Gender and Racial Diversity of Federal Government Economists

David Wessel Louise Sheiner Michael Ng

HUTCHINS CENTER ON FISCAL AND MONETARY POLICY BROOKINGS INSTITUTION

This report and underlying data are available online at:

https://www.brookings.edu/research/gender-and-racial-diversity/

Wessel (dwessel@brookings.edu) is a senior fellow at Brookings and director of the Hutchins Center. Sheiner is a senior fellow at Brookings and policy director of the Hutchins Center. Ng was a research analyst at the Hutchins Center. Stephanie Cencula, Haowen Chen, and Jeffrey Cheng assisted in gathering data and preparing this report. The authors appreciate the cooperation of the government agencies which provided data and responded to questions.

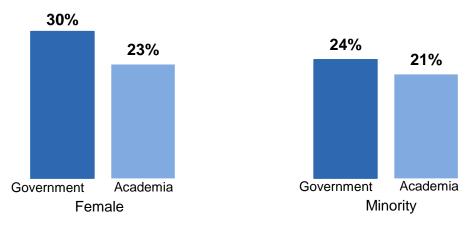
Introduction

The lack of diversity in the economics profession – and the lack of progress in this area relative to science, technology, engineering, and math (STEM) fields – is drawing increasing attention. Most of the focus has been on academic institutions. This report looks at the diversity of economists employed by the federal government, including the Federal Reserve, the executive branch, and the research arms of Congress.

Our major findings:

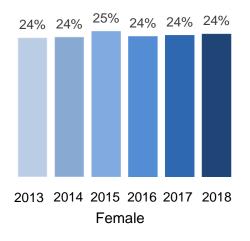
- 30% of Ph.D. economists in the federal government are women, compared to 23% of economics faculty in academia.
- 24% of Ph.D. economists in the federal government are minorities (Black, Hispanic, Asian, and other minorities), compared to 21% of economics faculty in academia.
- The share of female economists employed by the Federal Reserve System has been roughly stable at around 24% since 2013, the first year for which we have data, while the share of minorities has increased from 22% in 2013 to 25% in 2018.
- The shares of female and minority economists in the federal government outside of the Federal Reserve have increased since 2010, the earliest year for which we have data. The share of women increased from 27% in 2010 to 33% in 2018 for women and from 18% in 2010 to 24% in 2018 for minorities.

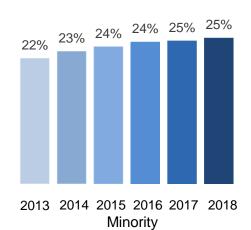
Share of Ph.D. economists who are female or minority, 2018



Source: OPM FedScope, CBO CFPB, DoD, EPA, FDIC, GAO, SEC, Treasury, CSWEP, AEA Universal Academic Questionnaire. DoD and CRS data are for 2019.

Share of Ph.D. economists in Federal Reserve System who are female or minority



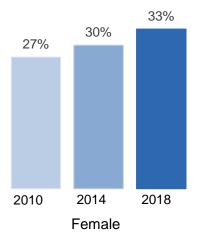


21%

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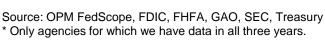
Source: Federal Reserve System

Share of Ph.D. economists in federal agencies (outside the Federal Reserve) who are female or minority*





18%





2018

24%

- Brookings employed 24 Ph.D. economists in 2018. Seven (29%) were women. The share of Brookings economists who are women has fluctuated between 29% and 37% over the previous five years.
- In 2018, 8 (33%) of Brookings' 24 economists were minorities 2 (8%) Black, 2 (8%) Hispanic, 2 (8%) Asian, 1 (4%) Hawaiian or Pacific Islander, and 1 (4%) multiracial. Five years earlier, Brookings employed 18 economists. One (6%) was Hispanic and 17 (94%) were white.

Background

The lack of diversity among economists is the focus of increasing attention in the profession. In March 2019, the past, present, and future presidents of the American Economic Association (AEA) – Olivier Blanchard, Ben Bernanke, and Janet Yellen – wrote in a letter to the membership, "Excluding or marginalizing people based on their gender, race, or other personal characteristics is not only deeply unfair to those who are excluded, it damages the field as a whole by limiting the diversity of perspectives and dissuading talented people from becoming economists. It is striking that, in an era when women and members of underrepresented minority groups have entered STEM fields at increasing rates, the low rates of participation and advancement of women and minorities in economics have changed little in recent decades."

The Representation of Women in Academic Economics

In academia, the share of full-time economics faculty who are women rose gradually from 19% a decade ago to 23% in 2018, according to an annual survey of colleges and universities conducted by the AEA Committee on the Status of Women in the Profession (CSWEP). Women represent a much smaller share of full professors and are more likely than men to be non-tenure track faculty.

The latest data from the pipeline are not encouraging. Of the 1,150 Ph.D. degrees in economics awarded in 2018 by institutions that responded to the CSWEP survey, 32% were to women, a fraction that has barely changed in 20 years. Although about 55% of all undergraduates were women in 2018, they represented 34% of those graduating with a major in economics; that hasn't changed much in the past 20 years.

"There has been no progress in the representation of women either entering the economics profession or advancing from untenured assistant to tenured associate professor. If anything, we see stagnation or decline in women entering economics at both the undergraduate and graduate level and increasing attrition of women as assistant professors. The most recent job market data shows that women are disproportionately likely to leave academia altogether," CSWEP said in its 2018 annual report.

Racial Diversity in Academic Economics

Conversations about the racial diversity of the economics profession generally focus on *underrepresented* minorities, i.e. Black, Hispanic, and Native American, but some data define minority more broadly to include Asian. According to not yet released data collected by the AEA on college and university economics full-time faculty in 2018-19 (excluding community colleges):

- 14% of full-time economics faculty were Asian, up from 11% in 2007-2008.
- 5% were Hispanic, up from 3% in 2007-2008.

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- "A message from the AEA leadership on the professional climate in economics." Olivier Blanchard (AEA immediate pastpresident), Ben Bernanke (AEA president), and Janet Yellen (AEA president-elect). March 18, 2019. https://www.aeaweb.org/news/member-announcements-mar-18-2019
- "The 2018 Report of the Committee on the Status of Women in the Economics Profession." Shelley Lundberg (AEA CSWEP Chair). December 13, 2018. https://www.aeaweb.org/content/file?id=9270

2% were Black, unchanged from 2007-2008.³

Data for the pipeline, drawn by the AEA Committee on the Status of Minority Groups in the Economics Profession from the federal government's Integrated Postsecondary Education Data System (IPEDS) and National Center for Education Statistics (NCES) data, show that 1,150 Ph.D. degrees in economics were awarded in 2017 – 682 Ph.D.s to foreigners who were not permanent residents of the U.S. and 468 to U.S. citizens and permanent residents.

Of those 468 Ph.D.s:

- 60 (13%) were Asian
- 15 (3%) were Black
- 18 (4%) were Hispanic

The share of Ph.D.s awarded to Black individuals varies from year to year with no obvious trend, but the numbers have been lower in recent years than at some times in the past. There were, for instance, fewer Ph.D. degrees in economics awarded to Black individuals in 2015, 2016, and 2017 (10, 15, 15, respectively) than in 1998, 1999 and 2000 (21, 20, 18, respectively). The fraction of Ph.D.s awarded to Hispanics in recent years is higher than it was 20 years ago. The trend among Asians has been relatively stable over the past 20 years.

Among recipients of undergraduate economics degrees earned in 2017 by U.S. citizens and permanent residents:

- 15% were Asian
- 5% were Black
- 11% were Hispanic

Data for the Federal Government

We collected data on Ph.D. economists employed by the Federal Reserve Board and the 12 regional Fed banks, many executive branch agencies, and three arms of Congress: the Government Accountability Office, Congressional Research Service and Congressional Budget Office. We did not include people with the title "economist" who did not have a Ph.D in economics.⁴ We believe our data cover more than 90% of all Ph.D. economists employed by the federal government.

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- 3. "Report on the Committee on the Status of Minority Groups in the Economics Profession (CSMGEP)." December 2008. https://www.aeaweb.org/content/file?id=433. The curators of the AEA survey note that the response rate is low (approximately 39 percent). As such, the data may not be representative, particularly if departments with greater or fewer numbers of minority faculty are more likely to respond. Changes over time may reflect larger trends in the economics profession or reflect a changing composition of institutions responding to the survey. Nonresponses to ethnic diversity questions cannot be distinguished from blanks that represent zeros; thus, all blanks were treated as zeros. This convention may understate ethnic representation. Ethnic representation includes only U.S. citizens and permanent residents.
- 4. The qualifications for the job "economist" as defined by the Office of Personnel Management essentially require no more than an undergraduate major in economics. https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedule-qualification-standards/0100/economist-series-0110/. In addition, the OPM definition may not capture economists who have moved into managerial positions.

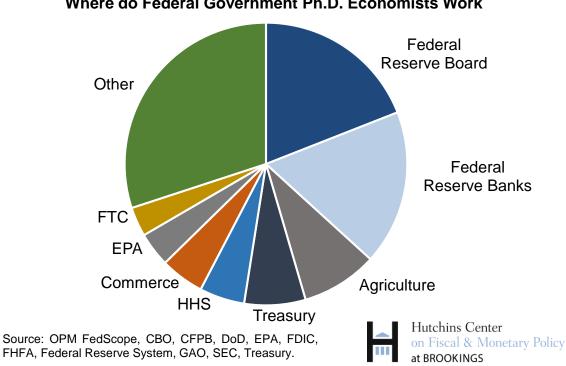
Many agencies provided us with the data directly; they are marked with an asterisk in Table 1. For agencies that did not, we used the data from the Office of Personnel Management's FedScope database.⁵ We also present data from the Brookings Institution.

Ph.D. Economists in the Federal Government

This report covers 2,111 Ph.D. economists currently employed by the U.S. government across 42 different agencies; see Table 1 for details. (For context, the AEA's Universal Academic Questionnaire counts more than 5,000 full-time faculty at the 291 institutions which responded to its latest survey. The Bureau of Labor Statistics estimates there are 12,750 teachers of economics at the post-secondary level, not all of whom hold

About 37% (776) of all Ph.D. economists who work for the federal government are employed by the Federal Reserve System – roughly half at the Board of Governors and half at the 12 regional Fed banks. With 402 economists, the Board of Governors employs far more Ph.D. economists than the largest university department. (The economics department at the University of California, Berkeley, for instance, has 49 faculty members. Harvard's economics department has 59, and the University of Chicago's has 40.)

Within the executive branch, the largest single employer of economists is the Department of Agriculture (184), followed by the Treasury (148), the Department of Health and Human Services (109), and the Commerce Department (106.)



Where do Federal Government Ph.D. Economists Work

We contacted each agency that employs more than a few economists and submitted FOIA requests to either supply the data or confirm what we had collected from the OPM database. Where an agency's data differed from the OPM database, we used agency-supplied data.

Table 1: Total Number of Ph.D. Economists in the Federal Government, 2018

	Total	Women	Minorities
Agency	(Count)	(Percent)	(Percent)
Federal Reserve System Federal Reserve Board*	402	26%	24%
FRB Atlanta*	23	26%	22%
FRB Boston*	28	43%	32%
FRB Chicago*	41	27%	17%
FRB Cleveland*	24	13%	13%
FRB Dallas*	32	16%	25%
FRB Kansas City*	23	30%	30%
FRB Minneapolis*	25 26	31%	31%
FRB New York*	61	25%	16%
	27	11%	41%
FRB Philadelphia* FRB Richmond*	33	18%	39%
FRB San Francisco*			
	26	19%	12%
FRB St. Louis*	30	10%	43%
Federal Agencies	21	100/	2.40/
Air Force*@	21	19%	24%
Army*@	12	8%	8%
Commodity Futures Trading Commission	8	-	25%
Congressional Budget Office*	63	46%	14%
Congressional Research Service*®	25	36%	20%
Consumer Financial Protection Bureau*	20	20%	25%
Department of Agriculture	184	29%	17%
Department of Commerce	106	30%	19%
Department of Defense ex. Army/Air Force*®	8	25%	50%
Department of Energy	25	20%	16%
Department of Health and Human Services	109	48%	39%
Department of Homeland Security	17	24%	29%
Department of Housing and Urban Development	12	-	33%
Department of the Interior	20	15%	15%
Department of Justice	44	32%	18%
Department of Labor	62	37%	24%
Department of Transportation	20	30%	30%
Department of the Treasury*	148	31%	30%
Environmental Protection Agency*	83	27%	8%
Federal Communications Commission	28	36%	14%
Federal Deposit Insurance Corporation*	51	39%	29%
Federal Housing Finance Agency*	36	39%	39%
Federal Trade Commission	71	18%	13%
Government Accountability Office*	42	55%	33%
International Trade Commission	17	-	29%
Millennium Challenge Corp.	10	-	40%
Office of Management and Budget	8	_	38%
Security and Exchange Commission*	61	34%	30%
Social Security Administration	24	38%	25%
Total	2,111	30%	24%

^{*} Based on agency-supplied data.

[@] Data for 2019.

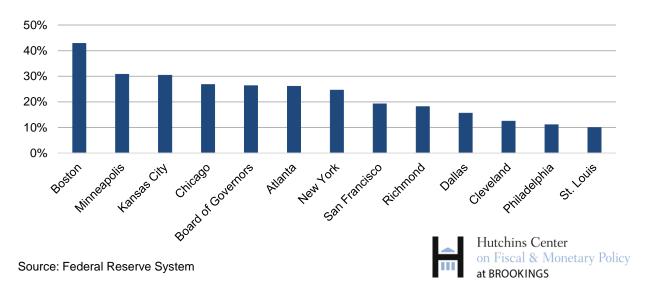
⁻ Data unavailable.

Gender Diversity of Ph.D. Economists in Federal Government

In 2018, about 30% of Ph.D. economists employed by all parts of the federal government (both agencies and the Federal Reserve System) were women, up about 2 percentage points from 2014. By comparison, 23% of economics faculty were women and 32% of the Ph.D.s in economics awarded in 2018 were to women, according to CSWEP.

In the Federal Reserve System in 2018, 190 (24%) of 776 Ph.D. economists were female. At the Board of Governors, 26% were female. At the 12 regional Fed banks, 84 (22%) were female. At the regional banks, the percentage ranged from 10% at the St. Louis Fed to 43% at the Boston Fed.

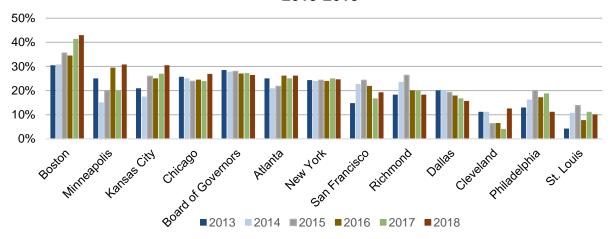
Women as Share of Federal Reserve Ph.D. Economists, 2018



The share of Ph.D. economists at the Fed who are female has remained essentially unchanged over the past five years, but there is wide variation in the trends among Fed banks. The Federal Reserve Bank of Boston showed the largest five-year increase in the female employment share – from 30% in 2013 to 43% in 2018. The share of women among the Dallas Fed's economists, meanwhile, fell over the five years from 20% to 16%.

Outside of the Fed, about 33% of federal government Ph.D. economists are women. GAO (55%), HHS (48%), the CBO (46%), the FDIC (39%), and the FHFA (39%) have the highest fraction of women. The Army (8%), the Department of the Interior (15%), and the FTC (18%) have the lowest.

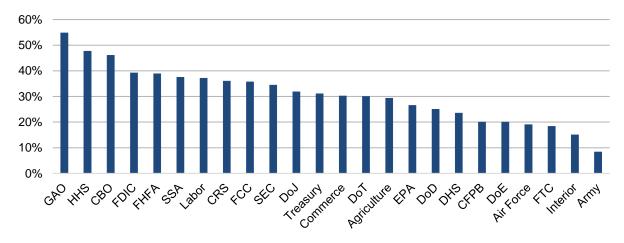
Women as Share of Ph.D. Economists at Federal Reserve, 2013-2018



Source: Federal Reserve System

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Share of Ph.D. Economists who are Women Across Federal Agencies, 2018



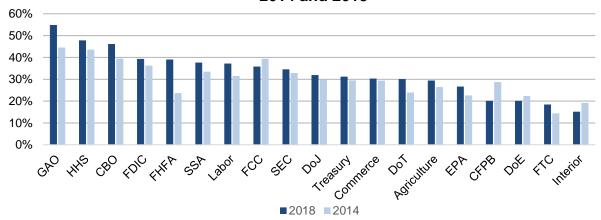
Source: OPM FedScope,CBO, CFPB, DoD, EPA, FDIC, FHFA, GAO, SEC, Treasury.



Among these agencies, the share of economists who are female rose from 30% in 2014 to 33% in 2018. The pattern varies by agency. Fifteen agencies have increased their female employment share, the highest among them being the FHFA (+15 percentage points), the GAO (+10pp), and the Department of Labor (+6pp). Four agencies decreased their female employment share — the CFPB (-9pp), the Department of the Interior (-4pp), the FCC (-4pp), and the Department of Energy (-2pp).

This comparison only includes agencies for whom we have data for 2010, 2014 and 2018.

Women as Share of Ph.D. Economists Across Federal Agencies, 2014 and 2018



Source: OPM FedScope, CBO, CFPB, EPA, SEC, FHFA, FDIC, GAO, Treasury. Note: CBO data are for 2015 and 2018.



Racial Diversity of Ph.D. Economists in Federal Government

Discussion about minority representation in the economics profession usually focuses on *underrepresented* minorities, i.e. Blacks, Hispanics, and Native Americans. Most data available for this report, however, includes Asians among minorities. While OPM does show some data by race, the data are sparse and poorly reported.

Of the 2,111 economists in the federal government in our data, 24% identified as minorities.⁷ The share of minority economists at federal agencies and the Federal Reserve System increased 2 percentage points over the most recent four-year period for which data are available (2014-2018).

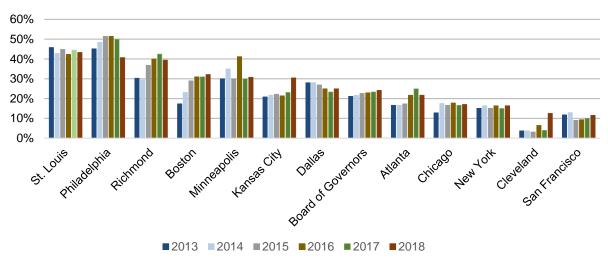
In the Federal Reserve System in 2018, 194 of 776 (25%) Ph.D. economists were minorities, broadly defined to include Asian as well as Hispanic, Black, and other minority categorizations. At the Board of Governors, minorities represented 24% of economists. Among the regional Fed banks, minorities represented 26% of economists, ranging from 43% at the St. Louis Fed and 41% at the Philadelphia Fed to 13% at the Cleveland Fed and 12% at the San Francisco Fed.

The Board of Governors increased its minority share of economists from 21% in 2013 to 24% in 2018. The regional Fed banks increased their share from 22% to 26% over this time period. The Boston Fed and the Kansas City Fed increased minority employment significantly, by 15 percentage points and 10 percentage points, respectively.

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^{7.} All agencies report the number of white economists they employ in OPM's FedScope database. Very few report specific minority types, so we define minority as everyone who isn't identified as white. Within the OPM data, we saw very few economists identified as Black or Hispanic; the majority of minority economists who were identified by race were Asian.

Minorities as Share of Federal Reserve Ph.D. Economists, 2013-2018

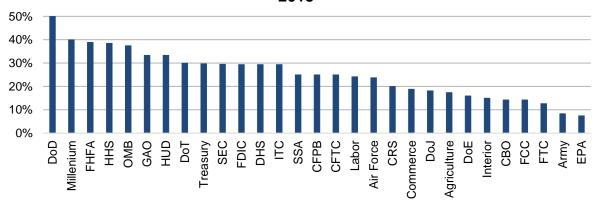


Source: Federal Reserve System

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At federal agencies other than the Fed, 23% of economists were minorities in 2018. The agencies with the highest share of minorities were the Department of Defense (50%), the Millennium Challenge Corporation (40%), the FHFA (39%), HHS (39%), and the Office of Management and Budget (38%). At the other end of the spectrum, the Army (8%), the EPA (8%) and the FTC (13%) employed the lowest share of minority economists among federal agencies.

Minorities as Share of Ph.D. Economists Across Federal Agencies, 2018



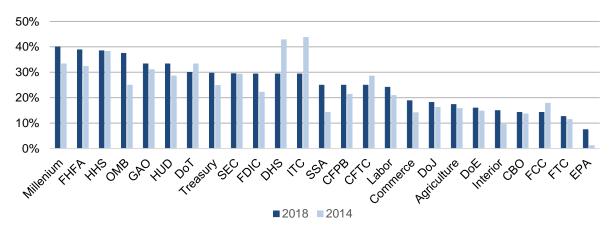
Source: OPM FedScope, CBO CFPB, DoD, EPA, FDIC, GAO, SEC, Treasury. Note: DoD and CRS data are for 2019



^{8.} This includes all the agencies for which we have data in 2018; for agencies for which we have data in 2010, 2014, and 2018, the minority share was 24% in 2018, as in the comparison figures above.

Federal agencies outside of the Fed increased the share of economists who are minorities by 3 percentage points over the most recent four-year period for which data are available. The Office of Management and Budget (OMB) and the Social Security Administration saw double digit increases in their minority employment share over this period, while the International Trade Commission, the Department of Homeland Security, and the Army saw double digit decreases.

Minorities as Share of Ph.D. Economists Across Federal Agencies, 2014 and 2018



Source: OPM FedScope, CBO CFPB, EPA, FDIC, GAO, SEC, Treasury. Note: CBO data are for 2015 and 2018.



Research Assistants at the Federal Reserve Board

Diversifying the pipeline of potential Ph.D.s in economics begins at the undergraduate level, which is beyond the scope of this report. However, research assistants are a major source of candidates for graduate study in economics, and these positions turn over more frequently than staff economists. We have data for research assistants only for the Fed Board of Governors. The share of research assistants who are female or minority has increased over the past four years. In 2017, the Board employed 150 research assistants. Of those, 39% were women versus 34% in 2013. In 2017, 29% research assistants were minorities versus 23% in 2013.

Brookings Economists

The Brookings Institution employed 24 Ph.D. economists in 2018. Of that total, 7 (29%) were women. The number of female economists over the preceding five years fluctuated between 6 and 10 and their share fluctuated between 29% and 37%. The current vice president and director of economic studies is a woman.

Eight (33%) of Brookings' economists in 2018 were minorities – 2 (8%) were Black, 2 (8%) were Hispanic, 2 (8%) were Asian, 1 (4%) was Hawaiian or Pacific Islander, and 1 (4%) was multiracial. Five years earlier, 17 of the 18 Ph.D. economists at Brookings were white and one was Hispanic.

In 2018, Brookings also employed 28 research assistants and analysts in its Economic Studies and Global Economy and Development programs. Of them, 12 (43%) were female and 10 (36%) were minorities – 6 (21%) Asian, 3 (11%) mixed race, and 1 (4%) Hispanic. Over the preceding five years, the number of female research assistants and analysts fluctuated between 8 and 32, and their share fluctuated between 32% and 52%. For minorities, the number fluctuated between 7 and 16, and the share fluctuated between 21% and 36%.

RESOURCES:

- AEA Universal Academic Questionnaire (UAQ) Link
- AEA Committee on the Status of Minority Groups in the Economics Profession (CSMGEP) Annual Reports -<u>Link</u>
- AEA Committee on the Status of Women in the Economics Profession (CSWEP) Survey and Annual Report Link
- AEA Letter from Leadership March, June
- Contact Information for AEA Ombudsperson Leto Copeley <u>Link</u>
- BLS Occupational Employment Statistics on Economics Teachers, Postsecondary Link
- OPM FedScope Database <u>Link</u>
- Brookings Institution Workforce Demographics <u>Link</u>
- Fed's Office of Minority and Women Inclusion (OMWI) report <u>Link</u>



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