

# The 2020 Report of the Committee on the Status of Women in the Economics Profession 

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By Judy Chevalier, Chair

## I. Introduction

The Committee on the Status of Women in the Economics Profession (CSWEP) has served women economists by promoting their careers and monitoring their progress through the profession since its founding as a standing committee of the American Economic Association in 1971. Our regular activities are myriad: In 1972, CSWEP fielded the first survey of economics departments regarding the gender composition of faculty and, since 1993, has surveyed some 250 departments annually with findings reported in the American Economic Association: Papers \& Proceedings and reprinted in the CSWEP Annual Report. CSWEP organizes mentoring programs that serve several hundred economists annually. These include the CeMENT Mentoring Workshops for junior women which have been shown in randomized control trial studies to improve outcomes. CSWEP offers one CeMENT program designed for faculty in PhD-granting institutions or research-oriented nonacademic positions and another for faculty in non PhD-granting institutions. At the annual AEA/ASSA Meetings, we typically also host three Mentoring Breakfasts as well as a variety of career development roundtables and panels. We also typically host career development panels and mentoring events at the meetings of each of the four regional economics associations.

In 2020, CSWEP launched two new mentoring initiatives. First, CSWEP launched its first mentoring program for women and nonbinary graduate students. The event, organized by Jennifer Doleac and Maya Rossin-Slater, was attended by 120 women and nonbinary graduate student participants and 48 volunteer mentors. In response to the pandemic, this event was held virtually. We also launched three different webinar series, hosting a total of nine webinars as of December 9, with over 2000 attendees in total.

CSWEP provides professional opportunities to junior women through competitive entry paper sessions at both the Annual AEA/ASSA Meetings and at regional economic association meetings. CSWEP also endeavors to raise awareness among men and women of the challenges that are unique to women's careers in economics and of best practices for increasing diversity in the economics profession. To recognize and celebrate the accomplishments of women, CSWEP awards the Carolyn Shaw Bell Award annually (for furthering the status of women in the economics profession) and the Elaine Bennett Prize biennially (for fundamental contributions to economics by a woman within seven years of the PhD, adjusted for leaves). CSWEP disseminates information on women in economics, professional opportunities, and career development through both the CSWEP website and the CSWEP News (which successfully moved from 3 annual issues to 4 in 2020). The CSWEP News articles provide valuable career development advice for both men and women and subscriptions have grown to over 3300 subscribers. Our website provides and tracks resources for women economists and for economists who seek to create a more inclusive profession.

The centerpiece of this Annual Report of CSWEP's activities is the summary of the 2020 Annual Survey in Section IV. The CSWEP data are available to individual researchers via ICPSR.

Section II reports on the administration of CSWEP. Section III describes CSWEP activities. Associate Chair Margaret Levenstein of the University of Michigan directed the 2020 CSWEP Annual Survey, analyzed the results and wrote the report on the status of women in the economics profession in Section IV. Section V concludes with well-deserved acknowledgements of many who have contributed to CSWEP's mission. Appendix A lists the 2020 Board members.

## II. CSWEP Administration

## A. CSWEP Office

Judy Chevalier of Yale University is in her second year as CSWEP chair. In September 2018, CSWEP began a new model of administration. CSWEP coordinates with the AEA's Nashville office to house CSWEP's Committee Coordinator, rather than at the home institution of the chair as had been done previously. This improves communication between CSWEP and the AEA administration will ease future leadership transitions. In the summer of 2019, the Committee Coordinator for CSWEP undertook a similar role assisting CSMGEP. The Committee Coordinator's time is divided between CSWEP duties, CSMGEP duties, and occasional tasks as needed for the Association. Rebekah Loftis assumed this role in December 2019. Each year, we have made some system improvements. For example, this year, the Coordinator worked with the Pittsburgh office to design a submission portal for our CeMENT mentoring programs; submissions to CeMENT took place via this central portal for both our doctoral and nondoctoral programs this year.

A central goal of the staffing reorganization was to facilitate smoother and more efficient chair transitions. We look forward to a smooth chair transition next year when Judy Chevalier's term ends. Similarly, a central goal of establishing the submission portal for CeMENT was to facilitate smoother and more efficient transitions of the CeMENT program directors.

## B. CSWEP Communications

The success of CSWEP programs in advancing the status of women in economics depends upon our ability to communicate broadly and effectively to members of the profession both inside and outside of academia. Our main communications tools are our subscriber email list, our twitter account, our website, and our newsletters.

Our subscriber list remains our primary form of communication. In order to receive communications from CSWEP, members of the profession must send an email to info@cswep.org. We currently have over 3300 subscribers which represents more than ten percent subscriber growth over the last year. A subset of our subscribers are CSWEP Liaisons. The CSWEP Liaison Network (created in 2014) recruits an individual at each institution who is willing to insure that their department completes our annual survey and who is willing to distribute CSWEP newsletters, announcements, and professional development opportunities to potentially interested individuals. Our goal had been to recruit a tenured faculty liaison in every department of economics including, where appropriate, economics groups in business, public policy and environmental schools. In 2019, we began an effort to establish a CSWEP liaison in every branch of government that employs PhD economists as well as to establish a liaison within each of the major foundations that conduct economic research.

We have also made a substantial effort to improve the professional development resources available on our website. For example, we keep a list of conferences, workshops, and events focused on mentoring or professional development. We have resources for job-seekers, resources for chairs looking to hire diverse talent, etc. This organization of resources can be found at https://www.aeaweb.org/about- aea/committees/cswep/programs/resources. Our website also archives recordings of our webinar series.

Our Twitter account, @AEACSWEP, was launched in 2017 and we have been tweeting prize announcements, calls for papers, and information about our board members since that time. Our Twitter account has been instrumental in building awareness of our new webinar series and advertising our mentoring opportunities. We also use our Twitter account to flag non-CSWEP professional development resources of interest to our followers and point our followers to the larger set of resources available on our webpage. Our Twitter followers have grown from just over 3000 followers one year ago to 5485 as of this writing. It is now commonplace, when we announce one of our webinars on Twitter, to have hundreds of people register for the webinar before we have sent out an email
communication to our subscribers.

## III. CSWEP Activities in 2020

## A. CSWEP and AEA Initiatives on Equity, Diversity and Professional Climate

The CSWEP Board continues to support AEA efforts on Equity, Diversity, and Professional Climate. Board member Petra Moser from New York University serves on the committee to design and award the new departmental diversity awards. CSWEP Chair Chevalier also serves on the AEA's outreach committee. Our Board continues to stand ready to assist the Executive Committee and Officers in diversity and inclusion efforts that the AEA may launch.

## B. Mentoring Programs

The effective mentoring of women economists is central to CSWEP's mission. Clearly, our CeMENT Mentoring Workshops are a crucial part of this endeavor. The CSWEP Mentoring breakfasts at the AEA/ASSA meetings, mentoring events at the four regional economic association meetings, and our new graduate student mentoring workshop, are all important components of our mentoring work. CSWEP also participates in coordinating the AEA Summer Fellows Program, which provides mentoring and research support for PhD students and junior faculty.

## 1. CeMENT Mentoring Workshop for Faculty in Doctoral Programs and CeMENT Mentoring Workshop for Faculty in NonDoctoral Programs.

Our CeMENT Mentoring workshops are the cornerstone of CSWEP's mentoring efforts. This workshop has been demonstrated to be effective in helping junior scholars earn tenure in a randomized controlled trial study. ${ }^{1}$

Responding to the enormous demand for our mentoring workshops, CSWEP increased the number of mentees accommodated in both our workshop for Faculty in Doctoral Programs as well as our workshop for Faculty in Nondoctoral Programs. In early 2020, we also received permission from the Executive Committee to increase the frequency of our workshop devoted to faculty in nondoctoral programs from every other year to every year. Both programs were held in 2020 and are scheduled to be held immediately following the AEA meetings in January 2021.

[^0]The 2020 CeMENT Mentoring Workshop for Faculty in Doctoral Programs was held after the San Diego ASSA meetings on January 5th - 7th, 2020. The program was organized and directed by Martha Bailey, then of the University of Michigan. The workshop consisted of large group discussions on career development topics and small group sessions pairing mentors with four to five junior economists with similar research interests. One unique feature of the CeMENT workshops is the small group sessions. The small group sessions allowed each junior participant to receive detailed feedback on a working paper from the other members of their small group. The basis of small group discussions were the research papers, CVs, and research statements provided by junior participants. Preparation for these sessions is intensive for both the mentors and the mentees. Forty-nine junior economists participated in the workshop and were matched with nineteen senior mentors. ${ }^{2}$

Based on informal and formal feedback we received, the workshop was a great success. Based on the exit survey, the average junior participant rating of the workshop was 6.53 (on a scale of 1-7 where 1 is "not at all helpful" and 7 is "extremely helpful"). The average mentor rating of the workshop was 6.56. Among all of the sessions, junior participants rated the "Getting Published" and "Getting Tenure" panels the most valuable, with the average rating of 5.98 and 5.96 respectively.

The table below shows the recent history of applications.

| History of Doctoral CeMENT Applications |
| :--- | |  | 2020 | 2019 | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| a) Total applications (b+e) | 201 | 180 | 106 | 122 | 110 |
| b) Applications eligible to randomize (c+d) | 158 | 99 | 80 | 80 | 73 |
| c) Randomized in* | 50 | 42 | 43 | 40 | 40 |
| d) Randomized out | 108 | 57 | 37 | 40 | 33 |
| e) Deemed ineligible* | 43 | 81 | 26 | 42 | 42 |

[^1]*49 of the 50 invited attendees attended in 2020; 40 of the 42 invited attended in 2019; 42 of the invited 43 attended in 2018

The CeMENT workshop for faculty at institutions that do not offer a Ph.D. in Economics was held on January 5 and 6, 2020 in San Diego. Forty-nine junior faculty and eleven senior mentors attended the two-day workshop organized by Ann Owen of Hamilton College. This was the first time that the workshop for faculty at non-doctoral institutions was held following the national AEA meetings in January and a record number of faculty attended the program.

The Workshop for Faculty at Non-doctoral Institutions is designed to assist faculty who are at institutions that place emphasis on both research and undergraduate teaching. Participants at the 2020 workshop received advice about publishing, teaching, networking, the tenure process, and achieving a work/life balance. They also worked together in small groups on goal setting and provided feedback on research papers to other group members. Overall, the workshop was rated as extremely helpful, with a mean overall rating was $6.5 / 7$, with participants commenting on the helpfulness of the advice they received and the usefulness of the network that they started at the workshop. ${ }^{3}$

For the 2021 virtual workshops, Martha Bailey of UCLA will continue in her direction of the program for faculty in PhD-granting institutions (and for researchers outside academia with similar research expectations). Jessica Holmes of Middlebury College has assumed directorship of the program for faculty from institutions that do not grant PhDs. We received 117 applications for the program for faculty in PhD-granting institutions and 48 applications for the program for faculty in non PhD-granting institutions.

## 2. Mentoring Breakfasts for Junior Economists

CSWEP hosted two mentoring breakfasts for junior economists of all genders at the 2020 ASSA meetings. These were organized by Sandy Black of Columbia University and our Associate Chair for Mentoring Sebnem Kalemli-Ozcan of the University of Maryland. Approximately 160 junior economists participated across the two breakfasts. Senior mentors staffed topical tables (Research/Publishing, Teaching, Tenure/Promotion, NonAcademic Careers/Grant- Writing, Work/Life Balance, Job Market and Job Market Special Topics—Dual Career Couples, Job Search 4+ Years post PhD) and junior participants rotated between tables at 20-minute intervals based on their own interests. In a postevent survey of participants, the median rating was 87 out of 100 .

[^2]
## 3. Peer Mentoring Breakfast for Mid-Career Economists

CSWEP hosted a mid-career mentoring breakfast, organized by Petra Moser of New York University at the 2020 ASSA meetings. Approximately 40 mid-career women attended the event with senior mentors. The breakfast kicked off with short talks by Rebecca Henderson of Harvard University and Leeat Yariv of Princeton University. The remainder of the breakfast was devoted to informal discussion at the breakfast tables. Each table consisted of 4-6 mid-career participants and 2 senior mentors who moderated the discussions about promotion to full professor, whether to accept administrative roles, managing research time, work/life balance, career transitions, and negotiating with department and university administrators.

## 4. Launching a Professional Development Initiative

At the 2020 AEA meetings, CSWEP co-hosted with CSMGEP a panel discussion entitled "Launching a Professional Development Initiative." The discussion was moderated by Peter Henry of New York University and the panelists were all individuals who started or are running a professional development initiative. Peter Henry runs an initiative for diverse predoctoral fellows. The other participants were Martha Bailey (CSWEP CeMENT director), Anna Gifty Opeku-Agyeman (cofounder of the Sadie Collective, an organization aimed at black women interested in economics at the undergraduate or high school level), Marie Mora (CSMGEP mentoring program), and Maya Rossin-Slater (who organized a mentoring program for graduate student women in economics). The session focused on advice for individuals and organizations that are considering launching such a program. A video of this event and the ensuing discussion is available on CSWEP's website here.

## 5. AEA Summer Economics Fellows Program

Begun in 2006 with funding from the National Science Foundation (NSF) and designed and administered by a joint AEA-CSMGEP-CSWEP committee, the AEA Summer Economics Fellows Program aims to enhance the careers of underrepresented minorities and women during their years as senior graduate students or junior faculty members. Fellowships vary from one institution to the next, but generally, senior economists mentor the fellows for a two-month period, and fellows, in turn, work on their own research and have a valuable opportunity to present it. The sponsoring institutions are largely government agencies. Many fellows have reported this experience as a careerchanging event.

Dan Newlon directs the summer fellows program. Our Committee Coordinator manages incoming applications. One member of our board (Karen Pence) is part of the committee to assess applicants. ${ }^{4}$ This was a difficult year for the program due to hiring freezes by a

[^3]number of sponsors due to the pandemic. Nonetheless, 14 fellows were hired in 2020 (versus 19 in 2019), of whom four were members of minority groups. Although there was a decline in sponsorship participation (hopefully temporary and due to the pandemic), there were three sponsors that hired for the first time.

Unfortunately, this decline in the ability to place fellows occurred in the same year as an unprecedented surge in applications. There were 125 applicants in 2019 and 230 in 2020. This increase may have been due in part to the launch of the new application portal. During 2019, our Committee Coordinator worked with the AEA Pittsburgh office to redesign the application portal. The goal of this portal was to make it feasible to organize packets more quickly and better serve fellowship sponsors. However, the portal also likely increased the visibility of the program on the internet and made application submission more streamlined.

## 6. Workshop for Women and nonbinary graduate students

Our CSWEP Southern region representative, Jennifer Doleac of Texas A\&M University, and Maya Rossin-Slater of Stanford organized and cohosted a mentoring event for women and non-binary third- and fourth-year graduate students, "Successfully Navigating Your PhD". Our CSWEP Coordinator advertised the event, processed the incoming applications, and supported the virtual workshop. The event consisted of a one-day mentoring workshop held on November 20, 2020. The event revealed the significant interest in programming of this type as there were 255 applicants of whom 120 were admitted and attended the workshop. Fortunately, 48 mentors volunteered their time to meet with the mentees. The mentors consisted of early career economists at universities, think tanks, and government agencies. Modelled in part after CeMENT, the workshop featured panels as well as small-group sessions in which students received individualized feedback on their research ideas from mentors and peers.

## 7.Professional Development webinar series

In response to the pandemic, CSWEP launched three different Professional Development webinar series. The first series, consisting of two webinars, focused on the impact of COVID on economists. One panel consisted of a conversation between junior faculty and economist deans and was entitled "How Should Universities Respond to the Disparate Impacts of COVID-19 on Faculty?". The second panel consisted of a conversation amongst government economists and was entitled, "Managing the Challenges of COVID-19 for Government

[^4]Economists: A panel conversation regarding the challenges that COVID-19 has created for work, productivity, and agency production."

Our second webinar series consisted of four panels and explored jobs for economists outside academia and featured women economists from government agencies, think tanks, and the private sector. This series was organized by Stephanie Aaronson of the Brookings Institution and was co-sponsored by Brookings. We hosted four different panels consisting of three to four economists per panel. The intended audience was graduate students, undergraduates, and career switchers.

Our third webinar series is ongoing. This webinar series, "Fireside Chats with Journal Editors: Demystifying the AEA Journal Process," is organized by Anusha Chari of the University of North Carolina at Chapel Hill, and consists of monthly half-hour interviews with journal editors. Thus far, we have interviewed Esther Duflo of the American Economic Review, Amy Finkelstein of AER: Insights and Erzo Luttmer of AEJ: Economic Policy.

While we always advertise that these webinars will be available on video, live attendance has been robust and thus far, our webinars have had more than 2000 total attendees. ${ }^{5}$

## C. Awards

## 1. Carolyn Shaw Bell Award

Awarded annually since 1998, the Carolyn Shaw Bell Award recognizes an individual for outstanding work that has furthered the status of women in the economics profession. Dr. Nancy L. Rose, Charles Kindleberger Professor of Applied Economics, MIT Department of

[^5]Economics, is the recipient of the 2020 Carolyn Shaw Bell Award. Professor Rose is an accomplished scholar, an award-winning teacher, a gifted advisor and mentor and a strong academic leader. She has also served as the Deputy Assistant Attorney General for Economic Analysis, Antitrust Division, United States Department of Justice. She has served as a Vice President of the American Economic Association, as a member of the AEA Executive Committee, and as a CSWEP board member. Professor Rose is a leader in the field of Industrial Organization and is known for her studies of the effects of regulation, particularly for airlines, motor carriers, and electric utilities. In these many roles, she has been a fierce advocate for women in the profession and has advised dozens of women students.

## 2. Elaine Bennett Research Prize

The Elaine Bennett Research Prize is awarded every other year to recognize, support and encourage outstanding contributions by young women in the economics profession. The first Elaine Bennett Research Prize was awarded in 1998. Stefanie Stantcheva, Professor of Economics at Harvard University, is the recipient of the 2020 Elaine Bennett Research Prize. Established in 1998, the Elaine Bennett Research Prize recognizes and honors outstanding research in any field of economics by a woman not more than seven years beyond her Ph.D. (adjusted for family responsibilities). Professor Stantcheva is recognized for her remarkable contributions to our understanding of optimal taxation, the relationship between innovation and taxation, and social preferences about redistribution. Using a wide range of methodologies, spanning empirical and theoretical work, Professor Stantcheva has pushed forward the frontier of knowledge about the impact and role of taxation, a fundamental question of public economics.

## D. CSWEP's Presence at the Annual Association Meetings and Regional Economic Association Meetings

1. The 2020 American Economic Association Meeting In addition to mentoring activities, presentation of the Annual Report, and the presentation of awards, CSWEP sponsored seven competitive-entry paper sessions at the AEA/ASSA Meetings in San Diego. For the 2020 meetings, Jonathan Guryan of Northwestern University, Claudia Olivetti of Dartmouth College, and Melissa Kearney of the University of Maryland organized two sessions in the economics of gender, including one on gender in the economics profession. Sebnem Kalemli-Ozcan of the University of Maryland organized two sessions on Financial Globalization, Growth and Welfare. Sandy Black of Columbia University and Jennifer Doleac of Texas A\&M University organized two sessions on Crime Research. These committees selected seven papers for publication in three pseudo-sessions in the AEA: P\&P. To be considered for these sessions, papers must have at least one junior author and, in non- gender-related sessions, at least one author must be a junior female.

The submissions process for these sessions is highly competitive-there were 135 abstract submissions for the 2020 sessions. Women consistently report that these sessions, which put their research before a wide audience, are professionally valuable.

## 2. Four 2020 Regional Economic Association Meetings

CSWEP maintains a strong presence at all four of the Regional Economic Association Meetings. At most regional meetings, CSWEP now hosts a networking breakfast or lunch, as well as paper sessions and career development panels. The events are well attended by people of all genders and provide an informal opportunity for CSWEP representatives and senior women to network and mentor one-on-one. We are grateful to the four Board Regional Representatives who organize and host CSWEP's presence at the Regionals.

The only in-person regional meeting of 2020 was the Eastern Economic Association Meeting in Boston in late February. Karen Conway of the University of New Hampshire and CSWEP Eastern Representative Terry-Ann Craigie of Connecticut College organized 10 paper sessions and a networking breakfast. The research sessions considered a range of topics in health, crime, education, and other subjects. In addition, one of the sessions featured three presentations on the use of art in teaching introductory economics. The networking breakfast included PhD students, postdocs, faculty at all stages and economists from non-academic institutions. Both the CSWEP Eastern Representative and the CSWEP Chair spoke at the breakfast to introduce CSWEP activities, and substantial time was allotted for informal discussion.

The Midwest Economic Association Meeting was scheduled to be held in Evanston Illinois in March 2020 and Midwest Representative Shahina Amin of the University of Northern lowa organized two career development panels. Unfortunately, the meetings were cancelled due to the pandemic.

The Western Economics Association Meeting were held virtually. Western Representative Catalina Amuedo-Dorantes of the University of California Merced organized four paper sessions. These were consolidated to three five-paper sessions when the conference converted to a virtual event. Session topics included household impacts of health shocks, topics in education, and examination of public policies impacting immigrants and families.

Finally, at the Southern Economic Association Meeting (November, held virtually), Jennifer Doleac (Texas A\&M University, CSWEP Board Southern Representative) organized numerous CSWEP events. Two research paper sessions focused on the economics of crime. There were also three professional development panels co-sponsored with CSMGEP and Committee on the Status of LGBTQ+ Individuals in the Economics Profession (CSQIP). The career development panels were: "Meet the Editors", "Meet the Funders", and "The Non-Rookie Job Market." The career development panels will be available on the CSWEP website. Jennifer Doleac additionally hosted several virtual CSWEP social hours that were wellattended by faculty, economists in nonacademic institutions, and graduate students.

## E. CSWEP News: 2020 Focus and Features

Under the able direction of CSWEP News Oversight Editor Kate Silz-Carson of the U.S. Air Force Academy and with the graphic design expertise of Leda Black, CSWEP published four newsletter issues in 2020. ${ }^{5}$

The first issue of the year contains the CSWEP annual report and an interview with the CSWEP prize winners. The other three issues of the year each feature a Focus section of articles with a theme chosen and introduced by a guest editor who solicits the featured articles. The quality of these Focus articles is consistently high, with many proving to be enduring career resources for junior economists. The CSWEP Board extends our thanks to the authors and other contributors.

## 1. Surviving and Thriving as an Academic Economist

This Focus section, organized by our former CSWEP Board Eastern Representative, Karen Conway, is stylized as a conversation among academics with tips for surviving and thriving. It is particularly helpful for new economists as the contributors discuss balancing the demands of teaching, research, and service. This Focus Section arose, as many of our Focus sections do, from a CSWEP session organized at a regional economics meeting. This conversation took place at the Eastern Economics Association meeting in 2019.

## 2. Advice for Job Seekers and Early Career Folks

This Focus Section, co-edited by Sarah Jacobson of Williams College contains career development advice. The contributors offer counsel on such topics as discerning from the outside what the institutional culture is like at a potential position, assessing whether a government job opportunity is a "fit", planning for the future possibility of changing jobs, and building a research portfolio in different types of job settings. This Focus section grew out of a panel at the Southern Economics Association in 2018.

## 3. Ideas for Mitigating the Disparate Impacts of COVID-19 on Economists

This Focus Section grew out of CSWEP's Summer 2020 webinars featuring economists grappling with the impact of COVID on their careers. The issue contains advice from a university dean, presents early research on the impact of the pandemic on women and people of color, and addresses the disparate impact of the pandemic and other challenges on people of color. We are grateful for CSWEP Board Members Petra Moser of New York University and Jonathan Guryan of Northwestern University in co-editing this issue and for the authors who contributed to it on a tight turnaround schedule.

CSWEP wishes to extend our thanks to all those who took the time to write contributions to newsletters during 2020. Professional development features of these and past issues of CSWEP News are now more easily accessible at CSWEP.org, where one can find them archived by year as well as by target audience and topic.

## IV. Status of Women in the Economics Profession ${ }^{6}$

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

This report presents the results of the 2020 CSWEP survey of U.S. economics departments. 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. After a long period of stagnation in the representation of women in economics, the last few years have begun to show a promising uptick. The share of women in the faculty of PhD-granting economics departments has increased each year since 2017, reaching 24.9\%, its highest level ever, in 2020 (Table 1). At every level of the professoriate, the female share is higher in 2020 than at any point in the past. The share of women entering PhD programs has also increased each of the last three years, reaching $35.3 \%$ in 2020. The increases of the last three years are small, but they suggest a hopeful inflection. The female share of the first year class first reached $35 \%$ in 2003, peaked at $35.8 \%$ in 2008, and then stayed between 30 and 33 percent until 2018. There has been no increase in the share of new PhDs going to women, but the female share of assistant professors has also reached a new high of $31.0 \%$. Another sign of progress in 2020 is that a record twelve top-twenty departments have first year classes that are at least $35 \%$ female (Table 7). Note that despite this progress, there are still more women in nontenure track positions (259) in PhD-granting economics departments than either full (233) or associate (188) professors (Table 1) and women make up less than a quarter of the incoming class in five of the top twenty departments (Table 7).

The share of women among undergraduate economics majors at these same schools has increased (from $30.0 \%$ in 1998 to $34.1 \%$ in 2020), but is still well below parity, and does not approach the $55 \%$ share of women in the undergraduate population. ${ }^{7}$
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. 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.

[^6]Progress at increasing the representation of women continued through the early 2000s and then essentially stopped. While the shares of women in the more senior ranks of the professoriate continued to increase as women progressed through the leaky academic pipeline, the share of women entering economics PhD programs peaked at $35.8 \%$ in 2008 and has not reached that level since (Table 1). The share of women receiving economics PhDs and becoming assistant professors reached $29 \%$ in 2005 and did not exceed that until 2019. Similarly the share of new economics PhDs going to women has been essentially flat since 2006. Hopefully, the small but positive changes in the last two to three years are the beginning of a new period of sustained improvements in the representation of women in the economics profession.

## B. The CSWEP Annual Surveys, 1972-2020

In fall 2020 CSWEP surveyed 125 doctoral departments and 111 non-doctoral departments. This report analyzes the responses provided by 124 doctoral and 100 non-doctoral departments - a remarkable achievement while most were operating remotely due to the COVID-19 pandemic and a sign of the importance that many in the economics profession attach to the status of women in our profession. ${ }^{8}$ 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 departmentallevel 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.v4. ${ }^{9}$

## C. 2020 Survey Results

In 2020 the share of tenure-track faculty in PhD-granting economics departments who are women reached an all-time high at $21.7 \%$ (Table 1, Figure 1). The shares of women at each level of the professoriate - assistant, associate, and full - reached all-time highs. Perhaps most importantly, after having been flat since 2005, the share of assistant professors in PhDgranting departments increased in each of the last three years. Progress in doctoral students

[^7]is not as striking: while the share of some in the first year class increased in each of the last three years, it is still below the share reached in 2008. Women make up less than a quarter of all faculty in PhD-granting departments, and over a quarter of all female faculty in PhDgranting departments 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 consistent story. There are three more female professors in 2020 than there were in 2019, and the number and share of women at the full level has increased for the last three years (Table 2b). The number and share of associate professors actually fell last year, and the year before that. This negative trend at the associate level may reflect promotion or attrition of individuals, but taking the longer view, it is clearly the result of the stagnation in the number of female assistant professors in this group of departments. It had reached $27 \%$ in 2008, when there were a total of 63 female assistant professors in "top 20" departments. In the decade between 2010 and 2019, there were on average 43.5 female assistant professors in these departments. In 2020, the number of female assistant professors in this group reached 50 for the first time since 2008. Women still make up a smaller share of assistant professors than they did in 2006. 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 32.6\% 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. ${ }^{10}$ 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 $35.8 \%$ of econ major undergrads; $37.2 \%$ of majors in the top $20 ; 34.1 \%$ in all PhD granting departments; and $38.9 \%$ in non-doctoral departments (Tables 1, 2, and 3). Both doctoral and non-doctoral programs rely on women to teach, with women making up $39.3 \%$ of all non-tenure track faculty in the former and $28.5 \%$ in the latter.

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 2020 new doctorates were $34.7 \%$ female, falling to $30.6 \%$ for assistant professors, to $27.4 \%$ for tenured associate professors, and $14.7 \%$ 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,

[^8]which has not occurred in this century. 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. 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 (compare the blue and red lines in Figure 3), they have disproportionately exited (or perhaps never entered) the assistant professor ranks prior to coming up for tenure (compare the red and green lines in Figures 3 and 4). As suggested above, a slightly more hopeful picture is suggested by the last few years of data. The estimated leakage of associate professors was smaller in 2019 and 2020 (note the convergence of the green and purple lines for the graduating classes of 2005 and 2006); this may also reflect the increased leakage from those cohorts into and while they were assistant professors. That is, there was real regression in women's status in economics; women receiving PhDs in 2005 and 2006 were less likely to be assistant professors seven years later, but those who persisted were less likely to exit at the full professor transition. The last two years suggest a reversal, as the estimated leakage of assistant professors was smaller in 2019 and 2020 (the green line approaches the red line for the classes of 2012 and 2013 in Figure 4).

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 increased in 2020, at least in the non-PhD granting departments.

Tables 4, 5, and 6 provide snapshots of the job market experiences of women from different types of PhD programs. Women made up $27.7 \%$ of job candidates from the top 20 schools last year (Table 4) and almost 36\% of all PhD students on the market (Table 5). While in 2019 women's were "over-represented" in their placements in positions in PhD granting departments (relative to their share on the market), that was not true of students on the market in 2020. The number of students placed was down significantly, presumably because of the COVID-19 pandemic and its impact on the budgets of academic institutions. But in addition, women were less likely to be placed in PhD granting departments, whether they were coming from a top 10 or top 20 department. Table 5 presents the share female and
outcomes for job market candidates in PhD-granting departments outside the top 20. Just under $36 \%$ 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. Men coming from top 20 departments were more likely to place in a PhD-granting department than women from the same departments. Women, on the other hand, were more likely to take public sector positions, especially when coming from top ten schools. That is not true of new PhDs coming from lower ranked departments where there seems to be more gender equity in placements.

## C. Conclusions

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 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. While the share of women in first year PhD programs has increased in each of the last three years, this progress has simply meant a return to the share that was reached in the early years of this century. Women make up a larger share of undergraduate majors, suggesting that a pool from which to attract graduate students does exist. However, even at the undergraduate level the share of women does not approach parity and it has not been increasing. Women are over-represented in non-tenure-track teaching jobs. Over a third of the female faculty in top twenty economics departments are in non-tenure track teaching positions. This may play a role in shaping how undergraduate women view the economics profession. The increases in the female share of the incoming PhD 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.

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.

## IV. Board Rotations and Acknowledgements

This year marks Judy Chevalier's second year as Chair. The terms of our Associate Chair for Mentoring Sebnem Kalemli-Ozcan is ending along with the term of at-large representative Sandra Black. They will be replaced by Anusha Chari of the University of North Carolina at Chapel Hill as Associate Chair for Mentoring and Kasey Buckles of Notre Dame University as an at-large board member.

In addition to these new board members, CSWEP will expand its board this year, adding Stephanie Aaronson of the Brookings Institution as our new Washington DC-area representative.

Also, Maggie Levenstein has renewed her service as Associate Chair for the Survey for another term and Shahina Amin has renewed her service as Midwestern Representative for another term.

CSWEP is grateful to the outgoing Board members for their generous contributions to CSWEP's mission, welcome our new members, and thank those board members who are continuing in their service.

We are grateful for the help of Rebekah Loftis our Committee Coordinator who has helped CSWEP with our pivot to providing virtual content during the pandemic while continuing and improving our other CSWEP Committee functions.

CSWEP is fully funded by the American Economic Association. We are very grateful for the continuing support of CSWEP's mission. Very special thanks are due to the AEA Secretary- Treasurer, Peter Rousseau, for his support and counsel. We have also benefited substantially from our work with the excellent AEA staff: Barbara H. Fiser, and Susan B. Houston as well as Michael P. Albert, Chris Fleisher, Liz Braunstein, Jenna Kensey, Theresa Wertz, Gwyn Loftis, Linda Hardin, Allison Bridges, Kristine Etter, Melissa Smith, Jonnda Burner, Tracy White and Julia Merry.



Figure 3. Lock-Step Model: Percentage of women, by entering PhD cohorts:
Matriculation, graduation and entry into first-year assistant professorship


Matriculating Cohort Year


When they matriculated in $t$
When Cohort Survivors Graduated with Ph.D.'s in $t+5$
When Continuing Survivors Became Last-Year-in-Rank Assistant Professors in $t+5+7$

Figure 4. Lock-Step Model: Percentage of women, by receiving-PhD cohort:
Graduation, last year-in-rank assistant professorship, and last year-in-rank associate professors


Graduating Cohort Year
$\qquad$ When They Received Their Degrees in $t$
When Cohort Survivors Became Last-Year-in-Rank Assistant Professors in $t+7$
$\ldots$ When Continuing Survivors Became Last-Year-in-Rank Associate Professors in $t+7+7$

Figure 5: Undergraduate senior economics majors

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

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 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Faculty |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 6.9\% | 6.1\% | 7.1\% | 6.9\% | 5.9\% | 5.9\% | 6.4\% | 6.9\% | 7.0\% | 7.0\% | 7.7\% | 7.9\% | 8.1\% | 8.3\% | 8.9\% | 9.4\% | 10.7\% | 11.4\% | 12.5\% | 10.9\% | 11.7\% | 12.1\% | 12.8\% | 12.5\% | 13.9\% | 14.2\% | 14.7\% |
| Number | 80.0 | 91.5 | 101.0 | 102.4 | 82.2 | 85.1 | 94.2 | 103.2 | 109.6 | 108.6 | 120.3 | 124.6 | 126.5 | 133.4 | 142.7 | 148.9 | 173.6 | 177.2 | 193.8 | 168.2 | 182.5 | 190.2 | 202.0 | 191.0 | 219.0 | 227.0 | 231.4 |
| Associate Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 13.9\% | 13.2\% | 13.3\% | 13.4\% | 14.5\% | 14.9\% | 15.4\% | 15.9\% | 17.1\% | 19.0\% | 20.0\% | 21.0\% | 20.2\% | 20.6\% | 21.9\% | 22.0\% | 22.4\% | 23.0\% | 22.4\% | 23.0\% | 23.2\% | 24.0\% | 25.3\% | 23.5\% | 26.0\% | 26.2\% | 27.4\% |
| Number | 61.0 | 81.5 | 76.0 | 79.4 | 82.9 | 83.0 | 84.3 | 85.6 | 91.5 | 106.3 | 111.3 | 114.8 | 112.0 | 120.6 | 133.7 | 129.1 | 137.2 | 139.8 | 131.9 | 136.8 | 149.9 | 155.9 | 173.5 | 157.0 | 174.0 | 184.0 | 189.3 |
| Assistant Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 24.9\% | 22.7\% | 22.6\% | 24.1\% | 24.1\% | 25.4\% | 24.5\% | 23.6\% | 23.6\% | 26.7\% | 27.3\% | 29.3\% | 28.6\% | 27.5\% | 28.6\% | 28.2\% | 28.0\% | 29.7\% | 27.5\% | 27.8\% | 29.0\% | 28.2\% | 27.9\% | 28.5\% | 28.6\% | 30.2\% | 30.6\% |
| Number | 126.3 | 145.0 | 132.8 | 141.9 | 134.7 | 146.5 | 146.3 | 146.1 | 148.0 | 185.2 | 188.3 | 202.9 | 201.7 | 212.7 | 228.7 | 215.3 | 228.8 | 229.7 | 213.6 | 211.2 | 226.5 | 231.7 | 232.0 | 245.5 | 236.0 | 247.0 | 244.4 |
| All Tenure Track (Subtotal) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 12.7\% | 11.5\% | 12.0\% | 12.1\% | 11.9\% | 12.3\% | 12.4\% | 12.6\% | 12.8\% | 14.3\% | 14.9\% | 15.8\% | 15.6\% | 15.7\% | 16.7\% | 16.9\% | 17.7\% | 18.6\% | 18.5\% | 17.9\% | 18.7\% | 19.0\% | 19.6\% | 19.4\% | 20.5\% | 21.1\% | 21.7\% |
| Number | 267.3 | 318.0 | 309.8 | 323.7 | 299.8 | 314.6 | 324.8 | 334.9 | 349.1 | 400.0 | 419.9 | 442.4 | 440.2 | 466.8 | 505.1 | 493.4 | 539.5 | 546.6 | 539.3 | 516.3 | 558.8 | 577.9 | 607.5 | 593.5 | 629.0 | 658.0 | 665.1 |
| All Non-Tenure Track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 29.6\% | 24.4\% | 35.2\% | 43.4\% | 30.5\% | 29.7\% | 31.4\% | 29.8\% | 33.0\% | 32.3\% | 31.3\% | 35.7\% | 33.3\% | 33.3\% | 32.5\% | 34.8\% | 33.0\% | 33.2\% | 38.8\% | 35.2\% | 37.8\% | 34.8\% | 35.1\% | 34.9\% | 36.9\% | 38.0\% | 39.3\% |
| Number | 29.0 | 36.0 | 36.0 | 53.9 | 61.0 | 79.3 | 120.8 | 97.1 | 95.9 | 130.1 | 149.5 | 138.1 | 154.9 | 181.1 | 182.5 | 195.9 | 229.3 | 224.3 | 214.7 | 181.5 | 223.3 | 296.7 | 311.0 | 324.0 | 234.0 | 285.3 | 258.7 |
| All Faculty |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 13.5\% | 12.2\% | 12.9\% | 13.5\% | 13.3\% | 13.9\% | 14.9\% | 14.5\% | 14.7\% | 16.6\% | 17.3\% | 18.2\% | 18.1\% | 18.5\% | 19.2\% | 19.7\% | 20.6\% | 21.3\% | 21.7\% | 20.5\% | 21.9\% | 22.4\% | 23.1\% | 23.0\% | 23.3\% | 24.4\% | 24.8\% |
| Number | 296.3 | 354.0 | 345.8 | 377.6 | 360.9 | 393.8 | 445.6 | 432.0 | 445.0 | 530.1 | 569.4 | 580.5 | 595.1 | 647.8 | 687.6 | 689.3 | 768.8 | 771.0 | 753.9 | 697.8 | 782.2 | 874.6 | 918.5 | 917.5 | 863.0 | 943.3 | 923.8 |
| Ph.D. Students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ph.D. Granted |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 24.3\% | 26.6\% | 24.0\% | 24.0\% | 28.6\% | 29.6\% | 31.1\% | 30.9\% | 29.5\% | 30.5\% | 28.9\% | 32.3\% | 33.5\% | 35.3\% | 34.9\% | 33.2\% | 33.6\% | 34.8\% | 32.8\% | 35.4\% | 32.7\% | 34.7\% | 31.1\% | 32.8\% | 32.1\% | 32.1\% | 34.7\% |
| Number | 180.0 | 230.5 | 219.2 | 224.2 | 256.0 | 261.2 | 273.1 | 283.9 | 246.9 | 288.2 | 312.6 | 322.8 | 334.6 | 368.0 | 432.4 | 363.2 | 337.3 | 348.0 | 351.8 | 391.2 | 356.7 | 403.8 | 372.0 | 361.0 | 370.0 | 345.0 | 370.9 |
| ABD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 27.3\% | 26.5\% | 27.9\% | 28.1\% | 28.1\% | 30.5\% | 31.1\% | 31.6\% | 31.7\% | 34.5\% | 33.3\% | 34.2\% | 33.9\% | 33.6\% | 34.0\% | 33.8\% | 34.1\% | 34.5\% | 32.7\% | 32.1\% | 32.2\% | 31.7\% | 31.7\% | 33.0\% | 32.7\% | 32.9\% | 32.5\% |
| Number | 689.0 | 307.5 | 756.7 | 818.7 | 787.2 | 832.9 | 834.3 | 835.8 | 938.2 | 1112.4 | 1217.1 | 1224.3 | 1220.3 | 1301.0 | 1276.2 | 1294.9 | 1363.9 | 1326.7 | 1312.0 | 1225.5 | 1345.0 | 1324.5 | 1428.0 | 1467.0 | 1470.0 | 1454.0 | 1444.6 |
| First Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 30.4\% | 29.3\% | 29.7\% | 30.3\% | 32.7\% | 31.4\% | 33.7\% | 33.5\% | 34.8\% | 35.0\% | 34.3\% | 32.3\% | 32.1\% | 33.6\% | 35.8\% | 33.5\% | 32.3\% | 32.6\% | 30.3\% | 32.7\% | 31.8\% | 31.5\% | 33.4\% | 32.2\% | 33.1\% | 34.7\% | 35.7\% |
| Number | 404.5 | 464.0 | 454.2 | 451.0 | 468.9 | 476.6 | 502.6 | 551.3 | 580.6 | 618.0 | 585.3 | 541.3 | 532.8 | 557.4 | 602.8 | 597.0 | 565.5 | 541.5 | 472.5 | 478.0 | 504.0 | 498.0 | 516.0 | 491.0 | 475.0 | 541.0 | 454.8 |
| Undergraduate Economics Majors Graduated |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | missing | 30.6\% | 33.0\% | 32.5\% | 32.1\% | 30.7\% | 32.0\% | 32.7\% | 33.4\% | 32.8\% | 32.4\% | 31.7\% | 31.3\% | 30.2\% | 30.9\% | 30.3\% | 30.3\% | 30.7\% | 30.3\% | 32.1\% | 33.6\% | 33.2\% | 32.9\% | 34.0\% | 34.1\% | 33.4\% | 34.1\% |
| Number | missing | 5818 | 8663 | 8721 | 7713 | 7785 | 10155 | 11295 | 13701 | 15746 | 15641 | 16622 | 16347 | 16164 | 15626 | 18929 | 19574 | 19808 | 19901 | 17833 | 20855 | 23364 | 22932 | 23218 | 24031 | 24989 | 24991 |
| Undergraduate Senior Majors* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  | 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 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | 29.0\% | 30.8\% | 31.4\% | 31.5\% | 32.8\% | 32.7\% | 34.3\% | 33.8\% | 34.2\% | 36.3\% | 34.2\% | 34.3\% |
| Number | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | 20050 | 23173 | 26101 | 29225 | 17581 | 20415 | 19975 | 21123 | 21683 | 23199 | 24403 | 21665 |

 *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.

|  |  |  |  |  |  |  |  |  |  |  |  |  | All Top | 10 Sch | ools |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 2020 |
| Faculty |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 4.1\% | 4.3\% | 5.6\% | 4.9\% | 5.7\% | 5.9\% | 7.2\% | 8.5\% | 8.0\% | 7.1\% | 8.6\% | 8.3\% | 8.7\% | 8.8\% | 8.0\% | 8.7\% | 9.6\% | 9.0\% | 9.2\% | 9.6\% | 9.7\% | 9.6\% | 9.2\% | 9.1\% | 10.7\% | 12.2\% | 12.5\% |
| Number | 9.0 | 10.0 | 13.0 | 11.0 | 13.8 | 14.3 | 17.3 | 20.3 | 23.5 | 18.0 | 22.0 | 21.5 | 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 | 39.0 |
| Associate Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 11.8\% | 13.9\% | 11.8\% | 12.7\% | 24.4\% | 28.6\% | 20.4\% | 13.2\% | 18.8\% | 18.5\% | 15.1\% | 21.1\% | 12.3\% | 15.2\% | 26.8\% | 20.0\% | 20.0\% | 19.6\% | 25.9\% | 23.3\% | 21.9\% | 25.0\% | 28.9\% | 30.8\% | 26.3\% | 21.2\% | 22.2\% |
| Number | 4.0 | 5.0 | 3.7 | 5.3 | 7.3 | 7.5 | 5.8 | 4.0 | 6.0 | 5.0 | 4.0 | 6.0 | 4.0 | 5.0 | 9.5 | 6.0 | 7.0 | 9.0 | 7.0 | 7.0 | 7.0 | 8.0 | 13.0 | 12.0 | 10.0 | 7.0 | 8.0 |
| Assistant Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 22.1\% | 20.4\% | 18.7\% | 20.4\% | 17.9\% | 17.5\% | 18.5\% | 19.4\% | 16.7\% | 20.2\% | 19.1\% | 22.5\% | 25.2\% | 26.2\% | 27.0\% | 26.1\% | 21.4\% | 21.4\% | 19.4\% | 17.0\% | 20.0\% | 21.6\% | 18.0\% | 20.2\% | 17.9\% | 19.8\% | 22.4\% |
| Number | 21.0 | 22.0 | 19.7 | 20.3 | 17.3 | 18.3 | 19.8 | 21.3 | 18.5 | 21.0 | 20.5 | 24.0 | 26.0 | 27.0 | 32.5 | 24.0 | 21.0 | 19.5 | 18.0 | 15.0 | 18.0 | 21.0 | 18.0 | 22.0 | 17.0 | 19.0 | 22.0 |
| All Tenure Track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 9.7\% | 9.8\% | 9.9\% | 10.1\% | 10.5\% | 10.7\% | 11.4\% | 12.1\% | 11.0\% | 11.5\% | 11.9\% | 13.1\% | 13.4\% | 13.7\% | 14.7\% | 13.4\% | 13.1\% | 12.8\% | 12.6\% | 12.2\% | 13.0\% | 13.6\% | 13.3\% | 13.7\% | 13.6\% | 14.5\% | 15.5\% |
| Number | 34.0 | 37.0 | 36.3 | 36.7 | 38.3 | 40.0 | 42.8 | 45.5 | 48.0 | 44.0 | 46.5 | 51.5 | 52.0 | 56.0 | 65.0 | 55.0 | 56.0 | 54.5 | 52.0 | 50.0 | 52.0 | 56.0 | 57.0 | 61.0 | 60.0 | 65.0 | 69.0 |
| 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\% | 34.2\% |
| 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 | 25.0 |
| All Faculty |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 10.5\% | 10.3\% | 11.2\% | 11.4\% | 11.4\% | 12.1\% | 12.7\% | 12.9\% | 12.3\% | 13.6\% | 13.6\% | 17.0\% | 14.9\% | 16.4\% | 16.5\% | 16.3\% | 15.3\% | 15.2\% | 15.6\% | 14.8\% | 15.7\% | 19.5\% | 17.8\% | 16.9\% | 16.2\% | 17.9\% | 18.1\% |
| Number | 38.0 | 41.0 | 42.3 | 43.7 | 44.4 | 48.8 | 51.8 | 51.5 | 56.0 | 58.0 | 58.5 | 73.5 | 63.0 | 73.0 | 79.0 | 74.0 | 73.0 | 84.5 | 72.0 | 69.0 | 72.0 | 99.0 | 92.0 | 90.0 | 82.0 | 95.3 | 94.0 |
| 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\% | 23.6\% |
| 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 | 49.0 |
| 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\% | 24.7\% |
| 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 | 233.0 |
| 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\% | 32.6\% |
| 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 | 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\% | 36.0\% | 39.6\% | 36.3\% | 36.8\% | 35.8\% |
| Number | missing | 348 | 378 | 390 | 647 | 558 | 740 | 688 | 707 | 752 | 817 | 874 | 743 | 697 | 564 | 834 | 770 | 822 | 729 | 866 | 849 | 895 | 907 | 990 | 866 | 981 | 979 |
| Undergraduate Senior Majors* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  | 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 | 2020 |
| Percent <br> Number | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | missing <br> missing | $\begin{array}{r} 37.9 \% \\ 662 \\ \hline \end{array}$ | $\begin{array}{r} 38.7 \% \\ 958 \\ \hline \end{array}$ | $\begin{array}{r} 39.2 \% \\ 1249 \\ \hline \end{array}$ | $\begin{array}{r} 39.2 \% \\ 999 \\ \hline \end{array}$ | $\begin{array}{r} 38.0 \% \\ 994 \\ \hline \end{array}$ | $\begin{array}{r} 38.6 \% \\ 1003 \end{array}$ | $\begin{array}{r} 37.3 \% \\ 898 \\ \hline \end{array}$ | $36.6 \%$ 924 | $\begin{array}{r} 38.3 \% \\ 984 \\ \hline \end{array}$ | $\begin{array}{r} 38.6 \% \\ 947 \\ \hline \end{array}$ | $\begin{array}{r} 36.2 \% \\ 993 \\ \hline \end{array}$ | $\begin{array}{r} 36.2 \% \\ 996 \\ \hline \end{array}$ |



|  | 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 | 2020 |
| Percent | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | 34.0\% | 35.2\% | 38.1\% | 37.3\% | 39.1\% | 37.8\% | 37.8\% | 37.5\% | 37.4\% | 39.7\% | 39.0\% | 39.4\% |
| Number | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | missing | 1588 | 2164 | 3004 | 2548 | 2627 | 2676 | 2243 | 2226 | 2252 | 2702 | 2589 | 2527 |

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 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Facultv |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 19.7\% | 21.1\% | 20.3\% | 21.9\% | 24.6\% | 24.6\% | 23.7\% | 23.3\% | 23.3\% | 23.8\% | 23.6\% | 24.7\% | 26.7\% | 28.8\% | 27.9\% |
| Number | 80.4 | 89.8 | 92.8 | 107.2 | 117.4 | 119.8 | 113.6 | 107.3 | 108.0 | 111.0 | 107.0 | 115.5 | 121.5 | 132.5 | 128.0 |
| Associate Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 37.2\% | 35.9\% | 34.4\% | 32.6\% | 32.4\% | 32.9\% | 33.9\% | 35.6\% | 35.0\% | 36.1\% | 37.5\% | 38.8\% | 42.2\% | 41.9\% | 38.9\% |
| Number | 92.9 | 93.3 | 92.9 | 89.9 | 94.2 | 94.8 | 93.4 | 93.2 | 95.2 | 96.8 | 97.1 | 104.8 | 114.5 | 119.5 | 108.2 |
| Assistant Professor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 38.0\% | 39.2\% | 39.4\% | 42.2\% | 40.2\% | 40.3\% | 40.2\% | 40.4\% | 41.8\% | 41.4\% | 40.5\% | 42.4\% | 40.9\% | 40.2\% | 41.9\% |
| Number | 91.7 | 100.3 | 106.2 | 114.5 | 118.9 | 123.0 | 122.4 | 113.6 | 119.3 | 127.2 | 127.1 | 133.5 | 131.2 | 139.8 | 152.7 |
| All Tenure Track (Subtotal) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 29.4\% | 30.1\% | 29.3\% | 30.1\% | 31.1\% | 31.3\% | 31.1\% | 31.3\% | 31.6\% | 32.2\% | 32.3\% | 33.6\% | 35.0\% | 35.8\% | 35.3\% |
| Number | 265.0 | 283.3 | 291.9 | 311.6 | 330.5 | 337.5 | 329.4 | 314.0 | 322.5 | 335.0 | 331.2 | 353.8 | 367.2 | 391.8 | 388.8 |
| All Non-Tenure Track |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 34.7\% | 35.3\% | 37.1\% | 29.5\% | 37.7\% | 35.4\% | 32.9\% | 36.0\% | 35.6\% | 36.6\% | 35.3\% | 33.3\% | 27.5\% | 34.7\% | 28.5\% |
| Number | 82.6 | 87.3 | 98.0 | 83.2 | 94.3 | 90.4 | 98.9 | 64.3 | 84.0 | 132.0 | 114.0 | 93.0 | 46.7 | 83.3 | 58.2 |
| All Faculty |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 30.5\% | 31.2\% | 30.9\% | 29.9\% | 32.3\% | 32.1\% | 31.5\% | 32.0\% | 32.3\% | 33.3\% | 33.0\% | 33.5\% | 34.0\% | 35.6\% | 34.2\% |
| Number | 347.7 | 370.6 | 389.9 | 394.8 | 424.8 | 427.9 | 428.3 | 378.3 | 406.5 | 467.0 | 445.2 | 446.8 | 413.8 | 475.2 | 447.0 |
| Students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Underaraduate Economics Majors Graduated |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 34.0\% | 33.1\% | 33.3\% | 34.7\% | 35.3\% | 34.3\% | 33.9\% | 34.7\% | 34.1\% | 33.9\% | 35.6\% | 35.9\% | 35.3\% | 35.6\% | 38.9\% |
| Number | 1406.8 | 1449.7 | 1580.2 | 1678.4 | 1754.8 | 1713.1 | 1581.1 | 1441.0 | 1826.6 | 2093.8 | 2255.1 | 2133.3 | 2230.5 | 2191.5 | 2797.5 |
| Undergraduate Senior Majors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 35.0\% | 37.9\% | 36.5\% | 35.9\% | 36.0\% | 35.4\% | 34.1\% | 35.6\% | 33.8\% | 35.4\% | 35.5\% | 35.9\% | 35.9\% | 35.9\% | 38.6\% |
| Number | 1549.3 | 1805.4 | 1784.3 | 1917.6 | 1935.2 | 1871.8 | 1793.5 | 1697.6 | 1826.8 | 2340.2 | 2301.9 | 2310.7 | 2383.8 | 2298.7 | 2854.2 |
| M.A. Students Graduated |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 33.2\% | 43.1\% | 33.3\% | 38.4\% | 35.4\% | 39.7\% | 39.2\% | 32.2\% | 39.9\% | 40.1\% | 39.9\% | 38.8\% | 38.2\% | 36.8\% | 39.8\% |
| Number | 17.7 | 61.5 | 77.7 | 89.3 | 81.8 | 66.9 | 56.3 | 34.0 | 59.0 | 55.0 | 43.5 | 40.0 | 20.0 | 63.5 | 39.3 |
| M.A. Students Expected to Graduate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | missing | missing | missing | missing | missing | missing | missing | 42.2\% | 37.4\% | 34.2\% | 42.3\% | 35.5\% | 35.2\% | 32.8\% | 34.9\% |
| Number | missing | missing | missing | missing | missing | missing | missing | 43.0 | 61.8 | 49.3 | 43.3 | 60.0 | 34.0 | 64.0 | 25.0 |
| $N$ respondents |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Number | 106.0 | 106.0 | 107.0 | 107.0 | 109.0 | 109.0 | 109.0 | 110.0 | 110.0 | 110.0 | 111.0 | 111.0 | 111.0 | 111.0 | 111.0 |

*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

|  | All Top 10 Schools |  |  |  |  |  |  |  | All Top 20 Schools |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1994-1997 | 1998-2002 | 2003-2007 | 2008-2012 | 2013-2017 | 2018 | 2019 | 2020 | 1994-1997 | 1998-2002 | 2003-2007 | 2008-2012 | 2013-2017 | 2018 | 2019 | 2020 |
| U.S.-based. All Tvoes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 24.9\% | 29.7\% | 30.1\% | 26.2\% | 27.7\% | 20.7\% | 37.7\% | 25.9\% | 26.7\% | 29.1\% | 31.6\% | 29.3\% | 28.3\% | 23.8\% | 35.6\% | 28.8\% |
| Number | 35.8 | 39.1 | 45.3 | 35.6 | 38.2 | 31.0 | 52.0 | 42.0 | 58.9 | 59.9 | 80.0 | 66.1 | 71.0 | 64.0 | 88.0 | 78.0 |
| Faculty, PhD Grantina |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 22.1\% | 25.9\% | 29.8\% | 24.5\% | 28.0\% | 17.6\% | 42.6\% | 23.0\% | 24.0\% | 26.3\% | 30.9\% | 27.8\% | 27.3\% | 20.2\% | 40.9\% | 24.4\% |
| Number | 16.0 | 18.9 | 26.8 | 17.8 | 19.4 | 13.0 | 29.0 | 14.0 | 27.0 | 29.5 | 44.4 | 33.2 | 29.4 | 22.0 | 38.0 | 22.0 |
| Faculty, Non-PhD Grantina |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 42.1\% | 50.1\% | 26.5\% | 35.1\% | 34.4\% | 14.3\% | 0.0\% | 20.0\% | 41.8\% | 50.2\% | 30.8\% | 41.2\% | 33.0\% | 14.3\% | 28.6\% | 10.0\% |
| Number | 6.8 | 5.3 | 2.4 | 2.5 | 2.0 | 1.0 | 0.0 | 1.0 | 8.8 | 7.3 | 6.6 | 6.9 | 6.0 | 1.0 | 4.0 | 1.0 |
| Non-Faculty, Any Academic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | missing | missing | missing | missing | 35.4\% | 26.7\% | 28.6\% | 33.3\% | missing | missing | missing | missing | 28.9\% | 28.6\% | 19.2\% | 34.8\% |
| Number | missing | missing | missing | missing | 3.4 | 4.0 | 2.0 | 5.0 | missing | missing | missing | missing | 6.0 | 8.0 | 5.0 | 8.0 |
| Public Sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 24.1\% | 30.3\% | 31.4\% | 29.9\% | 27.2\% | 10.0\% | 36.4\% | 32.3\% | 28.3\% | 28.8\% | 33.6\% | 28.9\% | 26.4\% | 23.1\% | 37.5\% | 32.7\% |
| Number | 6.5 | 8.5 | 7.3 | 6.9 | 4.6 | 1.0 | 8.0 | 10.0 | 12.3 | 12.9 | 14.2 | 11.5 | 9.8 | 9.0 | 15.0 | 16.0 |
| Private Sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 22.4\% | 30.8\% | 28.6\% | 24.1\% | 25.7\% | 27.3\% | 34.2\% | 24.0\% | 25.2\% | 28.9\% | 31.7\% | 28.5\% | 29.7\% | 27.9\% | 35.1\% | 31.3\% |
| Number | 6.5 | 6.4 | 8.8 | 8.4 | 8.8 | 12.0 | 13.0 | 12.0 | 10.9 | 10.2 | 14.8 | 14.5 | 19.8 | 24.0 | 26.0 | 31.0 |
| Foreian-based, All Types |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 17.8\% | 14.5\% | 23.1\% | 22.9\% | 20.2\% | 27.7\% | 24.2\% | 25.9\% | 17.8\% | 19.6\% | 22.7\% | 24.4\% | 24.8\% | 26.7\% | 28.8\% | 25.4\% |
| Number | 5.8 | 4.3 | 9.1 | 12.3 | 8.4 | 13.0 | 15.0 | 15.0 | 10.8 | 11.2 | 18.4 | 26.8 | 22.0 | 28.0 | 34.0 | 29.0 |
| Academic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 24.5\% | 13.4\% | 25.3\% | 23.0\% | 23.1\% | 27.3\% | 25.0\% | 28.3\% | 19.8\% | 19.9\% | 25.2\% | 22.3\% | 26.5\% | 26.7\% | 32.2\% | 27.3\% |
| Number | 5.3 | 3.0 | 7.1 | 9.3 | 6.8 | 9.0 | 11.0 | 15.0 | 8.5 | 8.2 | 13.6 | 17.7 | 16.8 | 20.0 | 28.0 | 27.0 |
| Non-Academic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 6.1\% | 17.7\% | 18.1\% | 22.6\% | 11.6\% | 28.6\% | 22.2\% | 0.0\% | 13.2\% | 17.7\% | 17.6\% | 29.6\% | 20.6\% | 26.7\% | 19.4\% | 13.3\% |
| Number | 0.5 | 1.3 | 2.0 | 3.1 | 1.6 | 4.0 | 4.0 | 0.0 | 2.3 | 3.0 | 4.8 | 9.1 | 5.2 | 8.0 | 6.0 | 2.0 |
| Unknown Placement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | missing | missing | missing | missing | missing | 100.0\% | 100.0\% | 50.0\% | missing | missing | missing | missing | missing | 33.3\% | 33.3\% | 50.0\% |
| Number | missing | missing | missing | missing | missing | 2.0 | 1.0 | 1.0 | missing | missing | missing | missing | missing | 2.0 | 1.0 | 1.0 |
| No Placement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 19.6\% | 31.7\% | 6.7\% | 0.0\% | 6.7\% | 50.0\% | 0.0\% | 0.0\% | 18.5\% | 34.7\% | 23.4\% | 18.1\% | 25.7\% | 50.0\% | 33.3\% | 16.7\% |
| Number | 6.5 | 2.5 | 0.6 | 0.0 | 0.2 | 1.0 | 0.0 | 0.0 | 9.0 | 4.0 | 3.5 | 1.2 | 0.8 | 2.0 | 2.0 | 1.0 |
| Total on the Market |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent | 23.3\% | 27.1\% | 28.0\% | 24.8\% | 25.9\% | 23.4\% | 33.3\% | 26.0\% | 24.1\% | 27.2\% | 29.4\% | 27.5\% | 27.4\% | 25.0\% | 33.4\% | 27.7\% |
| Number | 48.0 | 45.9 | 55.0 | 47.9 | 46.8 | 47.0 | 68.0 | 58.0 | 78.6 | 75.1 | 101.9 | 94.1 | 93.8 | 96.0 | 125.0 | 109.0 |
| Table 5. Percent Women in Job Placements of New Ph.D.s from All Other Economics Departments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | All Oth | er Schools |  |  |  |  |  |  |  |


|  | 1994-1997 | 1998-2002 | 2003-2007 | 2008-2012 | 2013-2017 | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S.-based, All Tvpes |  |  |  |  |  |  |  |  |
| Percent | 29.4\% | 33.3\% | 35.6\% | 38.7\% | 37.6\% | 36.9\% | 34.6\% | 36.2\% |
| Number | 90.7 | 119.4 | 169.3 | 209.7 | 170.9 | 174.0 | 159.0 | 136.3 |
| Faculty, PhD Granting Department |  |  |  |  |  |  |  |  |
| Percent | 31.3\% | 30.5\% | 31.8\% | 36.8\% | 33.3\% | 39.0\% | 36.9\% | 36.5\% |
| Number | 27.9 | 32.7 | 50.9 | 65.7 | 36.5 | 30.0 | 31.0 | 25.1 |
| Faculty, Non-PhD Granting Department |  |  |  |  |  |  |  |  |
| Percent | 29.1\% | 35.6\% | 40.9\% | 38.8\% | 38.6\% | 35.7\% | 35.7\% | 40.0\% |
| Number | 29.4 | 33.1 | 57.4 | 62.3 | 48.8 | 50.0 | 41.0 | 26.0 |
| Non-Faculty, Any Academic Department |  |  |  |  |  |  |  |  |
| Percent | missing | missing | missing | missing | 30.8\% | 41.4\% | 33.8\% | 30.2\% |
| Number | missing | missing | missing | missing | 15.4 | 29.0 | 22.0 | 16.0 |
| Public Sector |  |  |  |  |  |  |  |  |
| Percent | 30.9\% | 35.6\% | 36.4\% | 36.9\% | 35.5\% | 28.0\% | 31.1\% | 31.9\% |
| Number | 18.9 | 26.8 | 28.6 | 37.1 | 22.5 | 14.0 | 19.0 | 23.0 |
| Private Sector |  |  |  |  |  |  |  |  |
| Percent | 24.9\% | 32.7\% | 33.6\% | 44.0\% | 45.3\% | 37.8\% | 34.1\% | 39.3\% |
| Number | 14.4 | 26.8 | 32.4 | 44.6 | 47.7 | 51.0 | 46.0 | 46.1 |
| Foreian-based, All Types |  |  |  |  |  |  |  |  |
| Percent | 17.8\% | 27.2\% | 26.3\% | 30.3\% | 31.9\% | 29.6\% | 24.1\% | 35.1\% |
| Number | 23.8 | 29.9 | 42.3 | 69.2 | 57.7 | 66.0 | 41.0 | 63.1 |
| Academic |  |  |  |  |  |  |  |  |
| Percent | 21.2\% | 30.6\% | 29.8\% | 32.5\% | 34.7\% | 30.6\% | 25.4\% | 34.2\% |
| Number | 17.6 | 18.5 | 26.7 | 44.1 | 42.7 | 49.0 | 32.0 | 44.1 |
| Non-Academic |  |  |  |  |  |  |  |  |
| Percent | 12.3\% | 23.0\% | 21.9\% | 26.9\% | 25.9\% | 27.0\% | 20.5\% | 37.6\% |
| Number | 6.2 | 11.4 | 15.7 | 25.0 | 15.0 | 17.0 | 9.0 | 19.0 |
| Unknown Placement |  |  |  |  |  |  |  |  |
| Percent | missing | missing | missing | missing | missing | 8.0\% | 7.7\% | 58.3\% |
| Number | missing | missing | missing | missing | missing | 2.0 | 1.0 | 7.0 |
| No Placement |  |  |  |  |  |  |  |  |
| Percent | 21.7\% | 25.9\% | 35.0\% | 37.2\% | 42.7\% | 53.7\% | 35.9\% | 30.6\% |
| Number | 21.1 | 13.5 | 19.4 | 35.6 | 15.3 | 51.0 | 14.0 | 17.3 |
| Total on the Market |  |  |  |  |  |  |  |  |
| Percent | 25.1\% | 31.2\% | 33.4\% | 36.3\% | 36.3\% | 36.0\% | 31.5\% | 35.8\% |
| Number | 135.5 | 162.8 | 231.1 | 314.4 | 243.9 | 293.0 | 215.0 | 223.6 |

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

| 2019-2020 | Top 10 |  | Top 11-20 |  | All Others |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men |
| U.S.-based, All Types <br> (Share of all individuals by gender) | 72.4\% | 72.7\% | 70.6\% | 61.3\% | 60.9\% | 59.5\% |
| Faculty, PhD Granting Department | 33.3\% | 39.2\% | 22.2\% | 28.8\% | 18.4\% | 18.1\% |
| Faculty, Non-PhD Granting Department | 2.4\% | 3.3\% | 0.0\% | 6.8\% | 19.1\% | 16.5\% |
| Non-Faculty, Any Academic Department | 11.9\% | 8.3\% | 8.3\% | 6.8\% | 11.7\% | 14.4\% |
| Public Sector | 23.8\% | 17.5\% | 16.7\% | 16.4\% | 16.9\% | 20.8\% |
| Private Sector | 28.6\% | 31.7\% | 52.8\% | 41.1\% | 33.9\% | 30.2\% |
| Foreign-based, All Types <br> (Share of all individuals by gender) | 25.9\% | 26.1\% | 27.5\% | 35.3\% | 28.2\% | 29.4\% |
| Academic | 100.0\% | 88.4\% | 85.7\% | 81.0\% | 69.9\% | 72.9\% |
| Non-Academic | 0.0\% | 11.6\% | 14.3\% | 19.0\% | 30.1\% | 27.1\% |
| Unknown Placement <br> (Share of all individuals by gender) | 1.7\% | 0.6\% | 0.0\% | 0.0\% | 3.1\% | 1.3\% |
| No Placement <br> (Share of all individuals by gender) | 0.0\% | 0.6\% | 2.0\% | 3.4\% | 7.7\% | 9.9\% |
| Total on the Market | 58 | 165 | 51 | 119 | 224 | 397 |

Table 7. Distribution of Top 20 Departments by Female Share of First Year PhD class, 2014-2020

|  | Number of Programs |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 2016 | 2017 | 2018 | 2019 | 2020 |
| Share of women in 1st year PhD class |  |  |  |  |  |
| $40 \%$ or above | 6 | 2 | 7 | 9 | 7 |
| $35-39 \%$ | 1 | 1 | 0 | 0 | 5 |
| $30-34 \%$ | 2 | 8 | 2 | 5 | 3 |
| $25-29 \%$ | 5 | 1 | 3 | 5 | 1 |
| $20-24 \%$ | 3 | 3 | 3 | 0 | 4 |
| Below 20\% | 4 | 6 | 6 | 2 | 1 |

*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



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 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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.

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[^0]:    ${ }^{1}$ See Donna K. Ginther, Janet M. Currie, Francine D. Blau, and Rachel T.A. Croson. "Can mentoring help female assistant professors? Evaluation by randomized trial" working paper (2019) and Francine D.Blau, Janet M. Currie, Rachel TA Croson, and Donna K. Ginther. "Can mentoring help female assistant professors? Interim results from a randomized trial." American Economic Review 100, no. 2 (2010): 348-52.

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[^6]:    ${ }^{6}$ 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.
    ${ }^{7}$ 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 (National Science Foundation, National Center for Science and Engineering Statistics. 2019. Women, Minorities, and Persons with Disabilities in Science and Engineering: 2019. Special Report NSF 19-304. Alexandria, VA. Available at https://www.nsf.gov/statistics/wmpd).

[^7]:    ${ }^{8}$ 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.
    ${ }^{9}$ Aggregate time series data are publicly available. Department-level panel data are available with a restricted data use agreement. The data are updated annually.

[^8]:    ${ }^{10} \mathrm{We}$ 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.

