ICPSR 37118

Committee on the Status of Women in the Economics Profession (CSWEP) Annual Survey of U.S. Economics Departments, United States, 1994-2020

American Economic Association.
Committee on the Status of Women in the
Economics Profession

Survey Report 2019

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IV. Status of Women in the Economics Profession¹

A. Women's Status in the Economics Profession: Summary

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% of new PhDs, and 8.8% of assistant, 3.7% of associate, and 2.4% 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 after CSWEP's first survey, there was 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% of full professors and 25.8% 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%, and of the entering cohort of PhD students, at 34.7%, plateaued around 2005 (Table 1). The share of women among undergraduate economics majors at these same schools has increased (from 30.0% in 1998 to 33.5% in 2019), but is still well below parity, and does not approach the 55% share of women in the undergraduate population.²

One sign of progress in 2019 is that a record nine top twenty departments have first year classes that are at least 40% 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 proportions 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

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¹ 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.

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

2004, at the same time that women's entry into PhD programs stopped increasing, suggesting that there may be a common underlying cause.

B. 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 126 doctoral and 104 non-doctoral departments.³ The non-doctoral sample is based on the listing of "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 ICPSR study 37118 at https://doi.org/10.3886/ICPSR37118.v2.⁴

C. 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% (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%) is exactly the same as the average for the previous decade. The share of the incoming cohort of PhD students increased from 33.2% in 2018 to 34.7% 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% in 2018 to 30.3% 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 twenty," and produce the vast majority of faculty who teach in PhD-granting departments, we see a similar pattern. In

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³ We handle missing data as follows. We impute responses for missing items or non-responding departments. In years when non-responders 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 C. Scott and the American Economic Association for sharing the UAQ data with us.

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

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% of new students in top ten 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.⁵ The share of faculty who are women is higher than in PhD-granting departments, at every level of the professoriate, but there has been remarkably little change in this century. In general, the share female falls as the research intensity of the department increases (e.g., from top 20 to top ten). The one exception is among undergraduates. In the top ten departments, women made up 37.9% of senior majors in 2019; 37.8% of majors in the top 20; 33.8% in all PhD granting departments; and 35.4% 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% of all non-tenure track faculty in the former and 34.9% 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% female, falling to 30.3% for assistant professors, to 25.9% for tenured associate professors, and 14.6% 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 pipeline, as the share of assistant 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 lock-step 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

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⁵ 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 masters. Figure 2 and Table 3 use a consistent panel of departments over time.

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 the 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 of associate professors is consistently about 5% lower than the share who were assistant professors seven 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%, the maximum reached by PhD-granting departments, well below the 40% reached by undergrad-focused schools earlier in the century. The share female 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% of job 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. 6 Note that this placement was not as assistant professors in top 20 departments, which did not show much of an increase in 2019 (Table 2b). 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 public and private sectors. 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% 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.

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⁶ 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, UC 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.

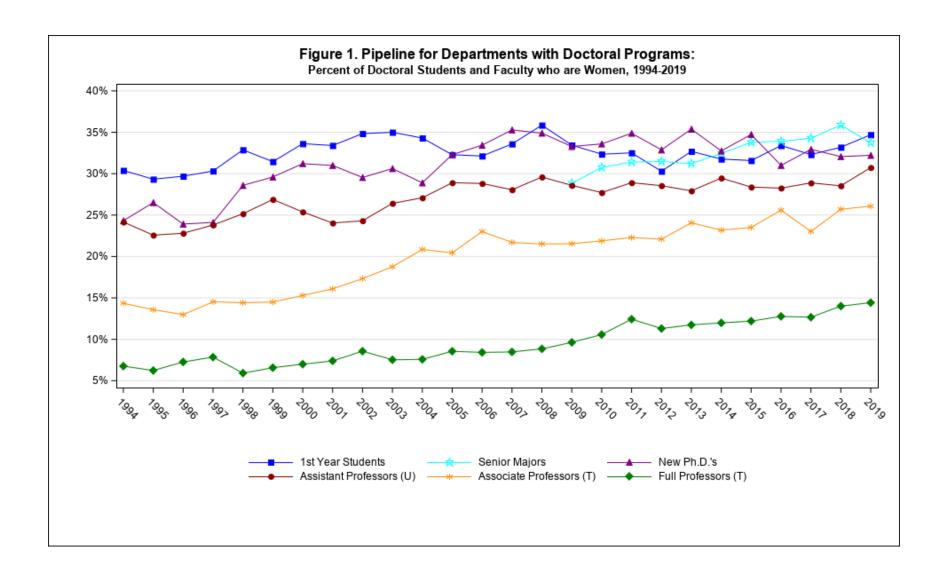
⁷ David Wessel, Louis Sheiner, and Michael Ng, Hutchins Center on Fiscal and Monetary Policy report, September 2019, available at https://www.brookings.edu/research/gender-and-racial-diversity/.

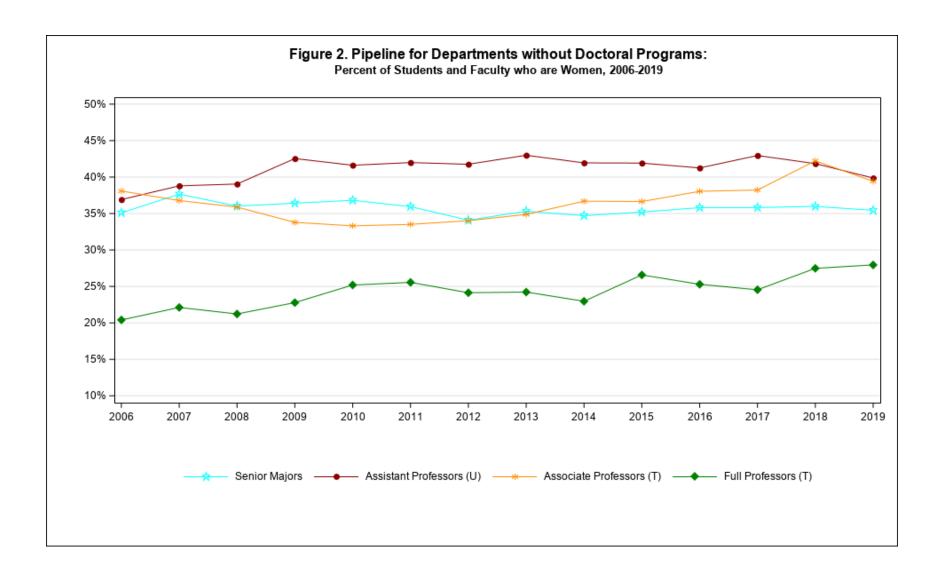
Women's representation in economics seemed to have peaked at the beginning of the turn of this century, with little improvement in new entrants to doctoral programs or the professoriate (Figure 1). For the top 20 programs, the share was flat or even slightly downward over the last twenty years. In 2019 the share of women in the top 20 programs increased, and nine programs have first year classes that are over 40% 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.

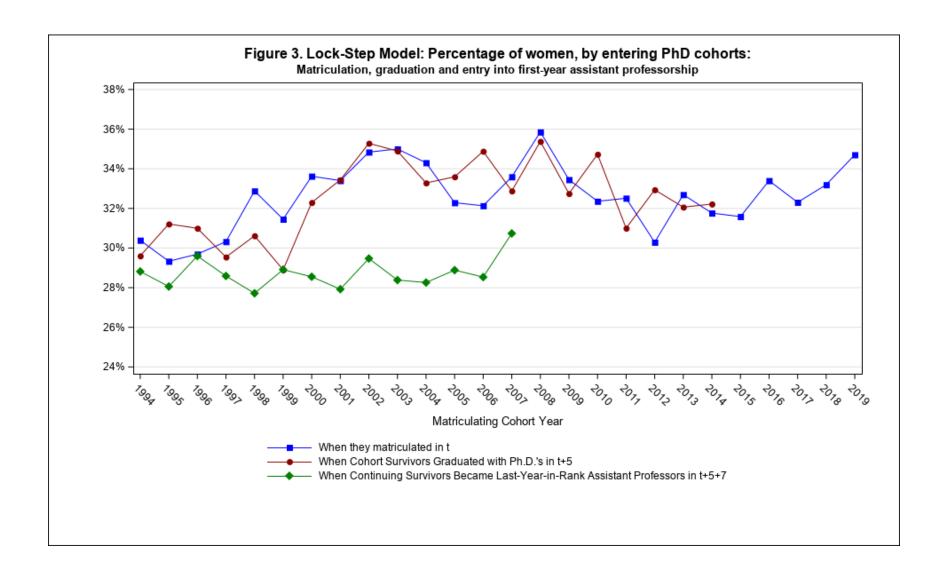
D. Conclusions

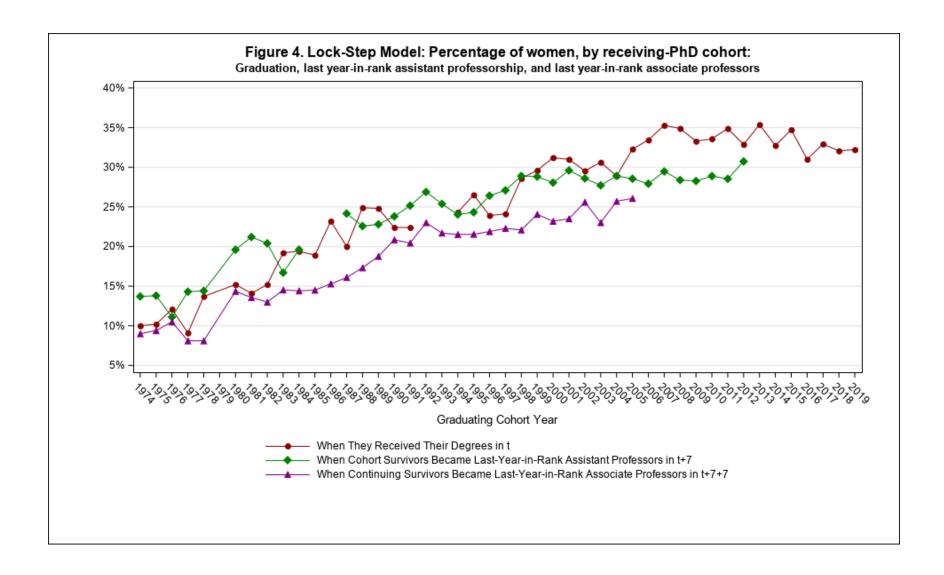
This report is unsurprisingly similar to those of previous years, showing stagnation in the representation of women either entering the economics profession or advancing from untenured assistant to tenured associate professor. There seems to be increasing attrition of women as assistant professors. Women 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% 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.









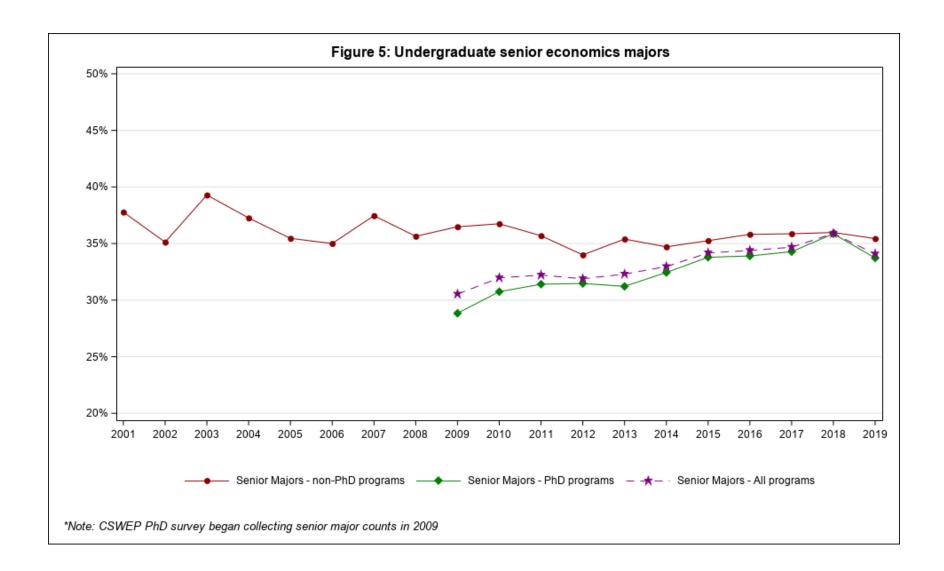


Table 1. The Pipeline for Departments with Doctoral Programs: Percent and Number of Doctoral Students and Faculty who are Women

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Faculty	1334	1993	1330	1337	1336	1333	2000	2001	2002	2003	2004	2003	2000	2007	2008	2003	2010	2011	2012	2013	2014	2013	2010	2017	2010	2013
Full Professor																										
Percent	6.9%	6.1%	7.1%	8.2%	6.0%	6.6%	6.8%	7.1%	8.1%	7.2%	7.2%	8.4%	8.1%	8.1%	8.5%	9.6%	10.6%	12.7%	12.5%	11.8%	12.1%	12.3%	12.9%	12.7%	14.0%	14.5%
Number	80.0	91.5	101.0	125.0	87.0	98.9	102.1	111.5	130.2	111.5	114.0	127.9	125.4	127.5	136.5	152.0	171.3		195.7	183.0	190.3	195.7		194.0		234.0
Associate Professor		,																								
Percent	13.9%	13.1%	13.2%	14.2%	14.1	14.1	14.5	16.0	16.5%	19.4%	20.1%	20.6%	22.9%	21.9%	22.5%	21.8%	22.7%	22.6%	22.7%	24.1%	23.1%	23.8%	26.1%	23.2%	25.8%	25.8%
Number	61.0	81.5	76.0	84.2	84.5	83.4	83.6	93.1	93.0	108.4	114.8	111.7	126.1	123.3	131.5	129.5	137.8	135.1	134.9	145.5	151.0			154.0		
Assistant Professor	02.0	01.0	70.0	02	0.10	0011	00.0	55.1	33.0	2001.	11	1111	120.1	120.0	101.0	123.3	257.0	103.1	20	1.5.5	131.0	250.0	273.0	25	270.0	273.5
Percent	24.9%	22.7%	22.5%	24.1%	24.5	25.7	24.3	23.1	24.4%	27.2%	27.3%	29.7%	28.9%	27.7%	29.5%	28.0%	27.6%	29.1%	28.7%	27.4%	29.0%	28.2%	28.3%	28.6%	28.4%	30.3%
Number	126.3	146.0	133.8	142.8	140.9	152.7	148.2	149.8	152.9	187.2	188.9	208.4	205.0	212.5	230.6	212.5	211.6	212.4	224.2	208.5	228.7	233.8	236.0	241.0		247.0
All Tenure Track (Subtotal)	120.5	140.0	133.0	142.0	140.5	132.7	140.2	143.0	152.5	107.2	100.5	200.4	203.0	212.3	250.0	212.5	211.0	212.4	22-1.2	200.5	220.7	233.0	230.0	241.0	233.0	247.0
Percent	12.7%	11.5%	12.0%	12.9%	11.9	12.5	12.5	12.7	13.4%	14.5%	14.7%	16.2%	16.3%	15.9%	16.8%	16.8%	17.4%	18.9%	18.9%	18.4%	18.9%	19.0%	19.9%	19.4%	20.5%	21.2%
Number	267.3	319.0	310.8	352.1		335.0			376.2	407.1	417.6	448.0	456.5	463.3	498.6	494.0			554.8	537.0	570.0			589.0		
All Non-Tenure Track	207.3	313.0	310.0	332.1	312.4	333.0	333.3	334.4	370.2	407.1	417.0	440.0	430.5	403.3	450.0	454.0	320.0	340.3	334.0	337.0	370.0	303.3	015.0	303.0	022.0	000.5
Percent	29.6%	24.3%	35.5%	43.4%	30.5	29.4	31.3	29.7	33.0%	32.3%	31.2%	35.7%	33.3%	33.3%	32.5%	34.8%	33.0%	33.2%	38.8%	35.2%	37.8%	34.8%	35.2%	35.0%	37.0%	37.6%
Number	29.0%	37.0	37.0	53.9	62.0	79.3		97.1	95.9	130.1	149.5	138.1	154.9	181.1	183.0	196.9	229.3		214.7	181.5	223.3			320.0		
All Faculty	23.0	37.0	37.0	33.3	02.0	13.3	120.8	37.1	93.9	130.1	149.5	138.1	134.9	101.1	183.0	190.9	229.3	224.3	214.7	101.5	223.3	230.7	312.0	320.0	233.0	270.5
Percent	13.5%	12.2%	12.9%	14.3%	13.2	14.1	14.8	14.4	15.3%	16.7%	17.1%	18.6%	18.7%	18.7%	19.3%	19.7%	20.3%	21.7%	22.0%	20.9%	22.0%	22.4%	23.3%	23.1%	23.3%	24.3%
Number	296.3	356.0			374.4		454.7		472.1	537.1	567.1		611.4	644.3	681.6	690.9			769.4	718.5	793.3					
Ph.D. Students	290.3	330.0	347.7	400.0	3/4.4	414.5	434.7	431.3	4/2.1	337.1	307.1	300.1	011.4	044.3	001.0	090.9	730.1	704.6	709.4	/10.5	793.3	002.2	931.0	909.0	833.0	930.0
Ph.D. Granted																										
Percent	24.3%	26.5%	23.9%		28.6	29.6	31.2	31.0	29.5%	30.6%	28.9%	32.3%	33.4%	35.3%	34.9%	33.3%	33.6%		32.9%		32.7%			32.9%		32.2%
Number	180.0	230.5	219.2	226.2	259.0	262.2	274.6	285.9	247.9	290.2	313.6	323.8	335.1	368.0	432.9	364.2	338.3	350.0	352.8	392.2	358.7	404.8	372.0	361.0	370.0	347.0
ABD																										
Percent	27.3%	26.4%	27.9%		28.2	30.6	31.2	31.7	31.8%	34.5%	33.3%	34.2%	34.0%	33.7%	34.1%	33.9%			32.7%		32.2%			33.0%		32.9%
Number	689.0	309.5	763.7	826.7	792.2	835.9	838.8	841.8	943.2	1117.4	1221.1	1230.3	1225.3	1305.0	1280.2	1298.9	1366.9	1329.7	1313.0	1227.5	1346.0	1324.5	1430.0	1469.0	1469.0	1450.0
First Year																										
Percent	30.4%	29.3%	29.7%	30.3%	32.9	31.5	33.6	33.4	34.8%	35.0%	34.3%	32.3%	32.1%	33.6%	35.9%	33.4%			30.3%		31.8%			32.3%		34.7%
Number	404.5	469.0	454.2	454.0	471.9	479.6	504.6	552.3	582.6	620.0	587.3	542.3	533.8	558.4	603.3	597.0	569.5	541.5	472.5	479.0	504.0	500.0	517.0	492.0	474.0	540.0
Undergraduate Economics Majors Graduated																										
Percent	missing	30.6%	33.0%	32.5%	32.0	30.6	32.0	32.6	33.3%	32.8%	32.4%	31.6%	31.3%	30.2%	30.9%	30.3%	30.3%	30.7%	30.4%	32.1%	33.6%	33.2%	32.9%	34.1%	34.1%	33.5%
Number	missing	5818	8714	8757	7755	7811	1018	1132	13725	15762	15691	16687	16427	16259	15636	19067	19840		20175		20867			22793		24638
Undergraduate Senior Majors*																										
Percent	missing	missing	missing	missing	missin	missin	missin	missin	missing	28.8%	30.7%	31.4%	31.5%	31.2%	32.4%	33.8%	33.9%	34.3%	35.9%	33.79						
Number	missing	missing	missing	missing	missin	missin	missin	missin	missing	20215	23290	26169	29245		19510	18579	19908	20699	21872	2323						

^{*}Notes: Entry and exit change the population universe. Any known Ph.D. programs are considered members of the population. Any non-respondents were imputed first with UAQ survey responses and, if those are unavailable, with linear interpolation. All programs responded to the 2019 survey.

Table 2a. The Pipeline for Top Departments: Percent and Numbers of Faculty and Students who are Women

												All	Top 10	Schools												
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Faculty																										
Full Professor																										
Percent	4.1%	4.3%	5.6%	4.9%	6.2%	6.3%	8.2%	8.3%	7.8%	7.1%	8.6%	8.8%	8.7%	8.8%	8.0%	8.7%	9.6%	10.0%	9.2%	9.6%	9.7%	9.6%	9.2%	9.1%	11.3%	12.2%
Number	9.0	10.0	13.0	11.0	15.0	15.5	19.0	20.0	23.0	18.0	22.0	21.0	22.0	24.0	23.0	25.0	28.0	26.0	27.0	28.0	27.0	27.0	26.0	27.0	33.0	39.0
Associate Professor																										
Percent	11.8%	13.9%	11.8%	12.7%	20.0%	25.9%	20.4%	13.6%	19.4%	18.5%	15.1%	21.1%	12.3%	15.2%	24.7%	20.0%	20.0%	19.6%	25.9%	23.3%	21.9%	25.0%	28.9%	30.8%	26.3%	21.2%
Number	4.0	5.0	3.7	5.3	6.0	7.0	5.5	4.0	6.0	5.0	4.0	6.0	4.0	5.0	9.0	6.0	7.0	9.0	7.0	7.0	7.0	8.0	13.0	12.0	10.0	7.0
Assistant Professor																										
Percent	22.1%	20.4%	18.7%	20.4%	16.7%	18.7%	18.3%	19.3%	17.1%	20.2%	19.1%	22.5%	25.2%	26.2%	26.7%	26.1%	22.6%	20.9%	19.4%	17.0%	20.0%	21.6%	18.0%	20.2%	17.9%	19.8%
Number	21.0	22.0	19.7	20.3	16.0	20.0	20.5	21.5	19.0	21.0	20.5	24.0	26.0	27.0	27.0	24.0	21.0	18.0	18.0	15.0	18.0	21.0	18.0	22.0	17.0	19.0
All Tenure Track																										
Percent	9.7%	9.8%	9.9%	10.1%	10.1%	11.1%	12.1%	11.9%	11.0%	11.5%	11.9%	13.6%	13.4%	13.7%	13.9%	13.4%	13.3%	13.5%	12.6%	12.2%	13.0%	13.6%	13.3%	13.7%	14.1%	14.5%
Number	34.0	37.0	36.3	36.7	37.0	42.5	45.0	45.5	48.0	44.0	46.5	51.0	52.0	56.0	59.0	55.0	56.0	53.0	52.0	50.0	52.0	56.0	57.0	61.0	60.0	65.0
All Non-Tenure Track																										
Percent	33.3%	17.4%	48.6%	39.6%	27.2%	29.1%	27.7%	28.6%	44.4%	33.3%	28.6%	55.0%	34.4%	48.6%	39.4%	42.2%	34.0%	23.1%	40.8%	35.2%	33.9%	44.3%	39.3%	33.3%	34.4%	35.7%
Number	4.0	4.0	6.0	7.0	6.2	8.8	9.0	6.0	8.0	14.0	12.0	22.0	11.0	17.0	14.0	19.0	17.0	30.0	20.0	19.0	20.0	43.0	35.0	29.0	22.0	30.3
All Faculty																										
Percent	10.5%	10.3%	11.2%	11.4%	11.1%	12.4%	13.4%	12.8%	12.4%	13.6%	13.6%	17.6%	14.9%	16.4%	15.9%	16.3%	15.5%	15.9%	15.6%	14.8%	15.7%	19.5%	17.8%	16.9%	16.8%	17.9%
Number	38.0	41.0	42.3	43.7	43.2	51.3	54.0	51.5	56.0	58.0	58.5	73.0	63.0	73.0	73.0	74.0	73.0	83.0	72.0	69.0	72.0	99.0	92.0	90.0	82.0	95.3
Ph.D. Students																										
Ph.D. Granted																										
Percent	24.4%	31.3%	22.7%	20.1%	25.7%	22.7%	23.0%	27.2%	25.5%	26.1%	27.0%	31.6%	29.6%	28.7%	31.2%	24.0%	24.7%	25.3%	28.2%	31.3%	25.9%	25.9%	26.4%	28.4%	23.6%	29.9%
Number	42.0	68.0	50.0	45.0	56.5	43.0	48.5	54.0	53.0	49.0	55.0	71.0	58.0	52.0	64.0	52.0	46.0	50.0	58.0	67.0	51.0	52.0	58.0	57.0	49.0	64.0
ABD																										
Percent	22.2%	22.1%	25.0%	22.2%	21.8%	23.6%	24.5%	25.7%	26.3%	32.3%	27.8%	27.0%	27.2%	26.0%	25.0%	29.1%	25.1%	26.6%	24.6%	30.4%	25.4%	25.1%	25.4%	24.6%	26.9%	25.2%
Number	150.0	57.0	182.0	150.0	173.3	185.0	176.3	167.5	218.0	256.0	231.0	245.0	251.0	218.0	209.0	231.0	221.0	226.0	207.0	255.0	217.0	225.0	247.0	221.0	264.0	234.0
First Year																										
Percent	18.1%	22.5%	23.8%	33.6%	28.7%	27.0%	29.9%	27.8%	27.0%	23.3%	25.7%	27.7%	24.6%	30.0%	24.4%	23.7%	23.7%	28.1%	22.1%	27.9%	24.0%	23.9%	29.8%	25.8%	26.1%	32.1%
Number	42.0	67.0	76.3	91.7	75.7	78.8	70.0	65.0	73.0	59.0	61.0	83.0	58.0	73.0	58.0	59.0	59.0	71.0	58.0	65.0	62.0	52.0	68.0	66.0	59.0	71.0
Undergraduate																										
Economics Majors																										
Percent	missing	30.8%	31.8%	30.7%	33.0%	32.2%	34.8%	34.4%	36.2%	34.9%	36.8%	35.9%	35.6%	35.4%	34.7%	35.7%	36.5%	36.1%	34.6%	39.6%	37.2%	36.9%	36.6%	40.7%	36.3%	37.8%
Number	missing	348	378	390	647	558	740	688	707	752	817	874	743	697	564	834	770	822	729	866	849	895	832	924	866	923
Undergraduate Senior																										
Majors*																										
Percent	missing	37.9%	38.7%	39.2%	39.2%	31.7%	37.3%	36.4%	36.5%	39.0%	40.3%	37.9%														
Number	missing	662	958	1249	999	311	780	715	780	841	787	851														

Table 2b. The Pipeline for Top Departments: Percent and Numbers of Faculty and Students who are Women

												All	Top 20	Schools												
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Faculty	1334	1333	1330	1337	1330	1333	2000	2001	2002	2003	2004	2003	2000	2007	2000	2003	2010	2011	2012	2013	2014	2013	2010	2017	2010	2013
Full Professor																										
Percent	4.0%	3.7%	4.6%	5.1%	6.7%	5.6%	7.1%	6.9%	10.2%	6.6%	7.9%	7.8%	7.9%	8.5%	8.5%	8.3%	9.2%	13.1%	8.5%	9.6%	10.0%	10.1%	11.3%	10.2%	11.9%	13.0%
Number	16.0	15.0	18.0	20.0	27.0	25.5	30.5	33.0	51.0	30.0	37.0	36.0	36.5	42.0	42.0	40.0	46.0	59.0	41.0	49.0	49.0	50.0	58.0	53.0	62.0	72.0
Associate Professor																										
Percent	9.9%	11.4%	13.3%	12.9%	14.4%	17.6%	16.4%	14.0%	16.9%	18.6%	15.0%	18.7%	14.8%	13.9%	21.2%	19.3%	23.7%	25.5%	22.1%	19.1%	20.4%	19.6%	20.2%	20.6%	20.6%	17.3%
Number	8.0	10.0	10.7	10.3	10.0	13.0	11.0	10.0	10.0	11.0	8.0	10.0	10.0	11.0	19.0	16.0	22.0	25.0	17.0	17.0	19.0	19.0	22.0	20.0	20.0	16.5
Assistant Professor																										
Percent	20.8%	18.5%	16.5%	16.3%	17.6%	19.1%	17.0%	18.5%	19.9%	23.4%	22.6%	26.2%	25.3%	24.0%	26.9%	23.5%	21.9%	22.3%	20.0%	18.7%	21.3%	21.5%	21.2%	20.7%	21.5%	22.7%
Number	35.0	33.0	29.7	29.3	29.5	36.5	33.5	38.5	38.0	47.0	45.5	53.0	50.5	53.0	58.0	48.0	48.0	45.0	41.0	37.0	43.0	44.0	44.0	43.0	45.0	44.0
All Tenure Track																										
Percent	9.1%	8.7%	8.9%	9.1%	10.3%	10.4%	10.8%	10.7%	13.2%	12.3%	12.5%	13.8%	13.3%	13.4%	14.8%	13.5%	14.3%	17.2%	13.0%	12.9%	14.1%	14.2%	14.9%	14.0%	15.4%	15.7%
Number	59.0	58.0	58.3	59.7	66.5	75.0	75.0	81.5	99.0	88.0	90.5	99.0	97.0	106.0	119.0	104.0	116.0	129.0	99.0	103.0	111.0	113.0	124.0	116.0	127.0	132.5
All Non-Tenure Track																										
Percent	34.6%	18.6%	53.4%	42.4%	32.1%	28.4%	35.6%	27.0%	38.3%	38.4%	39.3%	54.5%	36.2%	38.9%	30.0%	37.5%	36.4%	28.5%	39.1%	38.9%	39.6%	42.8%	39.3%	38.2%	33.1%	38.0%
Number	9.0	11.0	13.0	13.0	10.2	16.8	28.5	10.0	18.0	28.0	26.5	36.0	23.3	37.0	48.5	39.0	44.0	51.0	50.0	44.0	57.0	83.0	70.0	72.0	48.0	67.3
All Faculty																										
Percent	10.1%	9.5%	10.5%	10.6%	11.4%	11.8%	13.4%	11.5%	14.7%	14.7%	14.8%	17.3%	15.2%	16.1%	17.4%	16.3%	17.1%	19.3%	16.7%	16.1%	18.1%	19.8%	19.2%	18.5%	18.0%	19.6%
Number	68.0	69.0	71.3	72.7	76.7	91.8	103.5	91.5	117.0	116.0	117.0	135.0	120.3	143.0	167.5	143.0	160.0	180.0	149.0	147.0	168.0	196.0	194.0	188.0	175.0	199.8
Ph.D. Students																										
Ph.D. Granted																										
Percent	25.5%	29.6%	22.7%	22.1%	25.0%	24.0%	24.4%	26.1%	24.9%	26.1%	28.0%	31.6%	31.1%	30.5%	31.0%	26.8%	28.1%	27.8%	27.3%	33.2%	29.3%	28.4%	26.2%	26.9%	25.3%	
Number	77.0	98.0	82.0	80.0	89.5	76.0	81.0	90.0	84.0	86.0	92.0	118.0	109.5	105.0	115.0	101.0	92.0	96.0	99.0	124.0	102.0	110.0	112.0	98.0	98.0	123.0
ABD																										
Percent	23.0%	21.8%	25.6%	23.2%	24.0%	25.6%	26.5%	27.5%	27.5%	33.0%	30.1%	29.3%	29.3%	27.6%	27.7%	28.9%	27.0%	29.5%	27.9%	30.3%	26.5%	25.7%	26.7%	27.0%	27.3%	
Number	232.0	80.0	303.5	260.0	278.3	286.6	288.4	290.3	343.5	384.0	444.5	418.0	401.0	388.0	355.0	404.5	395.0	438.0	415.0	444.0	427.0	390.0	451.0	444.0	447.0	396.0
First Year																		.=	.=							
Percent	21.4%	27.4%	24.7%	29.9%	30.2%	28.1%	29.6%	27.4%	31.1%	29.4%	28.1%	27.3%	27.2%	29.9%	30.1%	27.9%	25.1%	27.8%	27.3%	28.4%	27.4%	24.9%	29.5%	26.0%	29.9%	
Number	93.0	132.0	128.8	142.7	141.2	143.3	134.0	138.0	156.0	145.0	133.0	132.0	126.0	141.0	139.0	129.0	122.0	132.0	124.0	121.0	123.0	112.0	130.0	116.0	126.0	167.0
Undergraduate Economics Majors																										
Percent	missing	32.1%	31.6%	33.0%	33.6%	32.6%	33.4%	34.3%	35.3%	35.3%	36.1%	36.2%	35.9%	34.2%	34.8%	35.0%	35.5%	36.2%	36.2%	39.3%	37.4%	37.2%	37.6%	39.2%	37.0%	37.2%
Number	missing	821	769	1009	1259	1061	1313	1461	1718	1925	1961	2136	1841	1666	1554	2000	1970	2114	2077	2241	2290	2494	2427	2446	2431	2282
Undergraduate Senior Majors*																										
Percent	missing	34.0%	35.2%	38.1%	37.3%	37.6%	37.7%	37.1%	38.7%	38.1%	38.8%	37.8%														
Number	missing	1588	2164	3004	2548	1505	2319	1674	1817	1994	2202	2126														

Table 3. Percent Women Faculty and Students: Economics Departments without Doctoral Programs

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Faculty														
Full Professor														
Percent	19.8%	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	88.7	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	35.5%	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	97.9	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	35.2%	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	95.4	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	28.4%	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	282.0	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	34.5%	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	86.6	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	29.6%	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	368.7	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
Students														
Undergraduate Economics Majors Graduated														
Percent	34.4%	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	1460.	1598.	1801.	1875.	1698.	1659.	1565.	1508.	1873.	1999.	2272.	2188.	2300.	2152.5
Undergraduate Senior Majors														
Percent	35.1%	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	1627.	1865.	1828.	1951.	2098.	2025.	1893.	1682.	1964.	2212.	2326.	2387.	2246.	2144.5
M.A. Students Graduated														
Percent	38.0%	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	23.0	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
M.A. Students Expected to Graduate														
Percent	missing	46.7%	40.1%	32.3%	44.3%	41.7%	42.0%	35.2%						
Number	missing	56.0	68.5	36.7	49.3	50.0	34.0	63.0						
N departments														
Number	106.0	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.

Table 4. Percent Women in Job Placements of New Ph.D.s from the Top Economics Departments

	14516 4.16													
			All To	o 10 Schools						All Top	20 Schools			
	1994-1997	1998-2002	2003-2007	2008-2012	2013-2017	2018	2019	1994-1997	1998-2002	2003-2007	2008-2012	2013-2017	2018	2019
U.Sbased, All Types														
Percent	24.9%	29.7%	30.1%	26.2%	27.7%	20.7%	37.7%	26.7%	29.1%	31.6%	29.3%	28.3%	23.8%	35.6%
Number	35.8	39.1	45.3	35.6	38.2	31.0	52.0	58.9	59.9	80.0	66.1	71.0	64.0	88.0
Faculty, PhD Granting Department														
Percent	22.1%	25.9%	29.8%	24.5%	28.0%	17.6%	42.6%	24.0%	26.3%	30.9%	27.8%	27.3%	20.2%	40.9%
Number	16.0	18.9	26.8	17.8	19.4	13.0	29.0	27.0	29.5	44.4	33.2	29.4	22.0	38.0
Faculty, Non-PhD Granting Department														
Percent	42.1%	50.1%	26.5%	35.1%	34.4%	14.3%	0.0%	41.8%	50.2%	30.8%	41.2%	33.0%	14.3%	28.6%
Number	6.8	5.3	2.4	2.5	2.0	1.0	0.0	8.8	7.3	6.6	6.9	6.0	1.0	4.0
Non-Faculty, Any Academic Department														
Percent	missing	missing	missing	missing	35.4%	26.7%	28.6%	missing	missing	missing	missing	28.9%	28.6%	19.2%
Number	missing	missing	missing	missing	3.4	4.0	2.0	missing	missing	missing	missing	6.0	8.0	5.0
Public Sector														
Percent	24.1%	30.3%	31.4%	29.9%	27.2%	10.0%	36.4%	28.3%	28.8%	33.6%	28.9%	26.4%	23.1%	37.5%
Number	6.5	8.5	7.3	6.9	4.6	1.0	8.0	12.3	12.9	14.2	11.5	9.8	9.0	15.0
Private Sector														
Percent	22.4%	30.8%	28.6%	24.1%	25.7%	27.3%	34.2%	25.2%	28.9%	31.7%	28.5%	29.7%	27.9%	35.1%
Number	6.5	6.4	8.8	8.4	8.8	12.0	13.0	10.9	10.2	14.8	14.5	19.8	24.0	26.0
Foreign-based, All Types														
Percent	17.8%	14.5%	23.1%	22.9%	20.2%	27.7%	24.2%	17.8%	19.6%	22.7%	24.4%	24.8%	26.7%	28.8%
Number	5.8	4.3	9.1	12.3	8.4	13.0	15.0	10.8	11.2	18.4	26.8	22.0	28.0	34.0
Academic														
Percent	24.5%	13.4%	25.3%	23.0%	23.1%	27.3%	25.0%	19.8%	19.9%	25.2%	22.3%	26.5%	26.7%	32.2%
Number	5.3	3.0	7.1	9.3	6.8	9.0	11.0	8.5	8.2	13.6	17.7	16.8	20.0	28.0
Non-Academic														
Percent	6.1%	17.7%	18.1%	22.6%	11.6%	28.6%	22.2%	13.2%	17.7%	17.6%	29.6%	20.6%	26.7%	19.4%
Number	0.5	1.3	2.0	3.1	1.6	4.0	4.0	2.3	3.0	4.8	9.1	5.2	8.0	6.0
Unknown Placement														
Percent	missing	missing	missing	missing	missing	missing	100.0%	missing	missing	missing	missing	missing	missing	33.3%
Number	missing	missing	missing	missing	missing	missing	1.0	missing	missing	missing	missing	missing	missing	1.0
No Placement														
Percent	19.6%	31.7%	6.7%	0.0%	6.7%	50.0%	0.0%	18.5%	34.7%	23.4%	18.1%	25.7%	50.0%	33.3%
Number	6.5	2.5	0.6	0.0	0.2	1.0	0.0	9.0	4.0	3.5	1.2	0.8	2.0	2.0
Total on the Market					,-									
Percent	23.3%	27.1%	28.0%	24.8%	25.9%	22.6%	33.3%	24.1%	27.2%	29.4%	27.5%	27.4%	24.9%	33.4%
Number	48.0	45.9	55.0	47.9	46.8	45.0	68.0	78.6	75.1	101.9	94.1	93.8		125.0

Table 5. Percent Women in Job Placements of New Ph.D.s from All Other Economics Departments

			All Oti	her Schools			
	1994-1997	1998-2002	2003-2007	2008-2012	2013-2017	2018	2019
U.Sbased. All Types							
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	missing	missing	missing	missing	30.7%	41.4%	34.8%
Number	missing	missing	missing	missing	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
Foreign-based, All Types							
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
Non-Academic							
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
Unknown Placement							
Percent	missing	missing	missing	missing	missing	missing	7.7%
Number	missing	missing	missing	missing	missing	missing	1.0
No Placement							
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
Total on the Market							
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

Table 6. New Ph.D. Job Placement by Gender and Department Rank, Current Year

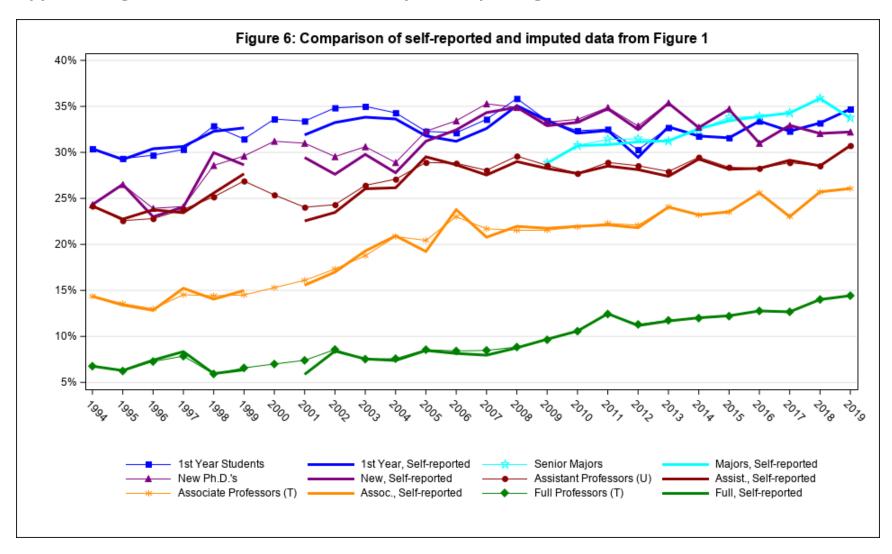
2018-2019	Тор	10	Top 1	1-20	All O	thers
2010-2019	Women	Men	Women	Men	Women	Men
U.Sbased, All Types (Share of all individuals by gender)	76.5%	63.2%	63.2%	64.6%	73.7%	64.5%
Faculty, PhD Granting Department	55.8%	45.3%	25.0%	21.9%	19.4%	17.6%
Faculty, Non-PhD Granting Department	0.0%	3.5%	11.1%	9.6%	25.6%	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%
Non-Academic	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, 2014-2018

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

^{*}Note to Table 7: 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.

Appendix Figures and Tables on Data Quality and Reporting



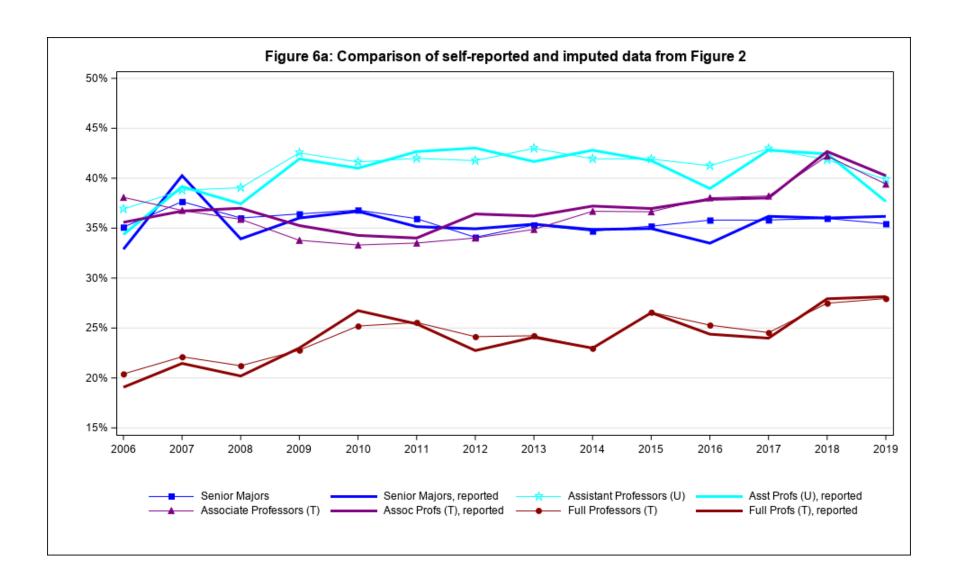


Table 8. Number of Economics Departments in the CSWEP Survey, by Year and Type of Program

									Yea	r of sur	vey								
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
With Doctoral Programs																			
Number responded CSWEP	68	77	92	98	91	93	100	110	120	122	122	117	122	124	124	126	126	126	126
Number of programs (analysis)	121	122	122	123	123	124	124	124	124	126	126	126	127	127	127	126	126	126	126
Without Doctoral Programs																			
Number responded CSWEP	49	33	49	61	65	69	63	71	66	80	82	62	101	104	107	84	109	108	104
Number of programs (analysis)	89	92	96	102	106	106	106	107	107	110	110	110	111	111	111	112	112	112	112

^{*}Notes: Any non-respondents are imputed, with UAQ if they responded to that survey, and then with linear interpolation for any remaining non-responding years.