The 2019 Report of the Committee on the Status of Women in the Economics Profession

December 13, 2019

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 geared to faculty in PhD-granting institutions or research-oriented nonacademic positions and another, held biennially, geared to faculty in non PhD-granting institutions. At the annual AEA/ASSA Meetings, we also host three Mentoring Breakfasts as well as a variety of career development roundtables and panels. We also host career development panels and mentoring events at the meetings of each of the four regional economics associations. 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). CSWEP disseminates information on women in economics, professional opportunities, and career development through both the CSWEP website and the *CSWEP News* (moving 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 nearly 3000 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 2019 Annual Survey in Section IV. Briefly, as we have reported for several years, we find that there has been little progress in increasing the representation of women in economics faculties during the past decade. This is not just due to the so-called "leaky pipeline" but due to stagnation or decline in the number of women entering economics at both the undergraduate and graduate level over the decade. This year, 2019, does show an uptick in the first year PhD students that are women. The extent to which this represents an inflection point cannot yet be predicted. The CSWEP data are available to individual researchers via ICPSR.

Section II reports on the administration of CSWEP activities in this, the first year of Judy Chevalier's term and the first year of our office support transition. Section III describes CSWEP activities addressing the challenges women continue to face in the economics profession and our joint efforts with the Committee on the Status of Minority Groups in the Economics Profession and with the Committee on the Status of LGBTQ+ Individuals in the Economics profession. Associate Chair Margaret Levenstein directed the 2019 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 2019 Board members.

II. CSWEP Administration

A. CSWEP Office

Judy Chevalier at Yale University took over as CSWEP Chair in January 2019 from Shelly Lundberg at the University of California at Santa Barbara (UCSB). In September 2018, CSWEP began a new model of administration by coordinating with the AEA's Nashville office to house and hire CSWEP's Committee Coordinator through the AEA (rather than at the home institution of the chair). This new base for the CSWEP administrative full-time assistant was intended to facilitate improved communication between CSWEP and the AEA administration, allow for direct control over the CSWEP website, and ease future leadership transitions. In the summer of 2019, Lauren Lewis, the Committee Coordinator for CSWEP, undertook a similar role assisting CSMGEP. This fall, we learned that Lauren Lewis, who has held the position since its inception in Nashville, would be leaving to pursue other opportunities. We have coordinated with the Nashville office to hire Rebekah Crowe who has not yet, as of this writing, begun in the position. We have used our co-location with the Nashville office to

make operational improvements. For example, the Committee Coordinator now has a permanent email address that is independent of the holder of the position; the Coordinator has worked with the Pittsburgh office to design a new submission portal for the Summer Fellows Program; the Coordinator has worked closely with the AEA staff in planning our ASSA activities.

The Wordpress site that makes CSWEP policies and procedures available to all Board and Committee members—and provides CSWEP with an institutional memory as the Board, Chair, and staff change—continues to be updated and expanded.

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 our community, junior and senior, within and outside the academy, and also to communicate to the profession as a whole. Our traditional communications tools, the CSWEP website, our subscriber email list, and *News*, have been augmented in recent years by email networks and social media and we have made improvements to all our communications.

The CSWEP Liaison Network (created in 2014) has continued to expand the distribution of the CSWEP newsletters, announcements, and professional development opportunities. The 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. [1] This year, we have begun an effort to establish a 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 Twitter account, @AEACSWEP, was launched in 2017 and we have been tweeting prize announcements, calls for papers, and information about our board members. We also use our Twitter account to flag professional development resources of interest to our followers and point our followers to the larger set of resources available on our webpage. With more than 3K followers, our Twitter presence seems to have improved our communications with younger economists; our presence on Twitter may have played a role in our subscriber increase and recent increases in applications for CSWEP mentoring programs.

[1] For a list of current members of the CSWEP Liaison Network, visit https://www.aeaweb.org/committees/cswep/Liaison_Network.php.

III. CSWEP Activities in 2019

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

The CSWEP Board applauds the creation of the AEA Ad Hoc Committee on the Professional Climate in Economics, the Ad Hoc Committee on Best Practices, and the Ad Hoc Committee on Outreach. CSWEP board members serve on each of these committees—Sandra Black on the Climate Committee, Associate CSWEP Chair for mentoring Sebnem Kalemli-Ozcan on the Best Practices Committee, Judy Chevalier and Ann Owen on the Outreach Committee. To further support these AEA efforts, we wrote about the Climate Survey in our newsletter, from our Twitter (where we tweeted out visualizations of some of the tables), and in our email communications with subscribers. We also profiled and interviewed the AEA Ombudsperson in our newsletter. We look forward to continued productive interface with these committees.

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 support for chapter events allow us to supplement these mentoring efforts. CSWEP also participates in the coordinating the AEA Summer Fellows Program, which provides mentoring and research support for PhD students and junior faculty. As discussed below, responding to enormous demand for our mentoring workshops, we have (with the assistance of the AEA) increased the number of mentees for the two CSWEP CeMENT workshops to be held in January 2020.

1. CeMENT Mentoring Workshop for Faculty in Doctoral Programs

The CSWEP CeMENT workshop for faculty in doctoral programs is aimed at mentoring female faculty in tenure-track positions at PhD granting economics departments in the U.S. or at institutions with similar research expectations. The 2019 CeMENT mentoring workshop for PhD-Granting Institutions was on Sunday, January 6th – Tuesday January 8th, 2019, at the Atlanta Marriott Marquis, Atlanta, GA. CeMENT Director Martha Bailey served as the main coordinator for this workshop and was joined by 40 participants and 20 senior mentors. [2]

[2] We are grateful to the mentors who volunteered their time for the January 2019 workshop: Sandra E. Black (University of Texas at Austin), Kasey Buckles (University of Notre Dame), Patricia Cortes (Boston University), Jennifer Doleac (Texas A&M University), Kathryn Dominguez (University of Michigan), Susan Dynarski (University of Michigan), Hulya Eraslan (Rice University), Jessica Goldberg (University of Maryland), Hilary Hoynes (University of California, Berkeley), Sarah Jacobson (Williams College), Pamela Jakiela (Center for Global Development), Erin Krupka (University of Michigan), Olivia Mitchell (University of Pennsylvania), Kathleen Mullen (RAND Corporation), Laura Razzolini (The University of Alabama), Mar Reguant (Northwestern University), Claudia Sahm (Federal Reserve Board), Katja Seim (Yale University), Manisha Shah (University of California, Los Angeles) and Abigail Wozniak (University of Notre Dame).

The workshop consisted of large group panel sessions and small group sessions. The five large group panel sessions focused on the topics of: getting published, efficient and effective teaching, networking, managing service, getting tenure, and work-life balance. Each large group session began with advice from a panel of three to four of the senior mentors, but a lot of time was reserved for Q&A. The 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 the 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.

Based on both formal and informal feedback, the workshop continues to be a huge success. The average junior participant rated the workshop 6.88 on a scale of 1-7 and many wrote long comments about the workshop. For example, one participant wrote, "The workshop was—undoubtedly and by a long shot—the highlight of my professional career."

The 2019 workshop was described and discussed in an article in the Economist. At the upcoming 2020 AEA meetings, Donna Ginther, Janet Currie, Francine Blau, and Rachel Croson will present "Can Mentoring Help Female Assistant Professors in Economics: An Evaluation by Randomized Trial"[3] . This paper assesses outcomes from the CSWEP CeMENT workshops. The study updates the authors' interim evaluation of the program in 2010. The authors examine, as of 2018, the progress of all six cohorts of program participants and applicants who were randomized out for the biannual program from 2004-2014. The authors find that women in the treatment group have 0.185 more top five publications than the control group and 0.548 more second-tier publications. The treatment significantly increased the probability of women having a tenured or tenure track position both overall and in an institution ranked in the top 100 in economics. The treatment increased the probability of a tenured job in an institution ranked in the top 30 by 6.6 percentage points and the probability of tenure in a top 50 ranked institution by 10.3 percentage points.

In response to significant excess demand, in January 2014 the Executive Committee of the AEA approved moving the workshop from a biennial to an annual frequency, effectively doubling the capacity from the earlier years of the program. The Executive Committee also committed to fund the program through 2022. Demand continues to be increasing. The table below shows the applications and attendance for each workshop held since the January 2016 workshop. The 2019 workshop held in Atlanta and discussed above is

[3] 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."

highlighted. The 2020 workshop will be held in San Diego following the AEA meetings. Due to the persistent excess demand for this workshop, the CSWEP chair discussed with the AEA President and Secretary-Treasurer the possibility of redeploying the expected CSWEP 2019 budget surplus to enable expanding the available slots for the 2020 workshop. For the 2020 workshop, 50 potential participants have been offered slots.

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

*40 of the 42 invited attended in 2019; 42 of the invited 43 attended in 2018

2. CeMENT Mentoring Workshop for Faculty in Non-Doctoral Programs

The CeMENT Mentoring Workshop for Faculty in Non-Doctoral Programs was not held in 2019. Given the biennial cadence of this workshop, 2019 would normally have been the year when this event was held. However, at the recommendation of Director Ann Owen, the CSWEP Board, and the AEA organizing staff agreed to move the next non-doctoral CeMENT workshop from the Southern Economic Association meetings in late 2019 to right after the main AEA Meeting in January 2020. For this workshop, as with the Workshop for Faculty in Doctoral Programs, applications were large this year relative to prior years. In total, 75 fully-eligible applications were received. For the 2015 and 2017 workshops, we averaged 44 applications and thus, we were able to meet demand for this workshop with 40 slots. The CSWEP Chair discussed this situation with the AEA President and Secretary-Treasurer, as with the Doctoral Programs workshop, it was agreed that the expected CSWEP 2019 budget surplus could be deployed to enable expanding the available slots for the 2020 workshop. For the 2020 workshop, 57 potential participants have been offered slots. The January 2020 program will be the last meeting with Ann Owen as director. Jessica Holmes of Middlebury has agreed to take on this role going forward and will assist at the upcoming workshop.

2. Mentoring Breakfasts for Junior Economists

CSWEP hosted two mentoring breakfasts for junior economists at the 2019 ASSA meetings. These were organized by Amalia Miller and our Mentoring Associate Chair Sebnem Kalemli-Ozcan. Over 160 junior economists and 55 senior mentors signed up to participate across the

two breakfasts. Both events were well-attended by junior economists and mentors. The junior mentoring breakfasts are open to both male and female participants, and roughly 9% of the junior participants at the 2019 breakfasts were male. Senior mentors staffed topical tables (Research/Publishing, Teaching, Tenure/Promotion, Non-Academic 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 post-event survey of participants, the average rating was 89 out of 100.

3. Peer Mentoring Breakfast for Mid-Career Economists

CSWEP hosted a mid-career mentoring breakfast, organized by Ragan Petrie, at the 2019 AEA/ASSA meetings. 37 mid-career women and 11 mentors registered to attend the event. The breakfast kicked off with series of short talks. Susan Dynarski (University of Michigan), talked about "Saying no" and Ulrike Malmendier (University of California, Berkeley), talked about "Navigating post-tenure careers". 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. The average rating for the event was 80 out of 100.

4. @Twitter Tips for Success: Social Media for Economists

Marie Mora organized and Susan Dynarski moderated a Sunday morning panel discussion on @Twitter Tips for Success: Social Media for Economists at the 2019 AEA Meetings in Atlanta (jointly sponsored by CSWEP and CSMGEP). Panelists included Jennifer Doleac (Texas A&M University), Darrick Hamilton (New School for Social Research), Sarah Jacobson (Williams College) and Mark Hugo Lopez (Pew Research Center). A video of this event and the ensuing discussion is available on CSWEP's website here. A total of 50 participants registered for this event. In a participant survey after the event, the average approval rating was 89 on a 1-100 scale.

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. Many fellows have reported this experience as a career-changing event.

Under the direction of Daniel Newlon, the AEA Summer Fellows Program had another very good year. The number of applicants placed by the AEA Summer Fellows Program for 2019 was nineteen, the second most fellows ever hired. The number of minority placements also increased from five in 2018 to six in 2019, another record. The number of applications increased from 123 in 2018 to 125 in 2019, the second most ever. The overall success rate was only 15%, but for US citizen/permanent resident/H1B1 visa holders it was 37% and for minority applicants it was 40%. [4]

Of the 125 applications, 105 were from women, 15 from underrepresented minority groups, and 35 from U.S. citizens/permanent residents/HIB visas. Twelve of the nineteen fellows hired were female non-minority graduate students. One female non-minority faculty member was also hired. The six minority hires were two female graduate students, one female faculty member and three male graduate students. Thirteen of the fellows were U.S. citizens/permanent residents or had HIB Visas.

The AEA Summer Fellows Program has twenty sponsors, the same number as last year. The U.S. Bureau of Economic Analysis, the International Trade Commission, and the Federal Reserve Banks in Atlanta, Boston, Chicago, Cleveland, Dallas, Minnesota, New York, Richmond and St. Louis hired summer fellows.

During 2019, Committee Coordinator Lauren Lewis worked with the AEA Pittsburgh office to redesign the application portal. This portal will make it feasible to organize applicant packets and recommendations more quickly in order to better serve fellowship sponsors.

C. Carolyn Shaw Bell Award

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. Yan Chen, Daniel Kahneman Collegiate Professor of Information in the School of Information at the University of Michigan, is the recipient of the 2019 Carolyn Shaw Bell Award. Professor Chen is a meticulous scholar and award-winning teacher, whose contributions to advancing women in economics are many. As a researcher, Yan Chen is an intellectual leader and role model in the experimental economics community. Her work is rigorous and insightful, and

[4] Many thanks to the 2019 committee for screening and matching fellows to sponsors: Daniel Newlon from the AEA (chair), CSWEP Board member Karen Pence of the Board of Governors of the Federal Reserve System, CSMGEP Board member Ivan Vidangos of the Board of Governors of the Federal Reserve System and Lucia Foster of the Center for Economic Studies at the U.S. Bureau of the Census. More information on the AEA Fellows Program is available at https://www.aeaweb.org/about-aea/committees/summer-fellows-program

she has made important contributions in formal theory and in experimental research both in the lab and in the field. The full award announcement is available online.

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

1. The 2019 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 Philadelphia. In 2019, Amalia Miller, Shahina Amin and Jeanne Lafortune organized four sessions in the economics of gender, including two on gender in the economics profession. Carola Frydman and Leah Boustan organized one session on Economic History. Marina Halac and Vasiliki Skreta organized two sessions on Microeconomics. These committees selected nine 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 92 abstract submissions for the 2019 sessions. Women consistently report that these sessions, which put their research before a wide audience, are professionally valuable. Even though many included papers have male co-authors, CSWEP sessions still account for a substantial share of women on the AEA Program.

2. Four 2019 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 men as well as women 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 first regional meeting of 2019 was the Eastern Economic Association Meeting in New York City in March, where Karen Conway (CSWEP Board Eastern Representative) organized 10 paper sessions and a networking breakfast. The topics spanned a wide range, including econometric methods, health outcomes and policy, labor markets and discrimination, and teaching pedagogy. The career panel featured six economists who shared their tips for surviving and thriving in the profession, including how to say no, how to both develop and cull research projects and how to balance competing demands. The networking breakfast included PhD students, faculty at all stages and economists from non-academic institutions, leading to wide-ranging discussions on research, teaching, the job market and challenges faced once on the job.

The Midwest Economic Association Meeting was held in St. Louis, MO, on March 15, 2019, and two career panels were organized by Midwest Representative Shahina Amin—"Advice for Job Seekers" and "Academic Career Challenges and Opportunities". These panels were well-attended and 36 people registered for and attended the networking luncheon held between the two events. There were senior economists, junior economists, and graduate students at each table and many lively conversations. A mentoring breakfast was held with 12 people in attendance.

The Western Economics Association Meeting was held on June 28-July 2 in San Francisco, CA. Western Representative Catalina Amuedo-Dorantes organized four paper sessions and a panel. The panel of journal editors offered advice on publishing, co-sponsored with CSMGEP and ASHE. Editors from the *American Economic Review, AEJ: Macroeconomics/B.E. Journals in Macroeconomics/Journal of Economic Growth/Journal of Economic Perspectives/QJE, Contemporary Economic Policy*, and *Economic Inquiry* kindly offered recommendations for publishing in their respective journals. All the events were well attended. They offered primarily junior researchers an opportunity to meet other academics and researchers, present their work, get valuable feedback on their work, as well as advice on a publishing and on balancing work and family in various job settings for economists.

Finally, at the Southern Economic Association Meeting (November, Fort Lauderdale, FL), Ragan Petrie (Texas A&M University, CSWEP Board Southern Representative) organized four CSWEP events. There was a professional development "Advice for Job Seekers and Managing an Early Career," chaired by Ragan Petrie, with Sheena Murray (University of Tennessee-Chattanooga), Sarah Reed (Chowan University), Marie Petkus (Centre College), Orgul Ozturk (University of South Carolina), Elaine Frey (California State University-Long Beach) and Joy Buchanan (Samford University). Two paper sessions were also on the program, "Enduring Effects of Gender Norms" and "Gender Gap in Labor Market and Learning Outcomes." A joint CSWEP/CSMGEP professional development session, "Department Chairs Offer Advice on Getting Appointed, Promoted and Tenured," was co-organized and co-chaired by Ebonya Washington (Yale University) and Ragan Petrie, with Scott L. Baier (Clemson University), Maureen Cropper (University of Maryland), Marionette Holmes (Spelman College), Omari H. Swinton (Howard University) and Laura Taylor (Georgia Institute of Technology). CSWEP also held a professional networking lunch, with 50 attendees. The discussions in the sessions were all lively, and the professional development panels were popular and well received.

E. CSWEP News: 2019 Focus and Features

Under the able direction of *CSWEP News* Oversight Editor Kate Silz-Carson and with the graphic design expertise of Leda Black, CSWEP published three newsletter issues in 2019.[5] We are moving to a production schedule of four issues per year commencing in 2020. Each

[5] Current and past issues of the *CSWEP News* are archived at http://www.aeaweb.org/committees/cswep/newsletters.php.

issue features 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.[6] The CSWEP Board extends our thanks to the authors and other contributors.

1. Best Practices for Mentoring Minority Women

The 2019 *CSWEP News*, Issue I contains the CSWEP 2018 Annual Report, including results and analysis by Maggie Levenstein from the 2018 survey of economics departments on the progress of women in academic economics.

The issue's Focus is *"Best Practices for Mentoring Minority Women"*, co-edited by Marie Mora, currently Professor of Economics and Associate Provost for Academic Affairs at the University of Missouri- Saint Louis. The perspectives in the News come from an anthropologist, a psychologist, a biologist, and an economist, who bring both personal experience and research expertise to this question. As some of the authors note, given the low representation of minorities, women, and especially minority women in economics, many students who major in economics or pursue graduate education in economics will *never* have the experience of being taught by an underrepresented minority woman faculty member. Many men and women who are not themselves underrepresented minorities can have opportunities to mentor minority women. The News contributors explore how to accomplish that. One important theme of these thoughtful pieces was the extent to which mentorship can be as much of a learning opportunity for the mentor as it is for the mentee.

2. Advice for Job Seekers

The 2019 *CSWEP News*, Issue II features a Focus section addressing a topic of perennial interest to economists--- the job market. These articles, commissioned by Board member and co-editor Shahina Amin address aspects of the job market that have received less attention: non-academic job search, the employer-side of hiring, interviewing for an industry job, and online interviews. These excellent articles represent part of CSWEP's continuing effort to demystify access points into the profession and level the playing field between job seekers who have access to mentors and job seekers who do not. These articles will be useful not only for job seekers but also for those of us who want to do better at advising graduate students. In addition to the Focus, this issue contained an interview with AEA Ombudsperson Leto Copley.

3. Academic Career Challenges and Opportunities

Our *Focus* section in this issue grows out a panel on academic career challenges and opportunities sponsored by CSWEP at the 2018 Midwest Economics Association meetings,

[6] The feature articles have provided the bulk of professional development materials for the binder for CeMENT workshop participants, now online at http://www.aeaweb.org/committees/CSWEP/mentoring/reading.php.

chaired by Abigail Wozniak, now director of the Federal Reserve Bank of Minneapolis' Opportunity & Inclusive Growth Institute. Dr. Wozniak worked the panelists to enshrine their reflections on the process of growing into one's position as an academic economist into articles for the *News.* A unifying thread in each of these articles, and in Dr. Wozniak's introduction, is a recognition of the extent to which academics are constantly faced with choices that can shape their career trajectories--- choices about the tradeoffs between the personal and professional, about whether and how to make new contacts at a conference, about how much to invest in teaching, about whether to invest in new skills, among myriad others. In this Focus section, four academic economists reflect on the choices they have made and offer advice to others as they navigate the many stages of an academic career.

This issue also includes interviews with Rohini Pande, the recipient of the 2018 Carolyn Shaw Bell Award and Melissa Dell, the recipient of the 2018 Elaine Bennett Research Prize.

CSWEP wishes to extend our thanks to all those who took the time to write contributions to newsletters during 2019. Professional development features of these and past issues of *CSWEP News* are now more easily accessible at CSWEP.org, where you can find them archived by year as well as by target audience and topic.[7]

F. CSWEP-CSMGEP-Div.E.Q. Video Resources Project

The CSWEP Chair, Judy Chevalier, worked with CSMGEP board member Amanda Bayer, with assistance from David Wessel of the Brookings Institution on a video resources project. With the help of research assistants, we watched many videos of economists from various places on the web and curated a set of videos of economists talking about their research. These videos show a diversity of economists talking about a diversity of research topics. A resource is included that links these videos to topics in an introductory curriculum so that high school and college instructors can show them to students. This project builds from research[8] that suggests that underrepresented students' academic interest in economics increases when they see how economics can be used to examine issues important to them and when they are presented with diverse role models. We are working with Hoai-Luu Nguyen and various researchers to obtain new content for this project in conjunction with Nguyen's Econimate channel. These videos are linked and available from the Div.E.Q. website, from the CSWEP website, and from the new AEA "Should I Major in Economics?" website.

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[7] https://www.aeaweb.org/committees/cswep/newsletters.php, https://www.aeaweb.org/committees/cswep/newsletters-audience.php and https://www.aeaweb.org/committees/cswep/newsletters-topics.php.

[8] See Amanda Bayer, Syon P. Bhanot, and Fernando Lozano. "Does simple information provision lead to more diverse classrooms? Evidence from a field experiment on undergraduate economics." AEA Papers and Proceedings, 109: 110-14 (2019) and Catherine Porter and Danila Serra. "Gender differences in the choice of major: The importance of female role models." American Economic Journal: Applied Economics" .

G. CSWEP Chapter Events

There is a challenge in reaching and assisting geographically dispersed women junior faculty, graduate students, research assistants, and undergraduates. Thus, CSWEP has participated in and assisted with a limited number of "Chapter Events" in which CSWEP provides some support for a significant mentoring activity undertaken outside the ASSA meetings or four regional meetings. For example, this year, we provided support for a mentoring workshop of similar design to the CeMENT workshop that was held at the annual meeting of the Midwest Econometrics Group Annual Meeting. The workshop page can be found here: https://u.osu.edu/meg2019/mentoring/. We continue to look for opportunities to distribute information about CSWEP at geographically dispersed meetings and conferences.

IV. Status of Women in the Economics Profession[9]

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

[9] 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.

to 33.5% in 2019), but is still well below parity, and does not approach the 55% share of women in the undergraduate population.[10]

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 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.[11] 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.[12]

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

[10] 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.

[11] 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.

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

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 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.[13] 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

[13] 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.

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 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.[14] Note that this placement was not as assistant professors in top 20 departments, which did not show much of an increase in 2019

[14] 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.

(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.[15] 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 non-academic to academic positions.

Women's representation in economics seemed to have peaked at the beginning of the turn of this century, with little improvement in new entrants to doctoral programs or the 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.

[15] 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/.

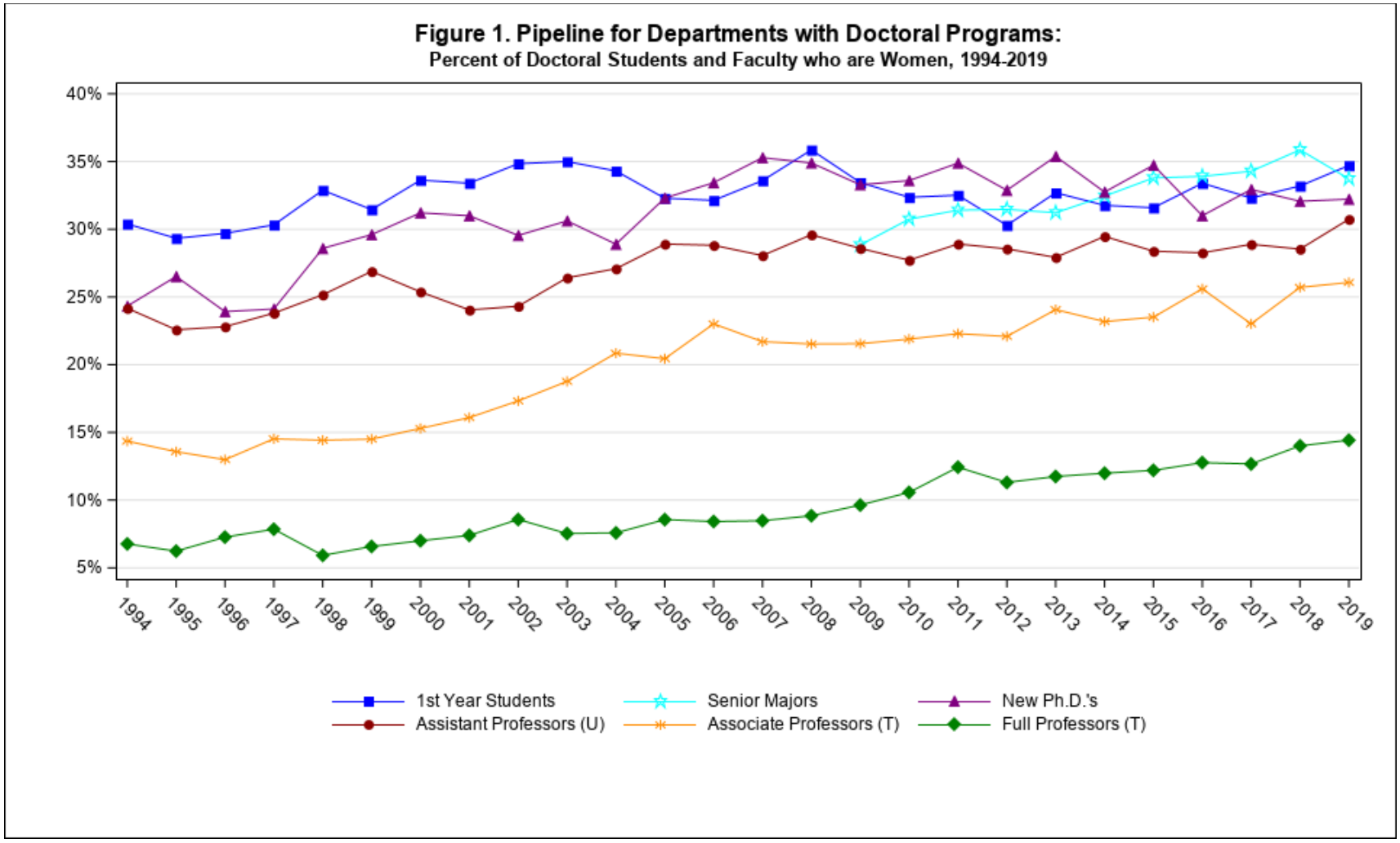


Figure 1. Pipeline for Departments with Doctoral Programs:
Percent of Doctoral Students and Faculty who are Women, 1994-2019
40%
35%
30%
25%
20%
15%
10%
5%
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
1st Year Students
Senior Majors
New Ph.D.'s
Assistant Professors (U)
Associate Professors (T)
Full Professors (T)

Figure 2. Pipeline for Departments without Doctoral Programs:
Percent of Students and Faculty who are Women, 2006-2019

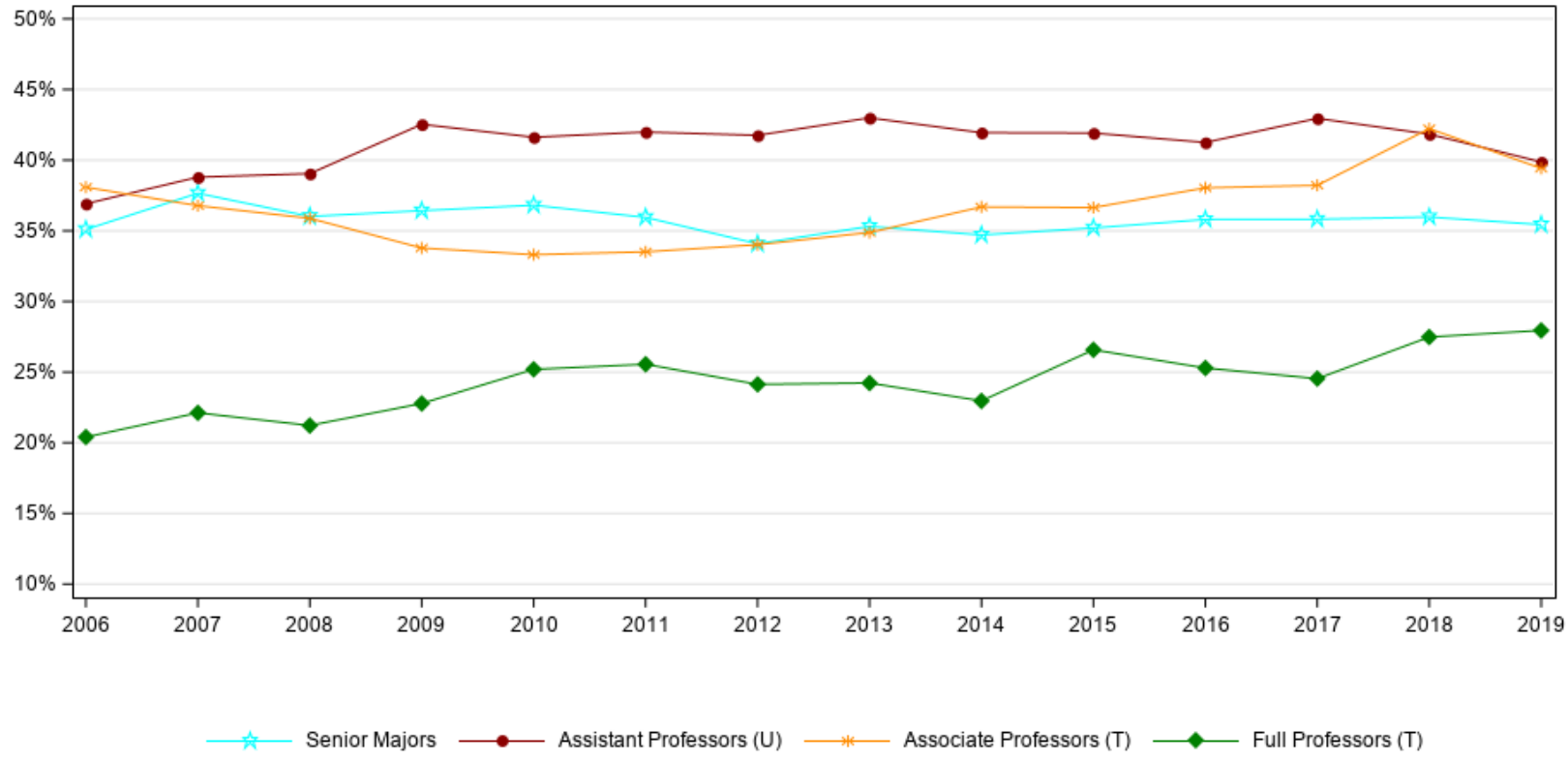


Figure 3. Lock-Step Model: Percentage of women, by entering PhD cohorts:
Matriculation, graduation and entry into first-year assistant professorship

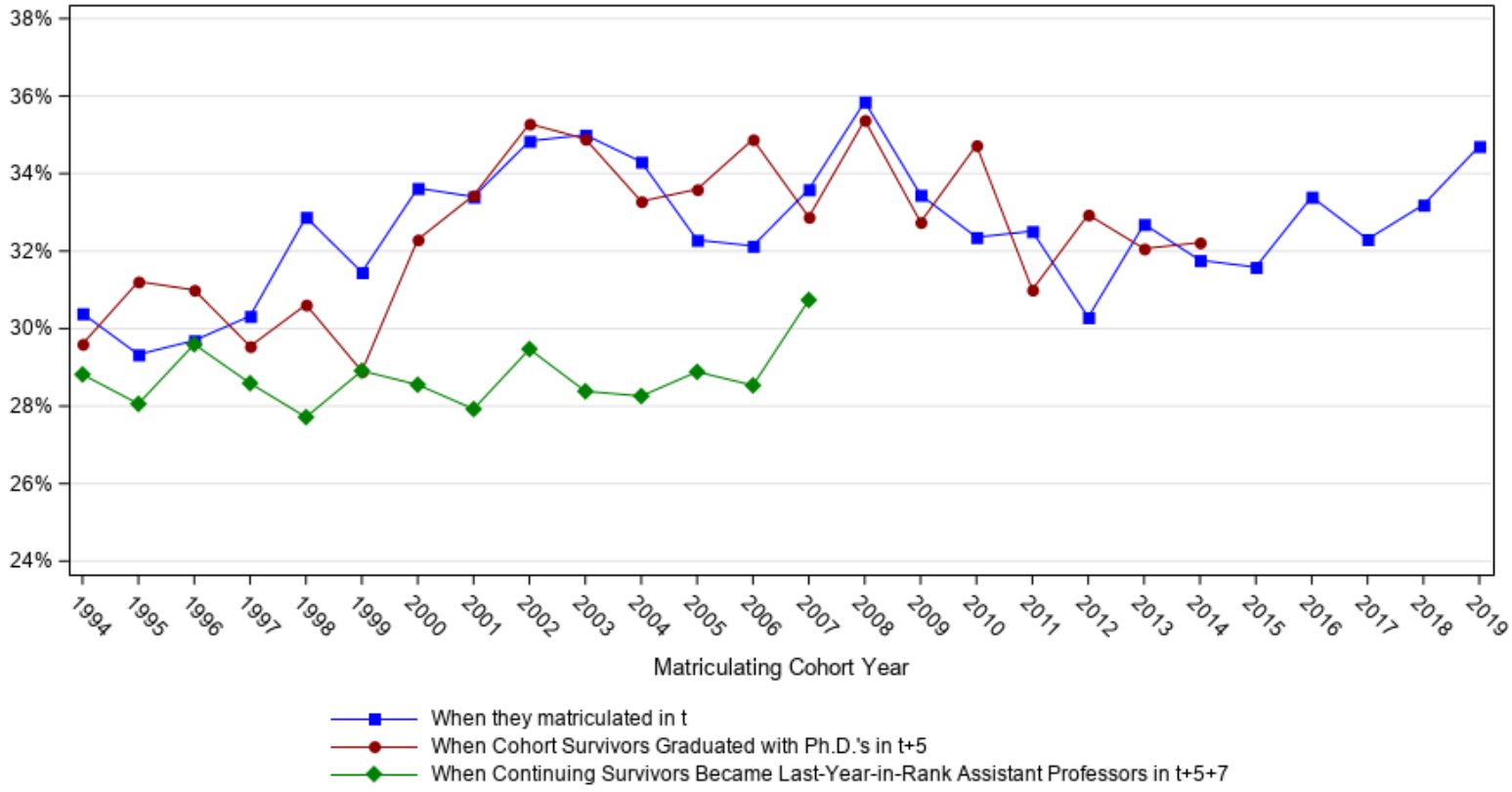


Figure 4. Lock-Step Model: Percentage of women, by receiving-PhD cohort:
Graduation, last year-in-rank assistant professorship, and last year-in-rank associate professors

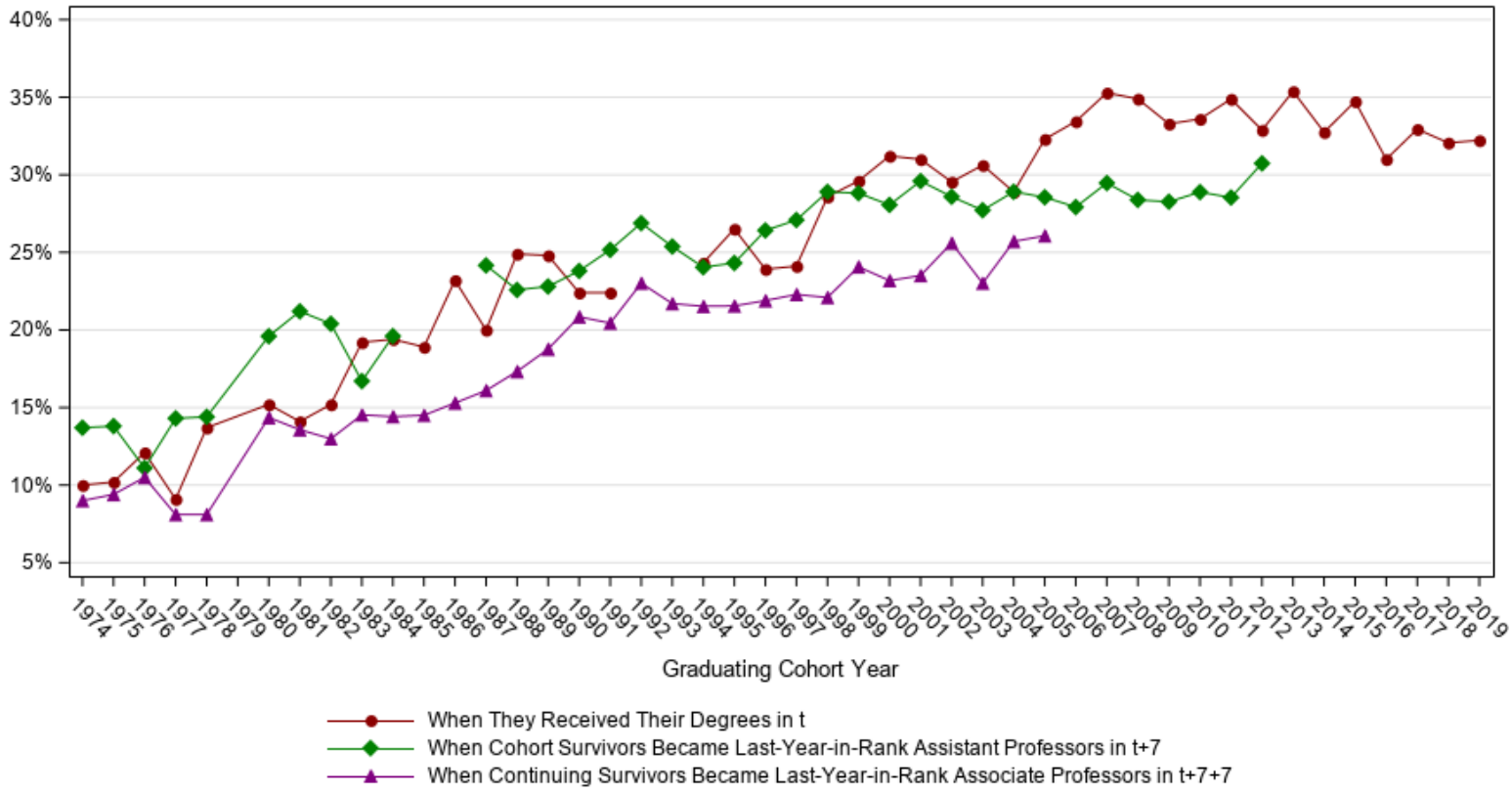
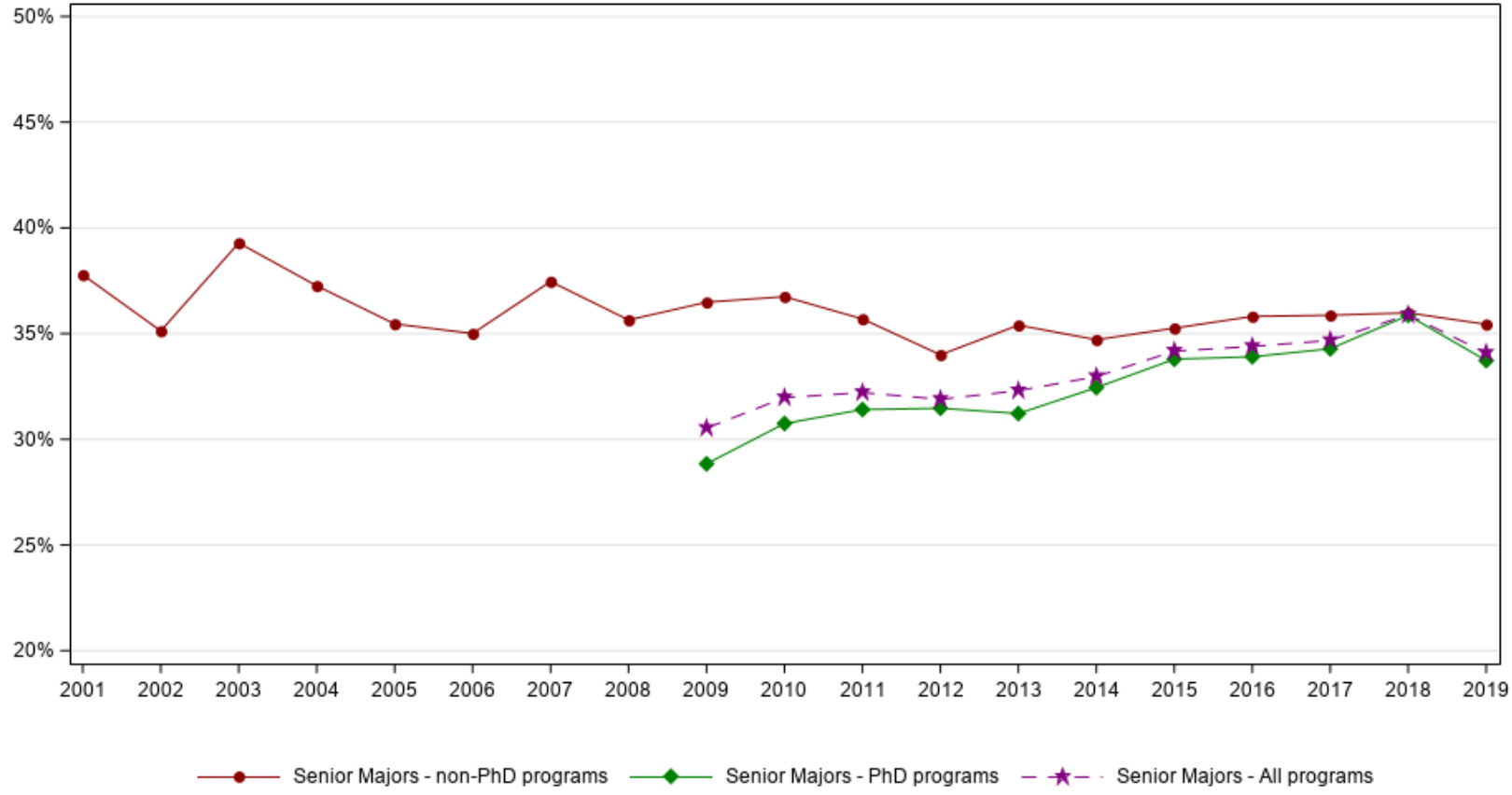


Figure 5: Undergraduate senior economics majors



**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
Faculty																										
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	193.0	195.7	183.0	190.3	195.7	204.0	194.0	219.0	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	156.0	179.0	154.0	170.0	179.5
Assistant Professor																										
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	233.0	247.0
All Tenure Track (Subtotal)																										
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	312.4	335.0	333.9	354.4	376.2	407.1	417.6	448.0	456.5	463.3	498.6	494.0	520.8	540.5	554.8	537.0	570.0	585.5	619.0	589.0	622.0	660.5
All Non-Tenure Track																										
Percent	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	120.8	97.1	95.9	130.1	149.5	138.1	154.9	181.1	183.0	196.9	229.3	224.3	214.7	181.5	223.3	296.7	312.0	320.0	233.0	276.3
All Faculty																										
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	347.7	406.0	374.4	414.3	454.7	451.5	472.1	537.1	567.1	586.1	611.4	644.3	681.6	690.9	750.1	764.8	769.4	718.5	793.3	882.2	931.0	909.0	855.0	936.8
Ph.D. Students																										
Ph.D. Granted																										
Percent	24.3%	26.5%	23.9%	24.1%	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%	34.9%	32.9%	35.4%	32.7%	34.7%	31.0%	32.9%	32.1%	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%	28.1%	28.2	30.6	31.2	31.7	31.8%	34.5%	33.3%	34.2%	34.0%	33.7%	34.1%	33.9%	34.1%	34.5%	32.7%	32.1%	32.2%	31.7%	31.7%	33.0%	32.8%	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%	32.4%	32.5%	30.3%	32.7%	31.8%	31.6%	33.4%	32.3%	33.2%	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	20078	20175	17851	20867	23376	22380	22793	23902	24638
Undergraduate Senior Majors*																										
Percent	missing	missing	missing	missing	missin	missin	missin	missin	missing	missing	missing	missing	missing	missing	missing	28.8%	30.7%	31.4%	31.5%	31.2%	32.4%	33.8%	33.9%	34.3%	35.9%	33.7%
Number	missing	missing	missing	missing	missin	missin	missin	missin	missing	missing	missing	missing	missing	missing	missing	20215	23290	26169	29245	14882	19510	18579	19908	20699	21872	23239

*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	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	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	Missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	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																										
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%	32.0%
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%	25.9%
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%	32.5%
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	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	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	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	missing	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	missing	missing	missing	missing	missing	missing	46.7%	40.1%	32.3%	44.3%	41.7%	42.0%	35.2%
Number	missing	missing	missing	missing	missing	missing	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

	All Top 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.S.-based, 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	94.0	125.0

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

	All Other Schools						
	1994-1997	*1998-2002*	*2003-2007*	*2008-2012*	*2013-2017*	*2018*	*2019*
U.S.-based, 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

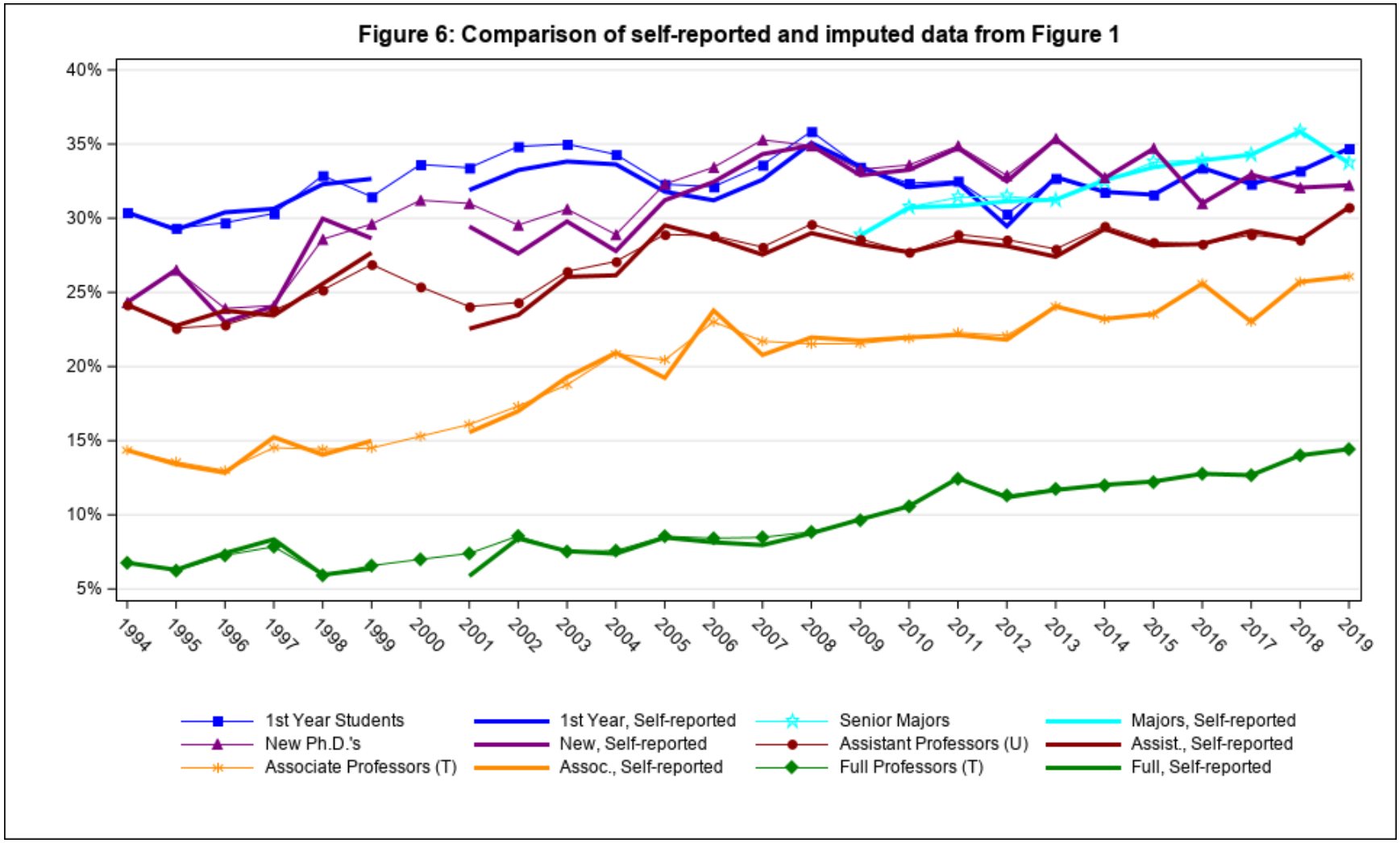
2018-2019	*Top 10*		*Top 11-20*		*All Others*	
	Women	*Men*	*Women*	*Men*	*Women*	*Men*
U.S.-based, All Types (Share of all individuals by gender)	**76.5%**	**63.2%**	**63.2%**	**64.6%**	**73.7%**	**64.5%**
Faculty, PhD Granting Department	55.8%	45.3%	25.0%	21.9%	19.4%	17.6%
Faculty, Non-PhD Granting Department	0.0%	3.5%	11.1%	9.6%	25.6%	24.6%
Non-Faculty, Any Academic Department	3.8%	5.8%	8.3%	21.9%	14.4%	14.3%
Public Sector	15.4%	16.3%	19.4%	15.1%	11.9%	14.0%
Private Sector	25.0%	29.1%	36.1%	31.5%	28.7%	29.6%
Foreign-based, All Types (Share of all individuals by gender)	**22.1%**	**34.6%**	**33.3%**	**32.7%**	**19.4%**	**27.6%**
Academic	73.3%	70.2%	89.5%	70.3%	78.6%	72.9%
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

	Number of Programs					
	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



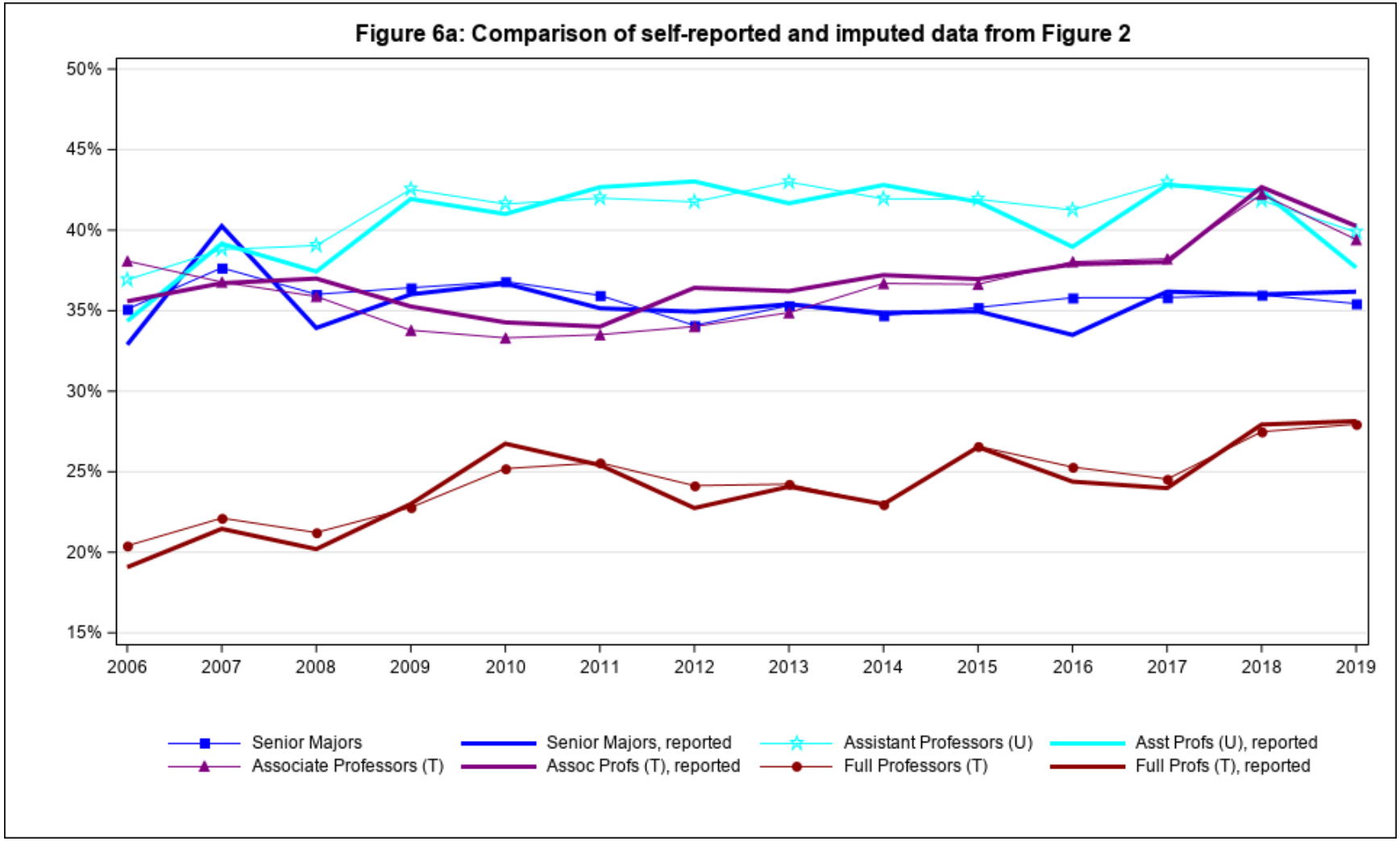


Figure 6a: Comparison of self-reported and imputed data from Figure 2
50%
45%
40%
35%
30%
25%
20%
15%
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Senior Majors
Associate Professors (T)
Senior Majors, reported
Assoc Profs (T), reported
Assistant Professors (U)
Full Professors (T)
Asst Profs (U), reported
Full Profs (T), reported

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.*