the importance of FOMC members' selection.

Race and *Racism* across the Social Sciences

Percentage of PhDs earned by members of URM groups



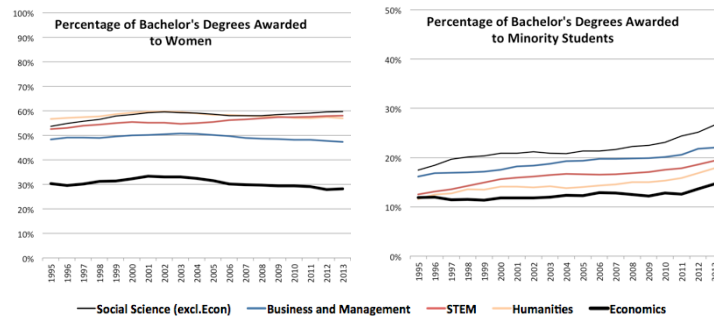
Percentage of academic articles containing the word *racism*



Bayer. *The Minority Report*, AEA, 2018

We have work to do at the undergraduate level

Demographic imbalance in undergraduate majors



Source: Bayer & Rouse (2016). Notes: Authors' calculations using IPEDS, US Dept. of Education, including U.S. citizens and permanent residents only. Social Science excludes economics. STEM is Science, Technology, Engineering, and Math.

Who majors in economics in college?

3.3%

of men

1.7%

of white students

1.1%

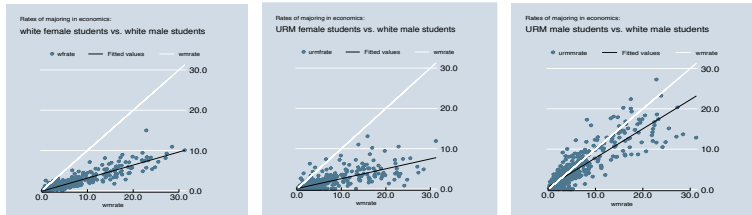
of women

1.2%

of URM students

Source: Bayer & Wilcox (2017). Notes: Authors' calculations using 2011-2015 IPEDS completions data.

Rates at which students graduate with a major in economics, by institution



white women
compared to
white men

URM women
compared to
white men

URM men
compared to
white men

Source: Bayer & Wilcox (2017). Notes: Authors' calculations using 2011-2015 IPEDS completions data.

Who is Being Trained in Economics?

<https://www.newyorkfed.org/data-and-statistics/data-visualization/diversity-in-economics>

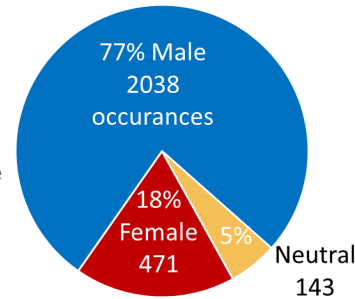
The website is based on Bayer & Wilcox (2017), available at
<https://www.federalreserve.gov/econres/feds/files/2017105pap.pdf>

Why do these imbalances exist?

Why?

One possible factor: Introductory economics textbooks

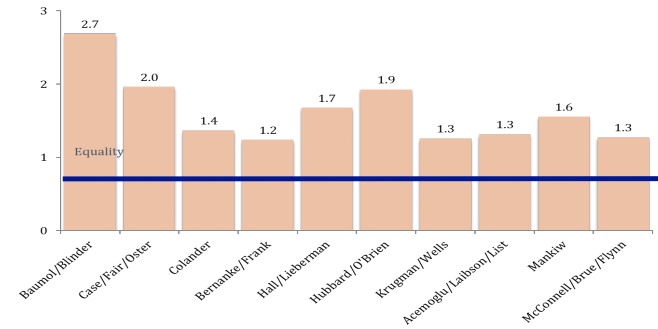
- 77% of the people are men
- Imbalance in all categories: economists, made up and ordinary people, celebrities, policy makers, real business leaders.
- Women take fewer actions, are more likely to be involved in fashion, food, or household tasks. Men are more likely to be in business or policy.



(Stevenson & Zlotnick 2018)

Image from "Gender Representation in Economics Textbooks," Stevenson & Zlotnick 2018
<https://www.aeaweb.org/conference/2018/preliminary/powerpoint/KKZaaBzs>

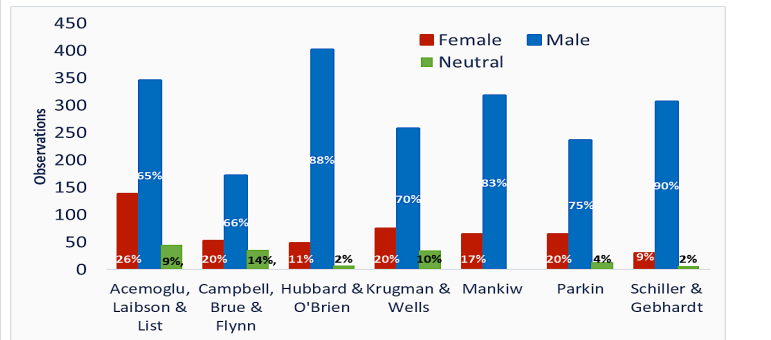
Ratio of "He" to "She" in *Principles* Textbooks



(Stevenson & Zlotnick 2018)

Image from "Gender Representation in Economics Textbooks," Stevenson & Zlotnick 2018
<https://www.aeaweb.org/conference/2018/preliminary/powerpoint/KKZaaBzs>

Men and Women by Text (Stevenson & Zlotnick 2018)



(Stevenson & Zlotnick 2018)

Image from "Gender Representation in Economics Textbooks," Stevenson & Zlotnick 2018
<https://www.aeaweb.org/conference/2018/preliminary/powerpoint/KKZaaBzs>

What if economics were to provide a more inclusive undergraduate experience?

Welcome+Info treatment



[Economics...it's much more than you think](#)
[...Es mucho más de lo que piensas](#)

[Economists study a wide range of topics.](#)



[What do effective charter schools have in common?](#)



[Why do mothers with medical degrees get fewer C-sections?](#)



[What are the economics of the Olympics?](#)



[What is economics?](#)



(Bayer, Bhanot & Lozano 2019)

[Images copyright American Economic Association; reproduced with permission of the AEA]

A field experiment (Bayer, Bhanot & Lozano 2019)

- Study population: 2,710 incoming college students from underrepresented groups, including all women, at 9 liberal arts colleges
- Randomization: at the student level within schools
- Treatments: two emails sent in the summer before students arrived on campus
 - Treatment 1 – “Welcome”
 - **Treatment 2 – “Welcome+Info” showcasing a diversity of research and researchers within economics**
 - Control – No messaging from the economics department
- Main outcome: whether the student completed an econ course in their first semester

Treatment 1 – Welcome; Treatment 2 – Welcome+Info

Email #1

Congratulations on your decision to attend [YOUR College]! We in the Economics Department welcome you and would like to get to know you over the next four years. We hope that you start by taking [Econ #, NAME, LINK] in the coming year. **Please click on the images below to learn a bit about what economists do and the kinds of things you can investigate with the tools you learn in economics courses.**

Sincerely,
 Professor [NAME], on behalf of the Economics Department

Email #2

Welcome to campus! We are excited you are here! We encourage you to explore courses across campus, and we especially hope to see you in [Econ #, NAME, LINK]. **Please click on the images to learn some more about economists and their research.**

Best wishes for a great semester,
 Professor [NAME], on behalf of the Economics Department

(Bayer, Bhanot & Lozano 2019)

Welcome+Info treatment

Meet Some Economists:



[Lashawn Richburg-Hayes](#) Senior Research Associate, MDRC
 “My own neighborhood is always at the back of my mind.”



[Mark Hugo Lopez](#) Director of Hispanic Research, Pew Research Center
 “I should have had more confidence in myself...Nothing happens unless you make it happen. You aren't sought; you have to seek.”



[Janet L. Yellen](#) Chair of the Board of Governors of the Federal Reserve System
 “When economics is tested by future challenges, I hope that our profession will be able to say that we have done all we could to attract the best people and the best ideas.”

Bookmark the American Economic Association's: [Resources for Students](#)

Explore a wide range of topics:



[Can strong peer networks close the gender gap in entrepreneurship?](#)



[Can a nearby SAT test center boost college attendance?](#)



[Do employers frown on for-profit colleges and online degrees?](#)

(Bayer, Bhanot & Lozano 2019)

[Images copyright American Economic Association; reproduced with permission of the AEA]

Main result

Table 1: Average Treatment Effects

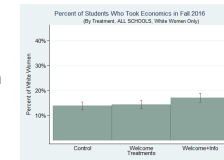
	Took Econ - Fall 2016		
	(1)	(2)	(3)
Welcome	0.0151 (0.0172)	0.0117 (0.0170)	0.01000 (0.0168)
Welcome + Info	0.0296* (0.0176)	0.0289* (0.0175)	0.0281 (0.0173)
Female		-0.123*** (0.0254)	-0.119*** (0.0264)
Constant	0.152*** (0.0120)	0.333*** (0.0383)	0.266*** (0.0414)
Observations	2710	2710	2710
R ²	0.001	0.027	0.048
Ethnicity Fixed Effects	No	Yes	Yes
School Fixed Effects	No	No	Yes

Notes: This table shows the average treatment effects of the Welcome and Welcome+Info treatment conditions, using completion of a Fall 2016 economics course as the outcome variable. Results with and without controls for ethnicity, gender, and school fixed effects are shown. Standard errors are in parentheses. * p<0.10 ** p<0.05 *** p<0.01

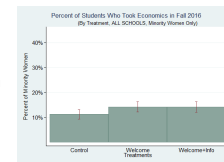
(Bayer, Bhanot & Lozano 2019)

Exploring treatment effects by subgroup

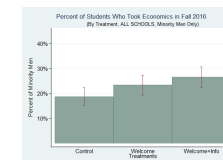
white women



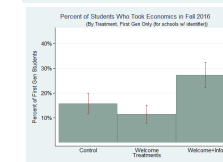
URM women



URM men



first-generation college students



(Bayer, Bhanot & Lozano 2019)

How can you make the most of this opportunity?

Daniel Kahneman: *Thinking, Fast and Slow*

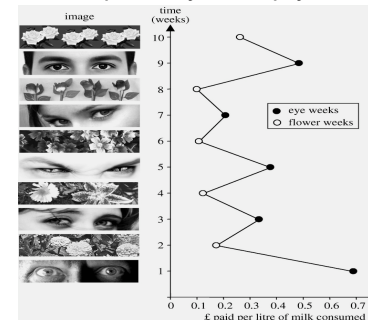
Two systems in the mind—

- System 1 is automatic, using easily available information.
- System 2 is conscious reasoning.

System 1 is the "secret author" of many of our "choices."

System 1 can influence System 2

Voluntary contributions triple when eyes are displayed above an honesty box



©2006 by The Royal Society

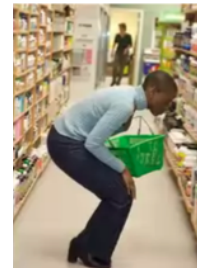
Melissa Bateson et al. Biol. Lett. 2006;2:412-414

biology
letters



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My advice to you



<https://medium.com/@giaphuathua/eye-level-is-buy-level-the-principles-of-visual-merchandising-and-shelf-placement-9226877c268>

- Keep looking beyond the obvious and help others do the same.
- Keep learning economics, and use it to examine issues important to you.
- Believe in yourself. Hold a growth mindset.
Intelligence and abilities in math and economics are not fixed traits. They expand through effort, practice, mistakes, and perseverance.
- Be different. Your uniqueness makes you powerful.