

# Committee on the Status of Women in the Economics Profession (CSWEP)

## I. Women's Status in the Economics Profession: Summary<sup>1</sup>

In 1971 the AEA established CSWEP as a standing committee to monitor the status and promote the advancement of women in the economics profession. In 1972 CSWEP undertook a broad survey of economics departments and found that women represented 7.6 percent of new PhDs, and 8.8 percent of assistant, 3.7 percent of associate, and 2.4 percent of full professors. This report presents the results of the 2019 CSWEP survey. It compares the top-ranked economics departments—which produce the vast majority of faculty in PhD-granting departments—to all PhD- and non-PhD-granting departments. It also examines gender differences in outcomes in the PhD job market and progress (and attrition) of women through the academic ranks. In the two decades since CSWEP's first survey, there has been significant improvement in women's representation in economics. By 1994, women made up almost a third of new PhD students and almost a quarter of assistant professors in economics departments with doctoral programs. The share of associate and full professors who were women had almost tripled (Table 1). The increased entry of women into economics in the late twentieth century is now reflected in later stages of the academic pipeline; in 2019, women made up 14.5 percent of full professors and 25.8 percent of associates (in PhD-granting departments). Despite this progress, there are still more women in non-tenure track positions (276) in PhD-granting economics departments than either full (234) or associate (180) professors (Table 1). Moreover, progress at increasing the flow of women *into* the pipeline

stopped earlier in the century. The female share of assistant professors, now at 30.3 percent, and of the entering cohort of PhD students, at 34.7 percent, plateaued around 2005 (Table 1). The share of women among undergraduate economics majors at these same schools has increased (from 30.0 percent in 1998 to 33.5 percent in 2019), but is still well below parity, and does not approach the 55 percent share of women in the undergraduate population.<sup>2</sup>

One sign of progress in 2019 is that a record nine top-20 departments have first-year classes that are at least 40 percent female (Table 7). On a more sanguine note, the pipeline for women in academic departments seems to have gotten leakier. CSWEP's model has long shown that women complete their PhDs and enter into assistant professor positions at proportions roughly equal to their share as new graduate students for each cohort. Women have been less likely to transition to tenured associate or full professors, creating a leaky pipeline. While women continue to complete their PhDs at the same rate as men (Figure 3), they have disproportionately exited (or perhaps never entered) the assistant professor ranks prior to coming up for tenure (Figure 4). This new leakage emerged after 2004, at the same time that women's entry into PhD programs stopped increasing, suggesting that there may be a common underlying cause.

## II. The CSWEP Annual Surveys, 1972–2019

In fall 2019 CSWEP surveyed 126 doctoral departments and 112 non-doctoral departments. This report analyzes the responses provided by all

<sup>1</sup>This survey report is written by Margaret Levenstein, CSWEP Associate Chair and Survey Director. We gratefully acknowledge the assistance of Dawn Zinsser in the administration and analysis of the survey.

<sup>2</sup>According to the National Center for Science and Engineering Statistics report on *Women, Minorities, and Persons with Disabilities in Science and Engineering*, 55 percent of full-time undergraduates are female.

TABLE 1—THE PIPELINE FOR DEPARTMENTS WITH DOCTORAL PROGRAMS: PERCENT AND NUMBER OF DOCTORAL STUDENTS AND FACULTY WHO ARE WOMEN

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>Faculty</i>										
Full professor										
Percent	10.6	12.7	12.5	11.8	12.1	12.3	12.9	12.7	14.0	14.5
Number	171.3	193.0	195.7	183.0	190.3	195.7	204.0	194.0	219.0	234.0
Associate professor										
Percent	22.7	22.6	22.7	24.1	23.1	23.8	26.1	23.2	25.8	25.8
Number	137.8	135.1	134.9	145.5	151.0	156.0	179.0	154.0	170.0	179.5
Assistant professor										
Percent	27.6	29.1	28.7	27.4	29.0	28.2	28.3	28.6	28.4	30.3
Number	211.6	212.4	224.2	208.5	228.7	233.8	236.0	241.0	233.0	247.0
All tenure track (subtotal)										
Percent	17.4	18.9	18.9	18.4	18.9	19.0	19.9	19.4	20.5	21.2
Number	520.8	540.5	554.8	537.0	570.0	585.5	619.0	589.0	622.0	660.5
All non-tenure track										
Percent	33.0	33.2	38.8	35.2	37.8	34.8	35.2	35.0	37.0	37.6
Number	229.3	224.3	214.7	181.5	223.3	296.7	312.0	320.0	233.0	276.3
All faculty										
Percent	20.3	21.7	22.0	20.9	22.0	22.4	23.3	23.1	23.3	24.3
Number	750.1	764.8	769.4	718.5	793.3	882.2	931.0	909.0	855.0	936.8
<i>PhD students</i>										
PhD granted										
Percent	33.6	34.9	32.9	35.4	32.7	34.7	31.0	32.9	32.1	32.2
Number	338.3	350.0	352.8	392.2	358.7	404.8	372.0	361.0	370.0	347.0
ABD										
Percent	34.1	34.5	32.7	32.1	32.2	31.7	31.7	33.0	32.8	32.9
Number	1,366.9	1,329.7	1,313.0	1,227.5	1,346.0	1,324.5	1,430.0	1,469.0	1,469.0	1,450.0
First year										
Percent	32.4	32.5	30.3	32.7	31.8	31.6	33.4	32.3	33.2	34.7
Number	569.5	541.5	472.5	479.0	504.0	500.0	517.0	492.0	474.0	540.0
<i>Undergraduate economics majors graduated</i>										
Percent	30.3	30.7	30.4	32.1	33.6	33.2	32.9	34.1	34.1	33.5
Number	19,840.0	20,078.0	20,175.0	17,851.0	20,867.0	23,376.0	22,380.0	22,793.0	23,902.0	24,638.0
<i>Undergraduate senior majors</i>										
Percent	30.7	31.4	31.5	31.2	32.4	33.8	33.9	34.3	35.9	33.7
Number	23,290.0	26,169.0	29,245.0	14,882.0	19,510.0	18,579.0	19,908.0	20,699.0	21,872.0	23,239.0

Notes: Entry and exit change the population universe. Any known PhD programs are considered members of the population. Any nonrespondents were imputed first with UAQ survey responses and, if those are unavailable, with linear interpolation. All programs responded to the 2019 survey.

126 doctoral and 104 non-doctoral departments.<sup>3</sup> The non-doctoral sample is based on the listing of

<sup>3</sup>We handle missing data as follows. We impute responses for missing items or nonresponding departments. In years when nonresponders to the CSWEP survey did respond to the AEA's Universal Academic Questionnaire (UAQ), we use UAQ data to impute missing responses. When the department responded to neither CSWEP nor UAQ, we use linear interpolation from survey responses in other years. Table 8 and Appendix figures provide more detail on response rates and the impact of imputation on reported results. We are very grateful to Charles E. Scott and the American Economic Association for sharing the UAQ data with us.

“Baccalaureate Colleges—Liberal Arts” from the *Carnegie Classification of Institutions of Higher Learning* (2000 edition). Starting in 2006 the survey was augmented to include departments in research universities that offer a master's degree but not a PhD degree program in economics. We have harmonized and documented the departmental-level data from the 1990s to the current period to improve our analysis of long-run trends in the profession. Department-level longitudinal reports are provided to all responding departments; these reports are shared with department chairs and CSWEP liaisons on an annual basis. Previous years of the survey are accessible as

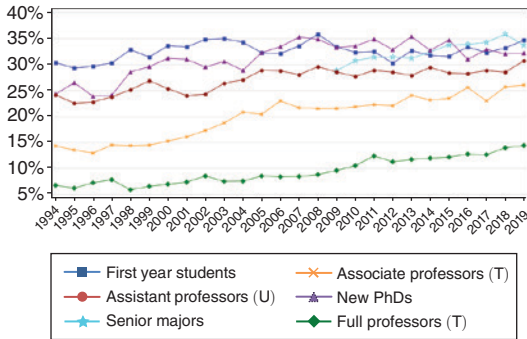


FIGURE 1. PIPELINE FOR DEPARTMENTS WITH DOCTORAL PROGRAMS: PERCENT OF DOCTORAL STUDENTS AND FACULTY WHO ARE WOMEN, 1994–2019

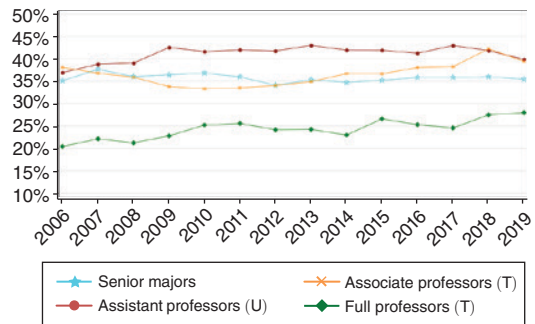


FIGURE 2. PIPELINE FOR DEPARTMENTS WITHOUT DOCTORAL PROGRAMS: PERCENT OF STUDENTS AND FACULTY WHO ARE WOMEN, 2006–2019

ICPSR study 37118 at <https://doi.org/10.3886/ICPSR37118.v2>.<sup>4</sup>

### III. 2019 Survey Results

In 2019 the share of full professors in PhD-granting economics departments who are women reached an all-time high at 14.5 percent (Table 1, Figure 1). In most other categories, the share of women in PhD-granting departments is essentially flat. The share of new PhDs granted (32.2 percent) is exactly the same as the average for the previous decade. The share of the incoming cohort of PhD students increased from 33.2 percent in 2018 to 34.7 percent in 2019. The total number of women entering PhD programs in 2019 bounced back from its very low level in 2018, increasing from 474 to 540, suggesting that the increase in women entering PhD programs was concomitant with an overall increase in new PhD students. This appears to be similar to a pattern in the early 2000s, when small increases in the share of women in the profession occurred along with increases in the total number of incoming students (Table 1). The proportion of assistant professors who are women increased slightly, from 28.4 percent in 2018 to 30.3 percent in 2019. Women make up less than a quarter of all faculty in PhD-granting departments, and over a quarter of all female faculty in PhD-granting departments are in non-tenure track positions. In

top departments, almost half of all female faculty are in non-tenure track positions.

Turning to the 21 economics departments that make up the “top 20,” and produce the vast majority of faculty who teach in PhD-granting departments, we see a similar pattern. In 2019, the top 20 departments increased the representation of women very slightly in most dimensions. The share of full professors, assistant professors, and entering PhD students increased slightly (Tables 2a and 2b). The share of women among PhDs granted increased substantially, as did, interestingly, the share of non-tenure track instructors. The stagnation of the last 15 years is now showing up as a declining share of associate professors who are female. Older cohorts are continuing to increase women’s share at the full professor rank, but they are not being replaced in equal numbers. One sign of progress is that both the top 10 and the top 20 increased both the share and the number of women in the entering PhD class. Women make up 32.1 percent of new students in top-10 departments, the highest fraction ever.

Turning to an examination of non-doctoral departments, Figure 2 and Table 3 show a similar pattern to that observed in PhD-granting departments.<sup>5</sup> The share of faculty who are women is higher than in PhD-granting departments, at every level of the professorate, but there has been remarkably little change in this century.

<sup>4</sup>Aggregate time-series data are publicly available. Department-level panel data are available with a restricted data use agreement. The data are updated annually.

<sup>5</sup>We report data on non-PhD departments beginning in 2006. The sample changed considerably in that year, expanding to include departments in universities that give master’s. Figure 2 and Table 3 use a consistent panel of departments over time.

TABLE 2—THE PIPELINE FOR THE TOP DEPARTMENTS:  
PERCENT AND NUMBER OF FACULTY AND STUDENTS WHO ARE WOMEN

	Top 10						Top 20					
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
<i>Faculty</i>												
Full professor												
Percent	9.7	9.6	9.2	9.1	11.3	12.2	10.0	10.1	11.3	10.2	11.9	13.0
Number	27.0	27.0	26.0	27.0	33.0	39.0	49.0	50.0	58.0	53.0	62.0	72.0
Associate professor												
Percent	21.9	25.0	28.9	30.8	26.3	21.2	20.4	19.6	20.2	20.6	20.6	17.3
Number	7.0	8.0	13.0	12.0	10.0	7.0	19.0	19.0	22.0	20.0	20.0	16.5
Assistant professor												
Percent	20.0	21.6	18.0	20.2	17.9	19.8	21.3	21.5	21.2	20.7	21.5	22.7
Number	18.0	21.0	18.0	22.0	17.0	19.0	43.0	44.0	44.0	43.0	45.0	44.0
All tenure track (subtotal)												
Percent	13.0	13.6	13.3	13.7	14.1	14.5	14.1	14.2	14.9	14.0	15.4	15.7
Number	52.0	56.0	57.0	61.0	60.0	65.0	111.0	113.0	124.0	116.0	127.0	132.5
All non-tenure track												
Percent	33.9	44.3	39.3	33.3	34.4	35.7	39.6	42.8	39.3	38.2	33.1	38.0
Number	20.0	43.0	35.0	29.0	22.0	30.3	57.0	83.0	70.0	72.0	48.0	67.3
All faculty												
Percent	15.7	19.5	17.8	16.9	16.8	17.9	18.1	19.8	19.2	18.5	18.0	19.6
Number	72.0	99.0	92.0	90.0	82.0	95.3	168.0	196.0	194.0	188.0	175.0	199.8
<i>PhD students</i>												
PhD granted												
Percent	25.9	25.9	26.4	28.4	23.6	29.9	29.3	28.4	26.2	26.9	25.3	32.0
Number	51.0	52.0	58.0	57.0	49.0	64.0	102.0	110.0	112.0	98.0	98.0	123.0
ABD												
Percent	25.4	25.1	25.4	24.6	26.9	25.2	26.5	25.7	26.7	27.0	27.3	25.9
Number	217.0	225.0	247.0	221.0	264.0	234.0	427.0	390.0	451.0	444.0	447.0	396.0
First year												
Percent	24.0	23.9	29.8	25.8	26.1	32.1	27.4	24.9	29.5	26.0	29.9	32.5
Number	62.0	52.0	68.0	66.0	59.0	71.0	123.0	112.0	130.0	116.0	126.0	167.0
<i>Undergraduate economics majors graduated</i>												
Percent	37.2	36.9	36.6	40.7	36.3	37.8	37.4	37.2	37.6	39.2	37.0	37.2
Number	849.0	895.0	832.0	924.0	866.0	923.0	2,290.0	2,494.0	2,427.0	2,446.0	2,431.0	2,282.0
<i>Undergraduate senior majors</i>												
Percent	37.3	36.4	36.5	39.0	40.3	37.9	37.7	37.1	38.7	38.1	38.8	37.8
Number	780.0	715.0	780.0	841.0	787.0	851.0	2,319.0	1,674.0	1,817.0	1,994.0	2,202.0	2,126.0

In general, the share female falls as the research intensity of the department increases (e.g., from top 20 to top 10). The one exception is among undergraduates. In the top 10 departments, women made up 37.9 percent of senior majors in 2019, 37.8 percent of majors in the top 20, 33.8 percent in all PhD-granting departments, and 35.4 percent in non-doctoral departments (Tables 1, 2, and 3). Both doctoral and non-doctoral programs rely on women to teach, with women making up 37.6 percent of all non-tenure track faculty in the former and 34.9 percent in non-doctoral departments.

At every level of the academic hierarchy, from entering PhD student to full professor, women

have been and remain a minority. Moreover, within the tenure track, from new PhD to full professor, the higher the rank, the lower the representation of women (Figure 1). In 2019 new doctorates were 32.3 percent female, falling to 30.3 percent for assistant professors, to 25.9 percent for tenured associate professors, and 14.6 percent for full professors. This pattern has been characterized as a “leaky pipeline.” Our reliance on this leaky pipeline for incremental progress in women’s representation in the profession depends on continued growth in entry, which no longer appears to be forthcoming. To the contrary, the pipeline seems to leak earlier in the academic process, as the share of assistant

TABLE 3—PERCENT AND NUMBER OF WOMEN FACULTY AND STUDENTS: ECONOMICS DEPARTMENTS WITHOUT DOCTORAL PROGRAMS

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>Faculty</i>													
Full professor													
Percent	21.8	20.3	22.2	25.2	25.0	23.5	23.9	23.1	25.4	25.2	24.2	27.8	28.0
Number	100.7	106.1	109.4	125.1	121.4	112.1	113.3	109.5	122.0	118.0	114.0	127.5	130.4
Associate professor													
Percent	34.2	34.4	32.9	32.5	31.2	32.7	35.5	35.8	36.7	38.5	38.7	42.3	40.1
Number	94.1	105.5	101.7	102.2	95.3	93.5	99.0	105.0	104.5	108.0	110.0	112.0	117.1
Assistant professor													
Percent	37.8	37.2	40.7	40.1	41.4	41.0	39.8	41.0	41.8	40.3	42.0	41.3	39.6
Number	109.1	117.2	117.5	121.5	121.7	119.8	116.2	121.4	131.3	129.9	133.0	135.0	134.6
All tenure track (subtotal)													
Percent	29.6	28.7	30.2	31.3	31.2	30.8	31.4	31.6	33.1	33.2	33.3	35.7	34.8
Number	303.9	328.8	328.6	348.8	338.3	325.4	328.4	335.9	357.8	355.9	357.0	374.5	382.2
All non-tenure track													
Percent	34.7	36.8	30.6	37.2	36.2	33.0	36.5	36.0	36.3	33.8	31.8	28.5	34.9
Number	90.4	103.8	86.7	92.9	92.2	102.4	64.3	85.0	138.0	109.5	93.0	47.0	79.9
All faculty													
Percent	30.6	30.3	30.2	32.4	32.1	31.3	32.1	32.4	34.0	33.4	33.0	34.7	34.8
Number	394.4	432.6	415.3	441.7	430.5	427.9	392.7	420.9	495.8	465.4	450.0	421.5	462.1
<i>Students</i>													
Undergraduate economics majors granted													
Percent	33.2	33.9	35.8	35.5	34.4	34.2	34.4	34.0	33.6	36.0	35.9	35.3	35.1
Number	1,598.0	1,801.7	1,875.5	1,698.0	1,659.6	1,565.8	1,508.0	1,873.1	1,999.8	2,272.6	2,188.3	2,300.5	2,152.5
Undergraduate senior majors													
Percent	37.7	36.0	36.4	36.8	35.9	34.1	35.3	34.7	35.2	35.8	35.8	36.0	35.4
Number	1,865.3	1,828.0	1,951.1	2,098.9	2,025.8	1,893.9	1,682.2	1,964.1	2,212.2	2,326.9	2,387.7	2,246.5	2,144.5
MA students graduated													
Percent	43.9	32.1	39.4	34.9	39.4	38.0	37.1	39.9	41.2	42.0	41.7	47.6	38.6
Number	59.5	76.7	87.3	81.8	68.4	65.3	57.0	65.0	56.0	47.0	48.0	39.0	72.9
MA students expected to graduate													
Percent	NA	NA	NA	NA	NA	NA	46.7	40.1	32.3	44.3	41.7	42.0	35.2
Number	NA	NA	NA	NA	NA	NA	56.0	68.5	36.7	49.3	50.0	34.0	63.0
Number respondents													
Number	106.0	107.0	107.0	110.0	110.0	110.0	111.0	111.0	111.0	112.0	112.0	112.0	112.0

*Notes:* For each category, the table gives women as a percentage of women plus men. For the five-year intervals, simple averages of annual percentages are reported.

professors who are female is no longer tracking those who complete their PhDs.

To provide a visual representation and estimates of this leaky pipeline, this report presents a simple lockstep model of typical academic career advancement (Figures 3 and 4). We track the gender composition of younger cohorts from when they enter graduate school and older cohorts from receipt of their degree. We compare the share female as the cohort progresses through academic ranks. Figure 3 shows that the proportion of women receiving their PhDs has been almost exactly the same as the proportion of women entering PhD programs six years prior. There does not appear to be excess

attrition of women in graduate school. However, there is evidence of attrition from graduate school into academia and during the academic probationary period: women's share of assistant professors is considerably smaller than would be predicted from the number receiving PhDs seven years earlier (Figure 3). This same pattern is reproduced in Figure 4, as the share female receiving their PhD diverges from the share of assistant professors for the cohorts of women who finished their degrees in 2004 and later. The pipeline has gotten leakier for younger women in the last decade. Figure 4 demonstrates as well the continuing excess attrition as women move (or don't) through the ranks. The female share

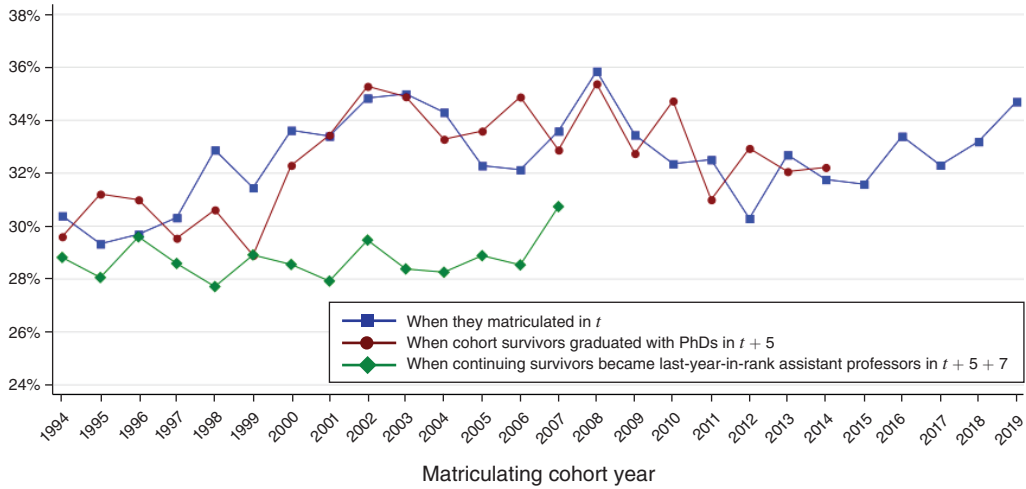


FIGURE 3. LOCKSTEP MODEL: PERCENTAGE OF WOMEN BY ENTERING PHD COHORTS: MATRICULATION, GRADUATION, AND ENTRY INTO FIRST-YEAR ASSISTANT PROFESSORSHIP

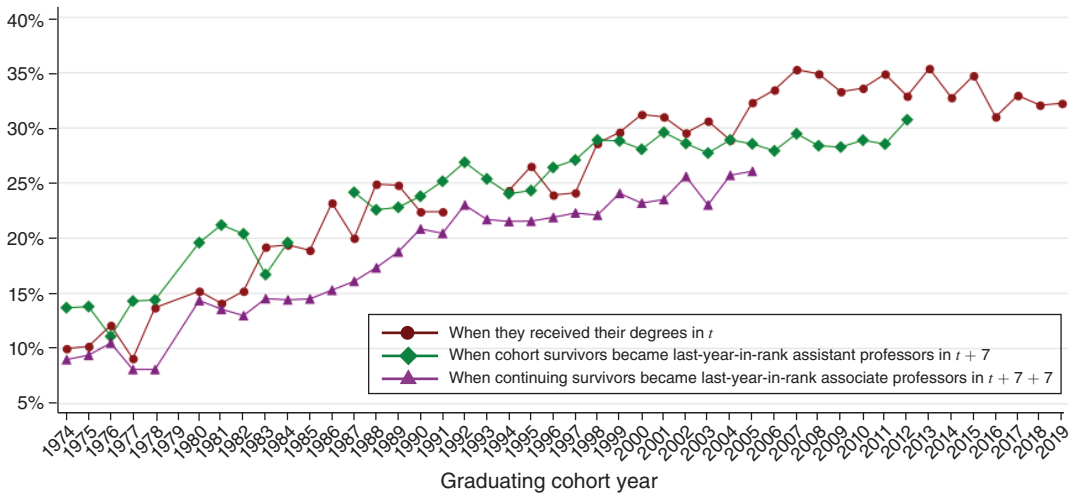


FIGURE 4. LOCKSTEP MODEL: PERCENTAGE OF WOMEN BY RECEIVING PHD COHORT: GRADUATION, LAST YEAR-IN-RANK ASSISTANT PROFESSORSHIP, AND LAST YEAR-IN-RANK ASSOCIATE PROFESSORS

of associate professors is consistently about 5 percent lower than the share who were assistant professors 7 years earlier.

Figure 5 shows the trend for women undergraduate senior majors (for PhD- and non-PhD-granting departments) over time. The female share is somewhat higher in non-PhD departments than in PhD-granting departments, but they have converged in recent years. Unfortunately, they have converged at around 35

percent, the maximum reached by PhD-granting departments, well below the 40 percent reached by undergrad-focused schools earlier in the century. The female share fell in 2019, perhaps as a result of the negative publicity received by the discipline in the last year.

Tables 4, 5, and 6 provide snapshots of the job market experiences of women from different types of PhD programs. Table 4 reports that women made up over 35 percent of job

TABLE 4—PERCENT AND NUMBER OF WOMEN IN JOB PLACEMENTS OF NEW PHDs FROM THE TOP ECONOMICS DEPARTMENTS

	Top 10						Top 20					
	1998–2002	2003–2007	2008–2012	2013–2017	2018	2019	1998–2002	2003–2007	2008–2012	2013–2017	2018	2019
<i>US-based, all types</i>												
Percent	29.7	30.1	26.2	27.7	20.7	37.7	29.1	31.6	29.3	28.3	23.8	35.6
Number	39.1	45.3	35.6	38.2	31.0	52.0	59.9	80.0	66.1	71.0	64.0	88.0
Faculty, PhD-granting department												
Percent	25.9	29.8	24.5	28.0	17.6	42.6	26.3	30.9	27.8	27.3	20.2	40.9
Number	18.9	26.8	17.8	19.4	13.0	29.0	29.5	44.4	33.2	29.4	22.0	38.0
Faculty, non-PhD-granting department												
Percent	50.1	26.5	35.1	34.4	14.3	0.0	50.2	30.8	41.2	33.0	14.3	28.6
Number	5.3	2.4	2.5	2.0	1.0	0.0	7.3	6.6	6.9	6.0	1.0	4.0
Non-faculty, any academic department												
Percent	NA	NA	NA	35.4	26.7	28.6	NA	NA	NA	28.9	28.6	19.2
Number	NA	NA	NA	3.4	4.0	2.0	NA	NA	NA	6.0	8.0	5.0
Public sector												
Percent	30.3	31.4	29.9	27.2	10.0	36.4	28.8	33.6	28.9	26.4	23.1	37.5
Number	8.5	7.3	6.9	4.6	1.0	8.0	12.9	14.2	11.5	9.8	9.0	15.0
Private sector												
Percent	30.8	28.6	24.1	25.7	27.3	34.2	28.9	31.7	28.5	29.7	27.9	35.1
Number	6.4	8.8	8.4	8.8	12.0	13.0	10.2	14.8	14.5	19.8	24.0	26.0
<i>Foreign-based, all types</i>												
Percent	14.5	23.1	22.9	20.2	27.7	24.2	19.6	22.7	24.4	24.8	26.7	28.8
Number	4.3	9.1	12.3	8.4	13.0	15.0	11.2	18.4	26.8	22.0	28.0	34.0
Academic												
Percent	13.4	25.3	23.0	23.1	27.3	25.0	19.9	25.2	22.3	26.5	26.7	32.2
Number	3.0	7.1	9.3	6.8	9.0	11.0	8.2	13.6	17.7	16.8	20.0	28.0
Nonacademic												
Percent	17.7	18.1	22.6	11.6	28.6	22.2	17.7	17.6	29.6	20.6	26.7	19.4
Number	1.3	2.0	3.1	1.6	4.0	4.0	3.0	4.8	9.1	5.2	8.0	6.0
<i>Unknown placement</i>												
Percent	NA	NA	NA	NA	NA	100.0	NA	NA	NA	NA	NA	33.3
Number	NA	NA	NA	NA	NA	1.0	NA	NA	NA	NA	NA	1.0
<i>No placement</i>												
Percent	31.7	6.7	0.0	6.7	50.0	0.0	34.7	23.4	18.1	25.7	50.0	33.3
Number	2.5	0.6	0.0	0.2	1.0	0.0	4.0	3.5	1.2	0.8	2.0	2.0
<i>Total on the market</i>												
Percent	27.1	28.0	24.8	25.9	22.6	33.3	27.2	29.4	27.5	27.4	24.9	33.4
Number	45.9	55.0	47.9	46.8	45.0	68.0	75.1	101.9	94.1	93.8	94.0	125.0

candidates from the top 20 schools last year. They made up larger fractions of academic placements in PhD-granting departments, perhaps reflecting the increased attention given to the status of women in the economics profession over the last year.<sup>6</sup> Note that this placement was not

as assistant professors in top-20 departments, which did not show much of an increase in 2019 (Table 2). Instead, there was a large increase in the number of women in non-tenure track positions in top-20 departments. Consistent with a recent Brookings report on *Gender and Racial Diversity of Federal Government Economists*, women were disproportionately placing in the

<sup>6</sup>See, for example, Alice Wu, “Gender Bias in Rumors among Professionals: An Identity-Based Interpretation,” *Review of Economics and Statistics*, forthcoming; Alice Wu, “Gendered Language on the Economics Job Market Rumors Forum,” *AEA Papers and Proceedings*, 108: 175–79 (2018); Alice Wu, “Gender Stereotyping in Academia: Evidence from Economics Job Market Rumors Forum” (Undergraduate Thesis, California, Berkeley, 2017); Justin Wolfers, “Why Women’s Voices Are Scarce in Economics,” *New York*

*Times*, February 2, 2018; and “Economics Is Uncovering Its Gender Problem,” *The Economist* March 21, 2019, available at <https://www.economist.com/leaders/2019/03/21/economics-is-uncovering-its-gender-problem>.

TABLE 5—PERCENT AND NUMBER OF WOMEN IN JOB PLACEMENTS OF NEW PHDs FROM ALL OTHER ECONOMICS DEPARTMENTS

	All other schools						
	1994–1997	1998–2002	2003–2007	2008–2012	2013–2017	2018	2019
<i>US-based, all types</i>							
Percent	28.9	32.6	34.7	39.5	37.5	36.8	34.7
Number	80.5	75.5	111.0	153.2	169.2	174.0	160.0
Faculty, PhD-granting department							
Percent	31.1	29.2	30.6	36.7	33.2	39.0	36.9
Number	26.0	21.3	35.4	48.6	36.0	30.0	31.0
Faculty, non-PhD-granting department							
Percent	28.3	36.5	41.0	39.3	38.3	35.7	35.7
Number	26.0	19.3	35.2	46.4	48.0	50.0	41.0
Non-faculty, any academic department							
Percent	NA	NA	NA	NA	30.7	41.4	34.8
Number	NA	NA	NA	NA	15.2	29.0	23.0
Public sector							
Percent	30.1	33.9	34.2	36.4	35.5	28.0	31.1
Number	16.3	18.0	18.0	24.2	22.4	14.0	19.0
Private sector							
Percent	24.6	32.9	33.5	48.5	45.2	37.5	34.1
Number	12.3	17.0	22.4	34.0	47.6	51.0	46.0
<i>Foreign-based, all types</i>							
Percent	17.9	25.4	25.1	29.5	31.8	29.3	24.6
Number	21.5	17.3	26.8	50.0	57.4	66.0	42.0
Academic							
Percent	21.5	30.8	28.7	31.7	34.5	30.6	26.0
Number	16.0	12.0	17.4	32.4	42.2	49.0	33.0
Nonacademic							
Percent	12.1	19.0	20.3	26.1	26.1	26.2	20.5
Number	5.5	5.3	9.4	17.6	15.2	17.0	9.0
<i>Unknown placement</i>							
Percent	NA	NA	NA	NA	NA	NA	7.7
Number	NA	NA	NA	NA	NA	NA	1.0
<i>No placement</i>							
Percent	21.1	26.4	33.6	36.8	43.1	53.7	35.9
Number	18.5	8.3	13.4	26.0	15.2	51.0	14.0
<i>Total on the market</i>							
Percent	24.7	30.4	32.3	36.6	36.2	36.7	31.7
Number	120.5	101.0	151.2	229.2	241.8	291.0	217.0

public and private sectors.<sup>7</sup> Women's representation in foreign job placements was similar to prior years. Table 5 presents the share female and outcomes for job market candidates in PhD-granting departments outside the top 20. Just under 35 percent of job market candidates from these departments were female. Table 6 presents placement data slightly differently, showing where last

year's job market candidates placed, by the rank of the originating department. Unlike in prior years, women job candidates, especially those in top-10 schools, were more likely than men on the job market to take positions in PhD-granting institutions. This seems to represent a shift from other academic jobs, not from nonacademic to academic positions.

Women's representation in economics seemed to have peaked at the beginning of the turn of this century, with little improvement in new entrants to doctoral programs or the professorate (Figure 1). For the top 20 programs, the share

<sup>7</sup> David Wessel, Louis Sheiner, and Michael Ng, Hutchins Center on Fiscal and Monetary Policy report, September 2019, available at <https://www.brookings.edu/research/gender-and-racial-diversity/>.



TABLE 6—NEW PHD JOB PLACEMENT BY GENDER AND DEPARTMENT RANK, CURRENT YEAR

2018–2019	Top 10		Top 11–20		All others	
	Women	Men	Women	Men	Women	Men
US-based, all types (share of all individuals by gender)	76.5	63.2	63.2	64.6	73.7	64.5
Faculty, PhD-granting department	55.8	45.3	25.0	21.9	19.4	17.6
Faculty, non-PhD-granting department	0.0	3.5	11.1	9.6	25.6	24.6
Non-faculty, any academic department	3.8	5.8	8.3	21.9	14.4	14.3
Public sector	15.4	16.3	19.4	15.1	11.9	14.0
Private sector	25.0	29.1	36.1	31.5	28.7	29.6
Foreign-based, all types (share of all individuals by gender)	22.1	34.6	33.3	32.7	19.4	27.6
Academic	73.3	70.2	89.5	70.3	78.6	72.9
Nonacademic	26.7	29.8	10.5	29.7	21.4	27.1
Unknown placement (share of all individuals by gender)	1.5	0.0	0.0	1.8	0.5	2.6
No placement (share of all individuals by gender)	0.0	2.2	3.5	0.9	6.5	5.4
Total on the market	68	136	57	113	217	467

TABLE 7—DISTRIBUTION OF TOP 20 DEPARTMENTS BY FEMALE SHARE OF FIRST-YEAR PHD CLASS, 2014–2019

	2014	2015	2016	2017	2018	2019
Share of women in first-year PhD class						
40 percent or above	2	3	6	2	7	9
35–39 percent	1	0	1	1	0	0
30–34 percent	5	2	2	8	2	5
25–29 percent	6	6	5	1	3	5
20–24 percent	2	6	3	3	3	0
Below 20 percent	5	4	4	6	6	2

Notes: This table classifies departments by the share of women in their entering class. This differs from the average share of women entering PhD programs each year because of differences in the size of different programs.

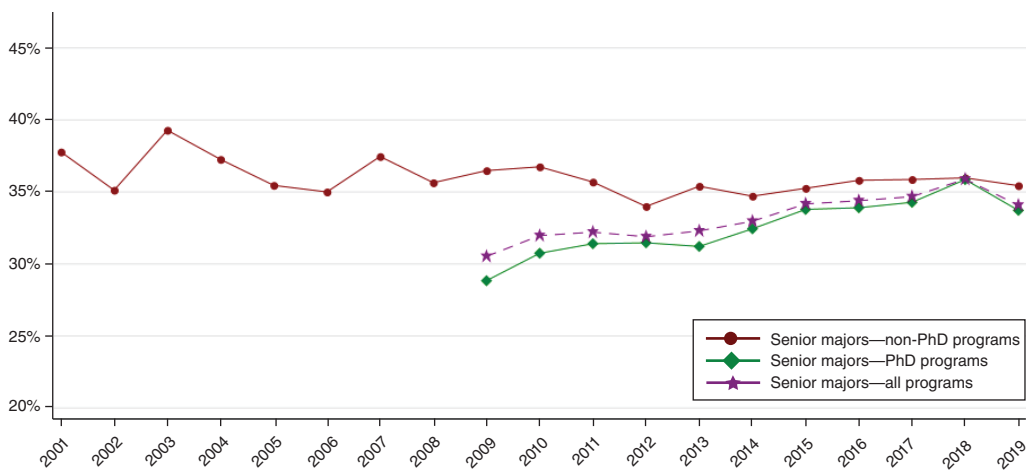


FIGURE 5. UNDERGRADUATE SENIOR ECONOMICS MAJORS

Note: CSWEP PhD survey began collecting senior major counts in 2009.

has been flat or even slightly downward over the last 20 years. In 2019 the share of women in the top 20 programs increased, and nine programs have first-year classes that are over 40 percent female (Table 7). This suggests that it is possible for the economics profession to change, and hopefully represents an inflection point toward a more inclusive and egalitarian profession.

**IV. Conclusions**

This report is unsurprisingly similar to those of previous years, showing stagnation in the representation of women either entering the economics profession or advancing from untenured assistant to tenured associate professor. There seems to be increasing attrition of women as assistant professors. Women make up a larger share of undergraduate majors, though those numbers do not approach parity and are not increasing over time. Women are over-represented in non-tenure track teaching jobs. Almost 40 percent of the female faculty in top-20 economics departments are in

non-tenure track teaching positions. This may play a role in shaping how undergraduate women view the economics profession. 2019 did see a slight uptick in the female share of the incoming PhD class, the area where rapid change is most possible. Hopefully this is the beginning of a shift in the inclusiveness of the field.

CSWEP’s many years of data on the evolution of faculty composition at the department level are unique in the social sciences and beyond. CSWEP now makes department-level longitudinal data available to individual departments so that they have this information to determine appropriate steps to achieve gender equity. Annual aggregate data and departmental-level data are available for research purposes in a manner that protects the confidentiality of the responding departments through the Inter-University Consortium for Political and Social Research and will be updated annually.

MARGARET LEVENSTEIN, *Chair*

APPENDIX FIGURES AND TABLES ON DATA QUALITY AND REPORTING

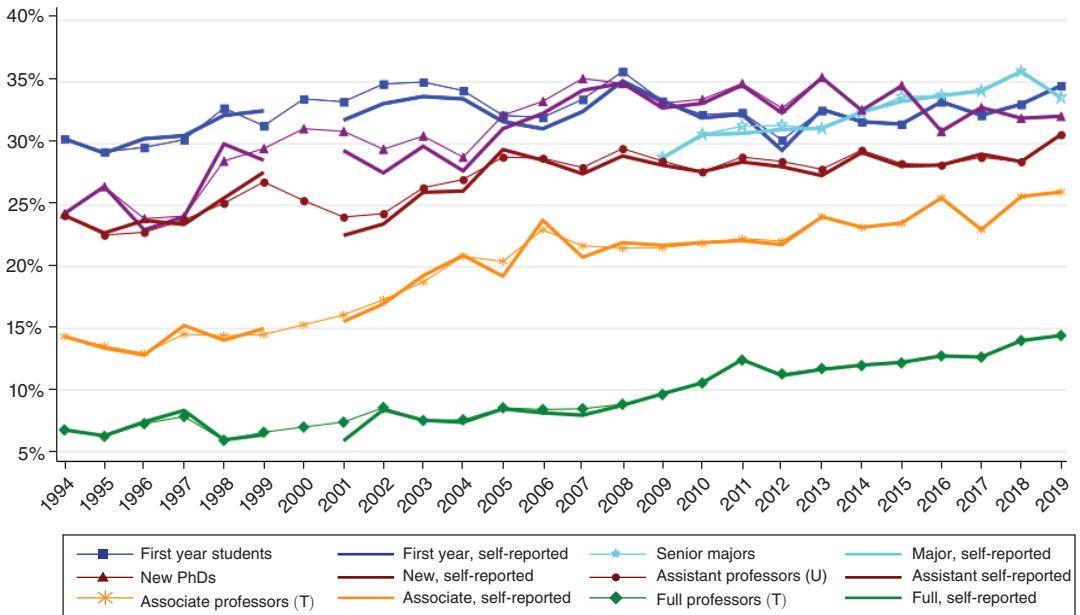


FIGURE 6. COMPARISON OF SELF-REPORTED AND IMPUTED DATA FROM FIGURE 1

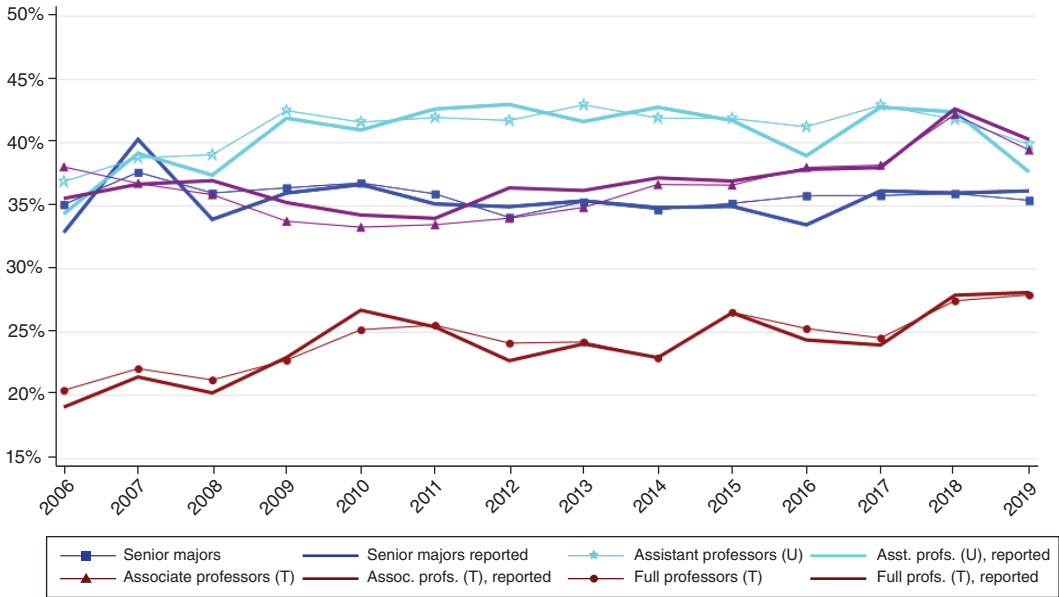


FIGURE 6A. COMPARISON OF SELF-REPORTED AND IMPUTED DATA FROM FIGURE 2

TABLE 8—NUMBER OF ECONOMICS DEPARTMENTS IN THE CSWEP SURVEY BY YEAR AND TYPE OF PROGRAM

	Year of survey																	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>With doctoral programs</i>																		
Number responded CSWEP	77	92	98	91	93	100	110	120	122	122	117	122	124	124	126	126	126	126
Number of programs (analysis)	122	122	123	123	124	124	124	124	126	126	126	127	127	127	126	126	126	126
<i>Without doctoral programs</i>																		
Number responded CSWEP	33	49	61	65	69	63	71	66	80	82	62	101	104	107	84	109	108	104
Number of programs (analysis)	92	96	102	106	106	106	107	107	110	110	110	111	111	111	112	112	112	112

Note: Any nonrespondents are imputed, with UAQ if they responded to that survey and then with linear interpolation for any remaining nonresponding years.

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