Gender and Racial Diversity of Federal Government Economists: 2020 Data

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HUTCHINS CENTER ON FISCAL AND MONETARY POLICY
THE BROOKINGS INSTITUTION

This report and underlying data are available online at:

https://www.brookings.edu/research/gender-and-racial-diversity-of-federal-government-economists-2020-data/

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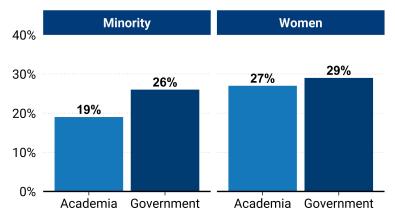
Introduction

The lack of diversity in the economics profession has drawn increasing attention in recent years, but much of the focus has been on academic institutions. This report—an update of <u>one we did in 2018</u>¹—looks at the diversity of the more than 2,200 Ph.D. economists employed by the federal government, including in the Federal Reserve System, the executive branch, and the research arms of Congress.

Our major findings for 2020:

- 29% of Ph.D. economists in the federal government are women, compared to 27% of economics faculty in academia.
- 26% of Ph.D. economists in the federal government are minorities (Black, Hispanic, Asian, and other minorities), compared to 19% of economics faculty in academia.
- 24% of the economists employed by the Federal Reserve System (which employs nearly 40% of the federal government's economists) are women; that percentage has been roughly stable since 2013, the first year for which we have Federal Reserve System data.
- 28% of the Federal Reserve System's economists are minorities, compared to 22% in 2013.
- 32% of federal economists outside the Federal Reserve are women, compared to 27% in 2010, the first year for which we have data for non-Fed federal economists.
- 26% of federal economists outside the Federal Reserve are minorities, compared to 18% in 2010.

Share of Ph.D. economists who are minorities or women, 2020



Source: OPM FedScope, individual agencies, AEA Universal Academic Questionnaire.

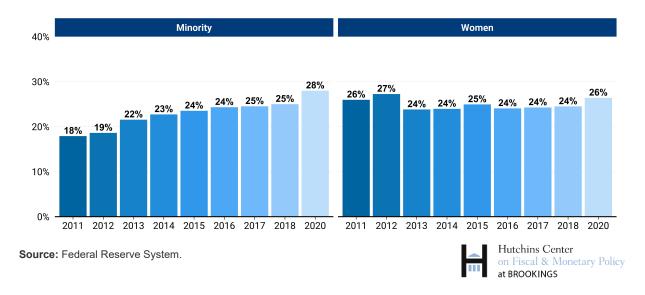
Note: Minorities includes Asian, Black, Hispanic, Native Hawaiian/Pacific Islander, American Indian/Alaska Native, and multiracial economists.

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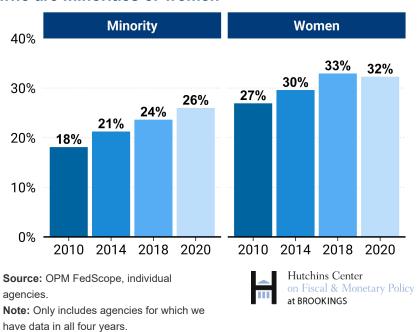
 Gender and racial diversity of federal government economists (2018). The Hutchins Center on Fiscal and Monetary Policy. The Brookings Institution. https://www.brookings.edu/research/gender-and-racial-diversity/

Employees at the Federal Reserve Banks are not legally government employees, but we include them in this analysis and refer to them as federal employees.

Share of Ph.D. economists in the Federal Reserve System who are minorities or women



Share of federal Ph.D. economists (outside the Fed) who are minorities or women



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Background

The economics profession is increasingly focused on the lack of diversity among economists. In 2019, Olivier Blanchard, Ben Bernanke, and Janet Yellen—then the past, present, and future presidents of the American Economic Association (AEA)—wrote 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."

A study by Census Bureau researchers covering economists in the executive branch, but not those working for Congress or the Fed, found that the diversity of government economists is comparable to the profession at large: the representation of women and minorities has grown over time but remains low compared to other disciplines. Economists from these underrepresented groups—particularly men of color—earn less than their white male colleagues across government agencies, but this earnings gap is smaller in government than in non-government jobs, the analysis found. The study was based on administrative data not available to us.

Janet Yellen, then a colleague of ours at Brookings and now the Secretary of the Treasury, highlighted the importance of racial and gender diversity across the profession at the 2019 conference to release our original report on the demographics of federal economists: "Within the federal government, diversity is especially important because diverse perspectives, inspiring the best ideas and decisions, translate into better service to the public. Moreover, diversity within the federal workforce promotes the mission that the government is supposed to serve ... Diversity is important in ensuring that the research that is done within economics appropriately reflects society's priorities."

Gender Diversity in Academic Economics

In academia, the share of full-time economics faculty who are women rose gradually from 23% a decade ago to 27% in 2020, 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 more encouraging than in previous years. Of the 1,080 Ph.D. degrees in economics awarded in 2020 by institutions that responded to the CSWEP survey, 35% were to women—the highest fraction in the last five years. Although about 55% of all undergraduates were women in 2020, they represented just 34% of those graduating with a major in economics. This hasn't changed much in the past 20 years.

In its 2020 annual report, CSWEP said, "This report is more optimistic than those of previous years, with small increases in women's representation at all levels of tenure track faculty suggesting a hopeful

- 3. "A message from the AEA leadership on the professional climate in economics." Olivier Blanchard (AEA immediate past president), Ben Bernanke (AEA president), and Janet Yellen (AEA president-elect). March 18, 2019. https://www.aeaweb.org/news/member-announcements-mar-18-2019
- Employment and Earnings of Federal Government Economists: Empirical Evidence by Gender and Race (2020) https://www.aeaweb.org/articles?id=10.1257/pandp.20201122
- "The gender and racial diversity of the federal government's economists." The Hutchins Center on Fiscal and Monetary Policy.
 The Brookings Institution. September 23, 2019. https://www.brookings.edu/events/the-gender-and-racial-diversity-of-the-federal-governments-economists/
- "The 2020 Report of the Committee on the Status of Women in the Economics Profession." https://www.aeaweb.org/content/file?id=13968

change from the lack of progress over the previous decade and more. This progress cannot continue unless economics is able to increase the number of women studying economics at both the undergraduate and graduate levels. The increases in the female share of the incoming Ph.D. class and in assistant professors, where rapid change is most possible, suggest that the efforts and attention to the status of women in economics over the past few years can have a measurable impact."

Racial Diversity in Academic Economics

Conversations about the racial diversity of the economics profession generally focus on *underrepresented* minorities in the field, i.e., Black, Hispanic, and Native American, but some data define minority to include Asians. According to the latest available data collected by the AEA on college and university economics full-time faculty in 2019-2020 (excluding community colleges):

- 14% of full-time economics faculty are Asian, up from 10% in 2014-2015.
- 5% are Hispanic, up from 4% in 2014-2015.
- 2% are Black, unchanged from 2014-2015.

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), show that 1,225 Ph.D. degrees in economics were awarded in 2019—761 Ph.D.s to foreigners who were not permanent residents of the U.S. and 464 to U.S. citizens and permanent residents.

Of those 464 Ph.D.s:

- 301 (65%) are white
- 72 (16%) are Asian
- 27 (6%) are Hispanic
- 13 (3%) are Black
- 13 (3%) are multiethnic
- 38 (8%) are of unknown ethnicity

Since 1995, the earliest year for which we have data, the number of Ph.D.s awarded to Black citizens or permanent residents has varied from year to year, with no obvious trend—ranging from 6 in 2001 to 21 in 1996 and 1998. There were fewer Black citizens or permanent residents granted economics Ph.D.s in the last 12 years (160 over 2008-2019) than in the 12 years prior (178 over 1996-2007). Of the 13 Ph.D.s awarded to Black U.S. citizens or permanent residents in 2019, four were to women and nine to men.

. . .

7. "Report on the Committee on the Status of Minority Groups in the Economics Profession (CSMGEP)." https://www.aeaweb.org/content/file?id=13728. The curators of the AEA survey note that the response rate is low (approximately 42 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.

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 degrees in economics earned in 2019 by U.S. citizens and permanent residents:

- 59% are white
- 16% are Asian
- 12% are Hispanic
- 5% are Black
- 8% are multiethnic or of unknown ethnicity
- Less than 1% are Native American, Native Alaskan, Native Hawaiian, or Pacific Islander

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, the Congressional Research Service, and the Congressional Budget Office. We did not include people with the title "economist" who did not have a Ph.D. in economics. We estimate that our data cover more than 95% of all Ph.D. economists employed by the federal government. 9

We asked each agency that employs more than a few economists to supply their own data or to confirm data we collected from the Office of Personnel Management's FedScope database. We use agency-supplied data where we have it; those agencies are marked with an asterisk in Table 1. For agencies that did not supply data, we use FedScope data.¹⁰

Ph.D. Economists in the Federal Government

This report covers 2,266 Ph.D. economists currently employed by the U.S. government. For context, the AEA's Universal Academic Questionnaire counts more than 5,000 full-time faculty at the 341 institutions which responded to its latest survey. Table 1 provides details on the distribution of economists across the 42 agencies that employ economists.

Nearly 40% (879) 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.

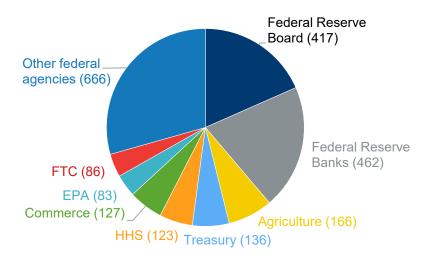
- 8. The qualifications for the job "economist" as defined by the Office of Personnel Management essentially require no more than an undergraduate major in economics. https://www.opm.gov/policy-data-oversight/classification-qualifications/general-schedulequalification-standards/0100/economist-series-0110/. In addition, the OPM definition may not capture economists who have moved into managerial positions.
- Our data represent a total of 2266 economists. The FedScope data, which include economists working at Cabinet-level agencies
 and independent agencies, include 86 economists who are not in our sample.
- 10. The FedScope database does not consistently report the number of economists by gender or racial/ethnic identity. For example, for the Office of Management and Budget, FedScope gives only the total number of economists and the number of non-minority economists. We calculate the number of minority economists by subtracting the number of non-minority economists from the total. We took the same approach with other agencies that presented data in a similar manner.

Gender and Racial Diversity of Federal Government Economists

With 417 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 52 faculty members. Harvard's economics department has 55, and the University of Chicago's has 40.)

Within the executive branch, the largest single employer of economists is the Department of Agriculture (166), followed by the Treasury (136), the Commerce Department (127), and the Department of Health and Human Services (123).

Where Ph.D. economists work in the government



Source: OPM FedScope, Federal Reserve System, individual agencies.



TABLE 1. Share of Ph.D. economists in the federal government who are minorities or women by agency, 2020

| | | | MINORITIES | | |
|--|------------------|-------|------------|---|--|
| | TOTAL (COUNT) | WOMEN | ALL | BLACK, HISPANIC, NATIVE AMERICAN & MULTIRACIAL | |
| FEDERAL RESERVE SYSTEM | | | | | |
| Federal Reserve Board* | 417 | 26% | 24% | 8% | |
| FRB Atlanta* | 27 | 30% | 26% | 7% | |
| FRB Boston* | 34 | 32% | 35% | 12% | |
| FRB Chicago* | 51 | 29% | 25% | 12% | |
| FRB Cleveland* | 35 | 11% | 14% | 11% | |
| FRB Dallas* | 30 | 17% | 27% | 7% | |
| FRB Kansas City* | 26 | 35% | 35% | 8% | |
| FRB Minneapolis* | 34 | 32% | 26% | 21% | |
| FRB New York* | 64 | 23% | 19% | 9% | |
| FRB Philadelphia* | 56 | 11% | 46% | 16% | |
| FRB Richmond* | 30 | 23% | 57% | 20% | |
| FRB San Francisco* | 41 | 29% | 34% | 20% | |
| FRB St. Louis* | 34 | 21% | 44% | 26% | |
| FEDERAL AGENCIES | | | | | |
| Air Force*a | 39 | 21% | 5% | 5% | |
| Army | 7 | - | 14% | - | |
| Commodity Futures Trading Commission | 12 | - | 17% | <u> </u> | |
| Congressional Budget Office* | 76 | 33% | 17% | <u>-</u> | |
| Congressional Research Service* | 29 | 38% | 10% | 3% | |
| Consumer Financial Protection Bureau | 18 | - | 22% | - | |
| Dep. of Agriculture | 166 | 27% | 18% | 13% | |
| Dep. of Commerce | 127 | 28% | 24% | - | |
| Dep. of Defense | 7 | - | 29% | _ | |
| Dep. of Energy* | 24 | 17% | 25% | _ | |
| Dep. of Health and Human Services* | 123 | 46% | 44% | _ | |
| Dep. of Homeland Security* | 17 | 24% | 35% | _ | |
| Dep. of Housing and Urban Development | 14 | - | 21% | _ | |
| Dep. of Justice* | 41 | 32% | 20% | 2% | |
| Dep. of Labor* | 62 | 37% | 23% | 5% | |
| Dep. of the Interior* | 20 | 20% | 20% | 20% | |
| Dep. of the Treasury | 136 | 32% | 35% | 7% | |
| Dep. of Transportation* | 28 | 36% | 39% | 11% | |
| Environmental Protection Agency*b | 83 | 25% | 12% | 6% | |
| Federal Communications Commission | 23 | 35% | 13% | - | |
| Federal Deposit Insurance Corporation* | 49 | 35% | 35% | 8% | |
| Federal Housing Finance Agency*b | 26 | 31% | 27% | 8% | |
| Federal Trade Commission* | 86 | 21% | 12% | 3% | |
| Government Accountability Office* | 51 | 53% | 31% | 14% | |
| International Trade Commission* | 24 | 54% | 42% | 29% | |
| Millenium Challenge Corp. | 12 | - | 42% | - | |
| Office of Management and Budget | 11 | - | 27% | - | |
| Security and Exchange Commission | 57 | 33% | 26% | 12% | |
| Social Security Administration | 19 | - | 26% | - | |
| TOTAL | 2266 | 29% | 26% | 10% | |
| | | | | | |

Source: OPM FedScope, individual agencies, and the Federal Reserve System.



MINIODITIES

^a The Air Force identified its economists as white or Black, and our tally of minority economists reflects that. It separately said two of its 39 economists identify as Hispanic, but it didn't say whether they were counted as white or Black, so we did not add that to the number of minority economists.

 $^{^{\}mbox{\scriptsize b}}$ One individual did not specify race.

^{*} Based on agency-supplied data.

⁻ Data unavailable.

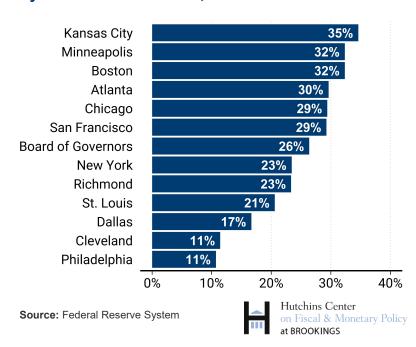
Gender Diversity of Ph.D. Economists in the Federal Government

In 2020, about 29% of Ph.D. economists employed by all parts of the federal government (both the agencies and the Federal Reserve System) were women, up about 2 percentage points from 2014. By comparison, 25% of economics faculty were women and 35% of the Ph.D.s in economics awarded in 2020 were to women, according to CSWEP.

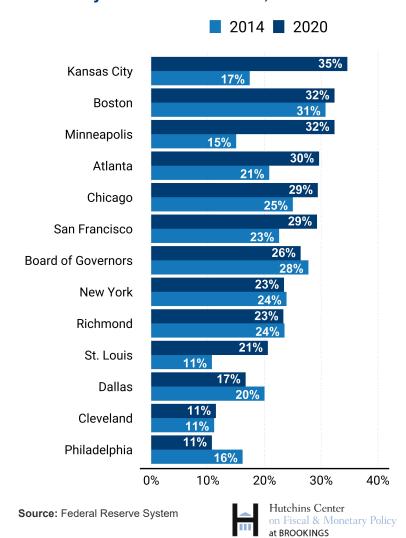
In the Federal Reserve System in 2020, 26% (232) of the 879 Ph.D. economists were women. Among the regional banks, the percentage of women economists ranged from 11% at the Cleveland and Philadelphia Feds to 35% at the Kansas City Fed.

The share of Ph.D. economists at the Fed who are women 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 Kansas City showed the largest six-year increase in the female employment share—from 17% in 2014 to 35% in 2020. The share of women among the Philadelphia Fed's economists, meanwhile, fell over the six years, from 16% to 11%.

Share of Ph.D. economists in the Federal Reserve System who are women, 2020



Share of Ph.D. economists in the Federal Reserve System who are women, 2020 vs. 2014

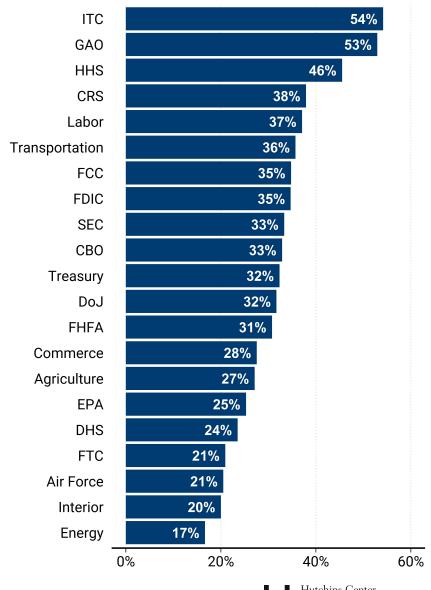


Outside of the Fed, about 32% of federal government Ph.D. economists are women.¹¹

Among these agencies, the share of economists who are female rose from 30% in 2014 to 32% in 2020. The pattern varies by agency. Eleven agencies have increased their female employment share, with the largest increases at the Department of Transportation (+12 percentage points), the GAO (+9 pp), and the FHFA (+7 pp). Four agencies decreased their female employment share: the Department of Energy (-5 pp), the FCC (-4 pp), the FDIC (-1 pp), and the Department of Commerce (-1 pp).

11. This comparison only includes agencies for whom we have data for 2014 and 2020.

Share of federal Ph.D. economists (outside the Fed) who are women, 2020

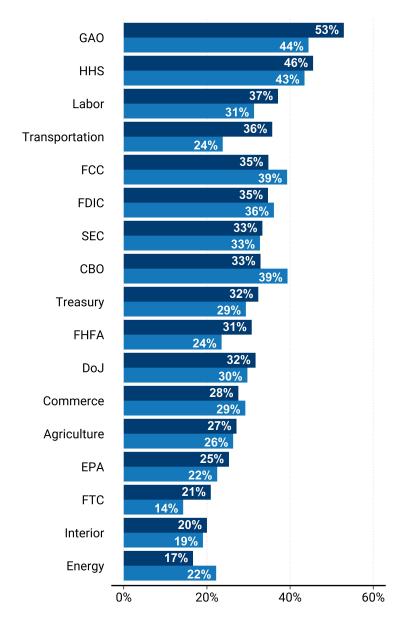


Source: OPM FedScope, individual agencies



Share of federal Ph.D. economists (outside the Fed) who are women, 2020 vs. 2014





Source: OPM FedScope, individual agencies.

Note: Only includes agencies for which

we have both years of data.



Racial Diversity of Ph.D. Economists in the Federal Government

Discussion about minority representation in the economics profession usually focuses on *underrepresented* minorities, i.e. Blacks, Hispanics, and Native Americans. However, most of the FedScope and much of the self-reported data define "minority" to include Asians, Blacks, Hispanics, and American Indians/Alaska Natives.

Of the 2,266 economists in the federal government in our data, 26% identify as minorities. Out of the 1,776 economists for whom we have specific racial/ethnic identification, 25% identify as minorities—including 10% who identify as Black, Hispanic, American Indian/Alaska Native, or multiracial. Table 2 disaggregates data on the Federal Reserve System economists by racial/ethnic category.

TABLE 2. Federal Reserve System Ph.D. economists by racial/ethnic category, 2020

| | WHITE | ASIAN | BLACK | HISPANIC | 2+ RACES | TOTAL ECONOMISTS |
|--------------------|-------|-------|-------|----------|----------|------------------|
| Board of Governors | 318 | 64 | 2 | 29 | 4 | 417 |
| FRB Atlanta | 20 | 5 | 1 | 1 | 0 | 27 |
| FRB Boston | 22 | 8 | 1 | 3 | 0 | 34 |
| FRB Chicago | 38 | 7 | 1 | 5 | 0 | 51 |
| FRB Cleveland | 30 | 1 | 0 | 4 | 0 | 35 |
| FRB Dallas | 22 | 6 | 0 | 2 | 0 | 30 |
| FRB Kansas City | 17 | 7 | 1 | 1 | 0 | 26 |
| FRB Minneapolis | 25 | 2 | 2 | 4 | 1 | 34 |
| FRB New York | 52 | 6 | 0 | 5 | 1 | 64 |
| FRB Philadelphia | 30 | 17 | 2 | 6 | 1 | 56 |
| FRB Richmond | 13 | 11 | 0 | 6 | 0 | 30 |
| FRB San Francisco | 27 | 6 | 1 | 7 | 0 | 41 |
| FRB St. Louis | 19 | 6 | 0 | 9 | 0 | 34 |
| Total | 633 | 146 | 11 | 82 | 7 | 879 |

Source: Federal Reserve System



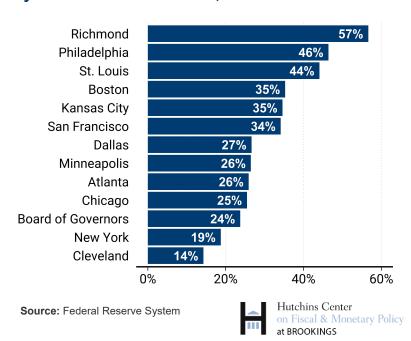
The share of minority economists at federal agencies and the Federal Reserve System increased 4 percentage points over the most recent six-year period for which data are available (2014-2020). 12

In the Federal Reserve System in 2020, 28% (246) of the 879 Ph.D. economists were minorities, of which 11% identify as Black, Hispanic, or multiracial. At the Board of Governors, minorities represented 24% of economists. Among the regional Fed banks, minorities represented 32% of economists.

In the Federal Reserve System, 60% (146) of the economists who identify as members of minority groups are Asian. The entire System has only 11 Black economists (just over 1% of all economists)—two of whom are at the Federal Reserve Board in Washington.

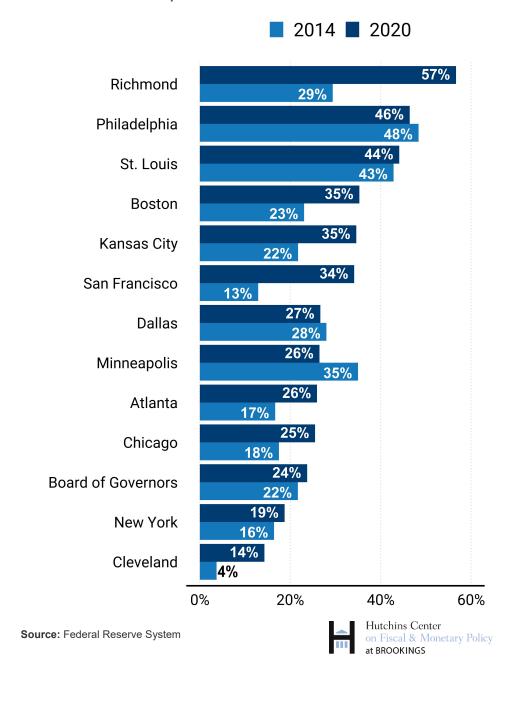
The Board of Governors increased its minority share of economists from 22% in 2014 to 24% in 2020. The regional Fed banks increased their share from 24% to 32% over this period. The Richmond Fed and the San Francisco Fed increased minority employment significantly, by 28 percentage points and 21 percentage points, respectively.

Share of Ph.D. economists in the Federal Reserve System who are minorities, 2020



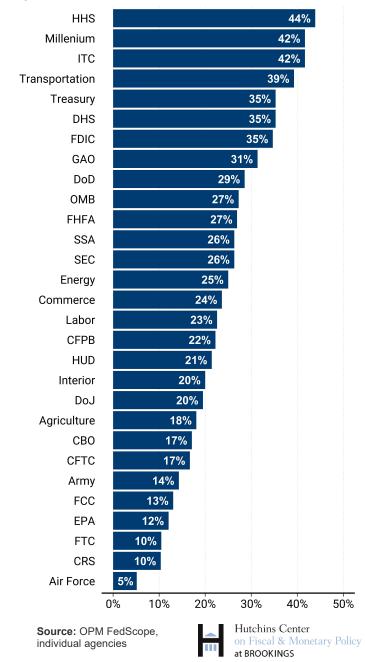
^{12.} We do not have data splitting minorities into subgroups for prior years.

Share of Ph.D. economists in the Federal Reserve System who are minorities, 2020 vs. 2014



In 2020, 25% of economists at federal agencies other than the Fed were minorities. ¹³ At agencies with data disaggregated by race/ethnicity, 23% of economists identify as minorities, including 10% who identify as Black, Hispanic, American Indian/Alaska Native, or multiracial (i.e. underrepresented minorities).

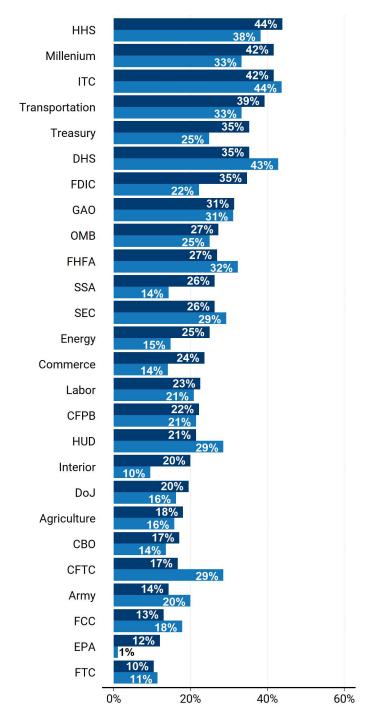
Share of federal Ph.D. economists (outside the Fed) who are minorities, 2020



13. This includes all the agencies for which we have data in 2020; for agencies for which we have data in 2010, 2014, and 2018, the minority share was 26% in 2020.

Share of federal Ph.D. economists (outside the Fed) who are minorities, 2020 vs. 2014





Source: OPM FedScope, individual agencies.

Note: Only includes agencies for which we

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have both years of data.

Federal agencies outside of the Fed increased the share of economists who are minorities (including Asians) by 4 percentage points over the most recent six-year period for which data are available. The Federal Deposit Insurance Corporation, the Social Security Administration, the Environmental Protection Agency, the Department of the Treasury, Commerce and Energy, the Commodity Futures Trading Commission, and the Department of the Interior all saw double digit increases in their minority employment share over this period.

Data for The Brookings Institution

The Brookings Institution employed 25 Ph.D. economists in 2021. Of that total, 36% are women. The number of female economists over the preceding six years fluctuated between 29% and 37%. The current Vice President and Director of Economic Studies is a woman.

Eleven of Brookings' economists in 2021 are minorities: 2 (8%) are Black, 1 (4%) is Hispanic, 6 (24%) are Asian, and 2 (8%) are multiracial. Eight years earlier, 17 of the 18 Ph.D. economists at Brookings were white and one was Hispanic.

In 2021, Brookings also employed 25 research assistants and analysts in its Economic Studies program. Of these, 15 (60%) were female and 11 (44%) were minorities: 3 (12%) Asian, 2 (8%) Black, 4 (16%) Hispanic, and 2 (8%) multiracial.

Over the preceding eight years, the share of female research assistants and analysts fluctuated between 32% and 60%. For minorities, the share fluctuated between 21% and 44%.



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