

Committee on the Status of Women in the Economics Profession

The American Economic Association (AEA) created the Committee on the Status of Women in the Economics Profession (CSWEP) and charged it to monitor the status of women in the profession and to undertake professional activities to improve this status. In addition to surveying all US economics departments for its annual statistical report, CSWEP sponsors six competitive-entry paper sessions at the annual AEA Meeting, publishes a thrice-yearly newsletter (chock-full of articles and information for those at the beginning of their career), and celebrates the research accomplishments of young female economists by awarding the Bennett Prize as well as the exceptional mentoring and promotion of women's careers by conferring the Bell Award. CSWEP also conducts a variety of formal and informal mentoring activities, most notably the CeMENT Mentoring Workshops.

The first part of this report covers new developments and CSWEP's ongoing activities. The second part updates the annual statistical report on the status of women in the economics profession. The third contains well-earned acknowledgements.

Before recounting CSWEP activities it is worth noting that there are likely many spillovers from CSWEP activities that are impossible to list or quantify. CSWEP activities raise the awareness among men and women of the challenges that are unique to women's careers and that can be addressed with many types of actions, from inclusive searches to informal mentoring activities. In addition, much of the information and advice freely disseminated by CSWEP can be of great value not just to female economists but to all economists and especially to any junior economist, whether male or female and whether minority or not.

I. CSWEP Activities

First Biennial Mentoring Breakfast held January 2013 in San Diego

In January 2013 at the AEA Meeting, CSWEP held the first Biennial CSWEP

Mentoring Breakfast. Organized by Board members Linda Goldberg and Terra McKinnish, this was a meet and greet affair. Thirty senior women and the first 110 junior economists who applied gathered for a modest breakfast and a rich networking experience. Participants could pick a table where the discussion was open-ended or a table with a topic such as research, handling referees reports, teaching, grants, work-life balance, and questions unique to junior women. Many had their immediate questions answered. Others initiated peer-to-peer or junior-senior mentoring relationships. The discussions went on long after the breakfast officially ended. With a waiting list of applicants who had to be turned away, this event was a tremendous success. There are plans to repeat this event, or if feasible an expanded version, in 2015.

Bennett and Bell Winners

Established in 1998 and awarded biennially, the 2012 Elaine Bennett Research Prize recognizes and honors outstanding research in any field of economics by a woman at the beginning of her career. This year's prize went to Anna Mikusheva for her work on econometric inference. Mikusheva is the Castle-Krob Associate Professor of Economics at the Massachusetts Institute of Technology.

Also established in 1998 but given annually, the Carolyn Shaw Bell Award recognizes an individual for outstanding work that has furthered the status of women in the economics profession. The 2012 award went to Catherine C. Eckel for making mentoring of and advocacy for women an integral part of her career and modeling this for the rest of us. A leader in experimental economics, Eckel is the Sara and John Lindsey Professor of Economics at Texas A&M University.

Press releases for both awards are available at <http://www.aeaweb.org/committees/cswep/>.

Sincere thanks are due to all involved in determining these awards.¹

CeMENT National Mentoring Workshop

As success breeds success, the effective mentoring of young women economists has become ever more central to CSWEP's aims. Taking center stage are the internationally recognized² annual CeMENT (previously CCOFFE) Mentoring Workshops which, in alternate years, target either women in departments where research accomplishments determine promotion (the *National Workshops*) or women in liberal arts schools at which teaching receives more weight (the *Regional Workshops*). The success of these Workshops has been rigorously documented³ and they are now funded by the AEA on an ongoing basis.

The National Workshops are held in even numbered years during the 2.5 days immediately following the AEA Annual Meeting. Organized by board member Terra McKinnish, 2012 saw the ninth CeMENT National Mentoring workshop. Forty-one junior and 16 senior women economists gathered as mentees and mentors for

¹ Many thanks to the 2012 Bell committee: Board member Susan Averett (Chair), Board member Linda Goldberg, and previous Bell recipients Elizabeth Hoffman (2010) and Sharon Oster (2011); and also to the 2012 Bennett committee: former Board member Nancy Rose (Chair), Board member Petra Todd, and former Bennett winner Monika Piazzesi (2006). Susan Athey, the 2000 Bennett winner, graciously pinch hit for Nancy Rose when she recused herself from the final decision. For holding to high standards and spotlighting the extraordinary accomplishments of women in economics, we owe an enormous debt to the challenging work of each member of these distinguished committees. This debt extends to all those who nominated the extremely competitive field of candidates for each award as well as to all those who wrote supporting letters for the candidates.

² Using CeMENT as a model, the American Philosophical Association and the Royal Economic Society's Women's Committee have both run successful mentoring workshops; WiNE (the European Economic Association's women's group) and economists in China, Japan, and South Korea are working on similar workshops.

³ Based on random assignment to participation and tracking the subsequent careers of both participants and those who were randomized out of participation, a rigorous evaluation showed that "CeMENT increased top-tier publications, the total number of publications, and the total number of successful federal grants in treated women relative to controls." Blau et al., "Can Mentoring Help Female Assistant Professors? Interim Results from a Randomized Trial" (*American Economic Review*, May 2010: 352).

plenary talks and small group sessions. Large group discussions on career development topics were interspersed with small group sessions, pairing two mentors with five junior economists with similar research interests. The six large group sessions focused on the topics of research and publishing, teaching, grants, work-life balance, the tenure process, and professional networking. The small group sessions allowed each junior participant to receive detailed feedback on a working paper. Nancy Lutz, Program Director for Economics at the National Science Foundation (NSF), helped to kick off the workshop and spoke on the grants panel. The Federal Reserve Bank of Chicago graciously hosted the main workshop dinner. In the planning stage is the next Regional Workshop, to be held at the Southern Economic Association Meeting in November 2013.

Thanks to the initiative of Terra McKinnish, CSWEP has posted all of the reading materials for the 2012 CeMENT National Mentoring Workshop at <http://www.aeaweb.org/committees/cswep/mentoring/reading.php>. Many of these readings are drawn from feature articles in past issues of the *CSWEP Newsletter*. Most are germane to the career of any junior economist, male or female.

Sponsored Paper Sessions at the AEA Meetings

As described in the Fall 2011 *Newsletter* found at http://www.aeaweb.org/committees/cswep1/newsletters/CSWEP_nsltr_Fall_2011.pdf, CSWEP sponsored six paper sessions totaling 24 papers on gender and on international and development economics at the AEA Meeting in Chicago. Two committees selected these papers from an open and highly competitive field of entries. The high quality of these sessions reflected the open and highly competitive selection procedure. Eight papers, in turn, were published in two synthetic sessions in the May 2012 *Papers and Proceedings of the AEA*.⁴

⁴ Thanks to Susan Averett, Ron Oaxaca, Linda Goldberg, and Rohini Pande for evaluating the many submitted abstracts and composing the sessions.

AEA Summer Economics Fellows Program

Begun in 2006 with seed monies from 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 experienced economists mentor the fellows who, in turn, work on and often present their own research. Summer 2012 saw 13 summer fellows, selected from 43 applicants, immersed in the research environments of the Federal Trade Commission, International Monetary Fund, Bureau of the Census, Board of Governors, and six regional Federal Reserve Banks. Thanks to the hosts for their active support of this program, one that is valued by hosts as well as Fellows. Evaluations from 2012 Fellows heaped praise on the program. In the works are efforts to increase the number of successful minority applicants and to smooth out the number of applicants each year.⁵

Additional Networking Activities

CSWEP conducts numerous other activities. Each year CSWEP orchestrates receptions for networking and seeing old friends at the AEA meetings (joint with CSMGEP) as well as at the Eastern, Southern, Western, and Midwest Association Meetings. Getting accepted into a paper session at a regional meeting tends to be straightforward. Thus, except for the large Southern Economics Association Meeting, CSWEP has shifted its focus to growing the number of professional development sessions and panels. For example, Kaye Husbands Fealing (former CSWEP Midwest representative) put together a well-attended session at the MEA meetings in Evanston that included Anne Winkler on “Balancing Research and Teaching,” Nancy Lutz (NSF) on “Getting

⁵ Many thanks to the 2012 committee for screening and matching: Dan Newlon from the AEA (Chair) whose efforts have undergirded this program from the get go in 2006, CSWEP Board member Cecelia Conrad, CSMGEP Board member Janice Shack-Marquez, and lastly Dick Startz, the moving force in creating this program when he served on the CSWEP Board and who has guided it ever since.

Grants,” Seema Jayachandran (Northwestern) on “Research Funding and Promotion,” and Meredith Crowley (FRB-Chicago) on “Non-Academic Careers.” For this work and lots more, thanks are due to the CESWEP Board’s 2012 regional representatives: Susan Averett (Eastern), Shelley White-Means (Southern), Jennifer Imazeki (Western), and Anne Winkler (Midwest).

CSWEP continues to administer the Haworth Mentoring Fund (which enables potential mentees to piggyback mentoring activities onto the visit of seminar speakers).

2012 CSWEP Newsletters

Under the able direction of oversight editor Madeline Zavodny, CSWEP published three issues.⁶ In a long-standing tradition, each featured a theme chosen and introduced by a guest editor who, in turn, cajoled several authors to write the featured articles. The quality of these articles is consistently high, and many live on as advice to junior economists long after the “pages” of the *Newsletter* have “yellowed.” Speaking for CSWEP, the Chair (who is the official editor but does almost none of the work) extends a warm thanks to all these contributors.⁷

In the Winter *Newsletter* Board member and Guest editor Jennifer Imazeki put together a special feature on “An Introduction to Social Media in Economics.” John Whitehead wrote on teaching with blogs and David McKenzie and Berk Özler on their impact. Rachael

⁶ Current and past issues of the *Newsletter* are archived at <http://www.aeaweb.org/committees/cswep/newsletters.php>. Readers who are not receiving the *Newsletter* can become subscribers at <https://www.aeaweb.org/committees/cswep/members/index.php?new> or update their account at <https://www.aeaweb.org/committees/cswep/members/index.php?step=1>.

⁷ The contributions of Madeline Zavodny cannot be overstated. Organizer *par excellence*, she is the real brain behind the *Newsletter*. She works with the guest editors, writes up missing pieces, makes continued improvements, oversees all of those boxes of announcements, coordinates with the Chair’s administrative assistant, and drags the column “From the Chair” from its author. She is also a selfless, lightning-quick copy editor, and we are all in her debt. Last but not least among her endless list of tasks, Helen Kalevas, CSWEP administrative assistant, formats the *Newsletter*, puts up with the flow of last-minute changes from the chair, coordinates with the printer, and sees to distribution.

Connelly wrote on the necessity and the hows of self-promotion. While *Newsletter* features typically target the career development of junior economists, this one was definitely to the benefit of senior economists!

For the Spring issue the guest editor was Board member Shelly White-Means. She directed attention to "Working in an Interdisciplinary Context." Ramona Zachary helped us to understand what colleagues from other disciplines hope to get from an economist. Two other authors showed us interdisciplinarity at its best. Elizabeth Peters did so for population and social policy programs, and Joni Hersch did so for interdisciplinary PhD programs.

In the third and final Fall 2012 issue, Board member Kevin Lang took over as guest editor and directed our attention to the "International Job Market for Academic Economists," an increasingly important segment of the job market that had not been covered in earlier issues. Denise Doiron and William Schworm wrote on Australia, Lin Zhou on China, Maia Güell and José V. Rodríguez Mora on Europe, and Yukiko Abe on women in Japan. Shulamit Kahn and Megan MacGarvie assessed the effect of working outside of the United States on scientific productivity.

CSWEP and Social Media

In addition to carrying out CSWEP's normal functions, an ad hoc committee is studying CSWEP's presence on the web via social media and communications more generally. In addition to making CSWEP's activities more accessible to younger economists, an anticipated side effect is the expansion of circulation of the *Newsletter*.

II. The Status of Women in the Economics Profession

As noted above, the Committee on the Status of Women in the Economics Profession is charged by the American Economic Association with monitoring the status of women in the profession. This section presents results from our annual survey on the gender composition of economics departments. We surveyed 122 economics departments with doctoral programs (henceforth called doctoral departments) and 147 economics departments without doctoral

programs.⁸ Because of the poor response rate of liberal arts departments, this report does not include the results from liberal arts departments. Efforts to increase the number of responses from liberal arts schools are still under way, and these will be reported in the *2013 Report*.

Starting with the intake of students into PhD programs, (i) *the percentage of women entering PhD programs has declined steadily over the last five years and stands at 29.3 percent. This is less than the 31.3 percent in 1997 when CSWEP first tracked this variable and much less than the peak of 38.8 percent in 2000.* Unless reversed, this constitutes a serious problem in the representation of women at every rank for generations going forward.

Additional facts stand out. *Broadly speaking (ii) except for entering PhD students, the last 16 years show notable growth in women's representation at all other levels; (iii) at every level in the hierarchy, women have been and remain a minority; and (iv) the higher the rank, the lower the representation of women.*⁹

Tracking the representation of women in cohorts of academics as they moved through graduate school up through the academic ranks shows that (v) *since 2000, cohorts of new PhD students saw no loss of women relative to men between matriculation and graduation with a PhD, and (vi) there has been little in the way of serious relative losses of women between earning the degree and becoming an assistant professor.* In contrast and as found in earlier studies, (vii) *there appears to be a significant relative loss of women in the transition from assistant to associate professor.* To assess the

⁸ The 2012 CSWEP surveys were sent to 122 economics departments with doctoral programs and 147 non-PhD departments listed in the Carnegie Classification of Institutions of Higher Education (2000 Edition) "Baccalaureate Colleges—Liberal Arts" as well as to six additional departments with only undergraduate and Master's degrees. We received responses from 120 of the departments with doctoral programs and harvested the data for the remaining two departments from the web.

⁹ At every stage subsequent to attaining the PhD, the percentage female declines: about 5 percentage points between new PhDs and assistant professors, about 6.5 percentage points between assistant professors and tenured associates, and about 10 percentage points between tenured associates and full professors.

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

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<i>All PhD granting departments</i>										
First-year students	34.0	33.9	31.9	31.0	32.7	35.0	33.5	32.1	32.4	29.3
ABD	32.7	33.1	33.9	33.6	32.7	33.7	33.5	34.2	34.3	32.5
New PhD	29.8	27.9	31.1	32.7	34.5	34.8	32.9	33.3	34.7	32.5
Assistant professor (U)	26.1	26.3	29.4	28.6	27.5	28.8	28.4	27.8	28.7	28.3
Associate professor (U)	24.0	11.6	31.2	24.6	20.0	29.2	25.0	34.1	30.8	40.0
Associate professor (T)	19.9	21.2	19.2	24.1	21.0	21.5	21.8	21.8	21.9	21.6
Full professor (T)	9.4	8.4	7.7	8.3	7.9	8.8	9.7	10.7	12.8	11.6
All-tenured/tenure track	15.5	15.0	16.1	16.3	15.5	16.9	16.9	17.5	19.0	20.9
Other (non-tenure track)	32.7	32.3	39.6	34.4	40.5	33.5	36.1	33.0	34.1	39.5
Number of departments	128	122	122	124	124	123	119	121	122	122

Note: T and U indicate tenured and untenured, respectively.

transition from associate to full, the data are simply inadequate.¹⁰

The remainder of Section II details these conclusions.

Women's Representation in the Stocks of Academics, 1997–2012

For departments with doctoral programs, Table 1 and Figure 1 summarize women's representation for the past 16 years. "The Pipeline" emphasizes the representation of women in the stock of economists at each rank, from first-year students to tenured full professors.

The first row of the table (and the blue line with squares in the figure) show that after reaching a peak of 38.8 percent in 2000, the share of first-year graduate students who are women slumped to 29.3 percent in 2012, a 9.5 percentage point decline. Notably, the 29.3 percent is the lowest percentage since 1997, the first year CSWEP collected data on first-year students. A longer-term comparison of 2012 to 1997, one that totally disregards the peaks in between, shows "only" a 2.0 percentage point decline. However measured, a 16-year decline in percentage of women in first-year graduate programs does not bode well for the future representation of women at all ranks over the long term.

¹⁰ Because full professors can be in rank for more than 25 years, at a minimum we would need data on the age distribution within the full professor ranks and, perhaps somewhat less crucially, the associate professor ranks.

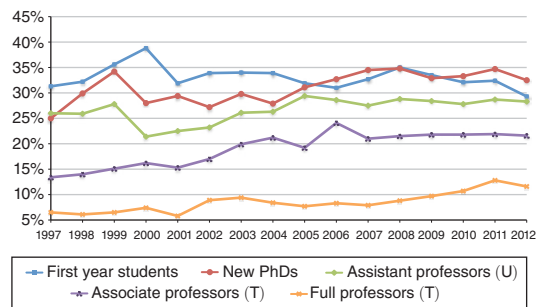


FIGURE 1. THE PIPELINE FOR DEPARTMENTS WITH DOCTORAL STUDENTS AND FACULTY WHO ARE WOMEN

Note: T and U indicate tenured and untenured, respectively.

Looking again at Figure 1, three additional facts jump out. *First, except for first-year PhD students, the last 16 years show notable growth in women's representation at all other levels.*¹¹ *Second, at every level in the hierarchy, women have been and remain a minority.* *Third, the higher the rank, the lower the representation of women.*¹² This third fact has been described as

¹¹ Simple comparisons of 2012 to 1997 show that over these 16 years, women's share of new PhDs, assistant professors, tenured associates, and full professors grew 7.5, 2.3, 8.2, and 5.1 percentage points, respectively.

¹² At every stage subsequent to attaining the PhD, the percentage of women declines: about 5 percentage points between new PhDs and assistant professors, about 6.5 percentage points between assistant professors and tenured associates, and about 10 percentage points between tenured associates and full professors.

the “leaky” pipeline, and we turn to examining this phenomenon more closely.

To compare the percentage of women who are assistant and tenured associate professors over time we note that earlier Reports¹³ showed differences hovering close to 11 percentage points in the five years preceding 1997, the earliest year shown in Table 1 and Figure 1. Hence, we can compare the differences between the assistant and associate levels in the eight years preceding 2000 to the 13 years beginning with 2000 and ending with 2012. The earlier differences (1992–1999) hovered around 11.6 percentage points, whereas the difference in the 13 later years averaged 6.5 percentage points. Thus, while there was a definite drop in the difference around the turn of the century, there has been no further convergence, with an average difference of 6.5 percentage points stubbornly persisting to the present.

Over the 16 years shown in Figure 1, the percentage of tenured associate professors who are women grew from 13.4 percent in the first year to 21.6 percent in the last, an 8.2 percentage point increase. By comparison, the percentage of full professors who are women grew faster as a share of their initial level, but nonetheless rose only 5.1 percentage points (from 6.5 percent to 11.6 percent). The result is that the gap between the percentage of professors who are women at the associate and full levels has grown from 6.9 percentage points to 10.0. The gap between the two series averaged 10.5 percentage points over these 16 years. Interestingly, for the most recent six years the percent of associate professors who are women has been flat, while the corresponding percent of full professors has been rising. Consequently the gap between the two has narrowed from the all-time recorded high of 15.8 percentage points in 2006 to the current 10.0 percentage points mentioned above. Optimism is checked by the fact that the gap still stands at 10 percentage points, over 3 percentage points higher than it was 16 years ago.

While the picture of women’s representation for the various ranks over the years presented above tells us where we have been and where we are now, it does not tell us how we got here or

how to improve women’s representation.¹⁴ Past studies have found that, conditioning on years since degree and other observables, women have a lower probability of attaining tenure, take longer to attain tenure, and have a lower probability of being promoted to full.¹⁵ To see how the CSWEP survey results fit with these past results, we turn to tracking the progress of academic cohorts over time, using a bare-bones model of lock-step progression through the ranks.

A Lock-Step Model

In order to track the progress of academic cohorts over time we employ a bare-bones model of lock-step progression through the ranks. Assume that for our data movements through the ranks occurred as follows: five years elapsed from matriculation through earning the PhD, assistant professors were in rank for seven years and then were either promoted to associate or left the tenure track (within the universe of doctoral departments), and associate professors were in rank for seven years and then were either promoted to full or left the tenure track (within the universe of doctoral departments). In addition, assume that relative to men, women in later cohorts had at least as good a chance at advancement as women in earlier cohorts. Under these assumptions we can track the representation of women in a cohort that entered a PhD program in year t (call them cohorts of vintage t matriculation) by looking at degree recipients in $t + 5$, assistant professors in $t + 5 + 7$ (by which time there are no assistant professors from vintages earlier than t), and associate professors in $t + 5 + 14$ (by which time there are no associate professors from vintages earlier

¹⁴ One could isolate earlier sentences in the last paragraph and mistakenly interpret each one as showing either that our profession is doing well or that it is doing poorly with regard to advancing the representation of women. This highlights the difficulty of assigning meaningful interpretations to differences in a characteristic (percent female) of two stocks (associate and full professors) when the two stocks comprise individuals from nonoverlapping cohorts.

¹⁵ Donna Ginther and Shulamit Kahn, “Women in Economics: Moving Up or Falling Off the Academic Career Ladder?” *Journal of Economic Perspectives*, Summer 2004; and Donna Ginther and Shulamit Kahn, “Women’s Careers in Academic Social Science: Progress, Pitfalls, and Plateaus” in *The Economics of Economists*, Alessandro Lanteri and Jack Vromen, eds. Cambridge: Cambridge University Press, forthcoming.

¹³ Joan Haworth, “2002 Report on the Status of Women in the Economics Profession.”

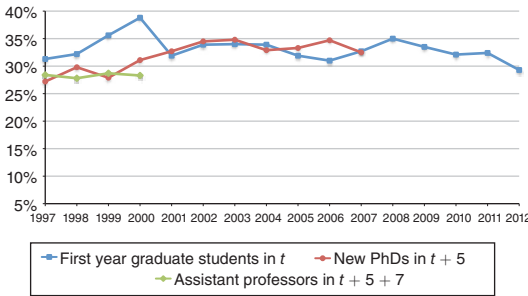


FIGURE 2. COHORTS OF NEW PHD STUDENTS FROM MATRICULATION THROUGH FIRST FACULTY PLACEMENT

Note: Women in t as a percent of first-year graduate students, women in $t + 5$ as a percent of newly minted PhDs, and women in $t + 5 + 7$ as a percent of assistant professors, departments with doctoral programs.

than t). We proceed to interpret the data in the light of this model.

Turning to deviations of the model from reality, some assistant professors get promoted in years four through six while others extend their tenure clocks by taking leaves or making lateral moves from one doctoral department to another. As we exclude tenured assistant professors, the seven-year approximation for assistant professors is likely reasonable. More troublesome is the assumption of seven years in rank for associate professors. While some get promoted earlier and others somewhat later, the real issue is small numbers of tenured associate professors in rank essentially until retirement. An overrepresentation of men in this anomalous group would drag down the percentage female of associate professors, a caveat to bear in mind.¹⁶ However, because the size of this anomalous group changes very slowly over time, an overrepresentation of men would have little impact on serial changes in the percentage female at the associate level.

¹⁶ This problem cannot be solved except with more information on the distribution of time in rank or micro data. Arbitrarily increasing the assumed time in rank of associate professors to, say, ten years would not work because something like 30-year lags would be required. For this we do not have the data.

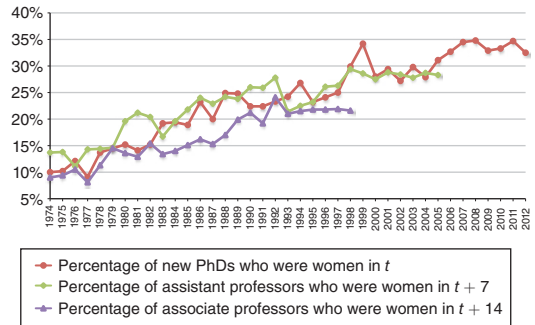


FIGURE 3. COHORTS OF NEWLY MINTED PHDs FROM ATTAINING THE PHD THROUGH THE LAST YEAR AS ASSOCIATE PROFESSOR

Note: Women in t as a percent of newly minted PhDs, women in $t + 7$ as a percent of assistant professors, and women in $t + 14$ as a percent of assistant professors, departments with doctoral programs.

The Representation of Women in Cohorts, from Matriculation to Graduation

Figure 2 plots the percentage of women in cohorts of first-year PhD classes (blue with squares) and in their graduating class five years later (red with circles).¹⁷ If these plots were coterminous, then for each cohort of entering graduate students the representation of women relative to men would not have changed between matriculation and graduation. Observe that the four earliest cohorts (first-year PhD students 1997–2000) experienced a drop in the representation of women between entry and graduation from their PhD programs (for those years, the red line is below the blue line). Later cohorts (first-year PhD students 2001–2007) experienced no such decline. If this result continues to hold for the 2008 and later cohorts of entrants, then 2001 marks the advent of policies in PhD programs that maintain women’s representation from matriculation through graduation.

The Representation of Women in Cohorts, Going Forward from Graduation

Figure 3 graphs the representation of women in cohorts of new PhDs (red with circles) and

¹⁷ CSWEP first collected data on entering PhD classes in 1997. In the model graduate students who enrolled in 2007 graduated in 2012, so this is the last cohort we can observe.

their representation seven years later as seventh-year assistant professors (green with diamonds), and seven years after that as seventh-year associate professors (purple with triangles).¹⁸ Under the assumed model, at time t the heights of these three lines trace the representation of women in the t th cohort of PhDs as members of that cohort advanced first to the rank of assistant professor and then to the rank of associate professor. If all three lines were coterminous, then for every cohort of new PhDs the representation of women would not have changed as that cohort moved through the ranks.

Looking first at the transition from new PhD to seventh-year assistant professor, a comparison of the top two curves shows this transition for 32 cohorts. For the earlier cohorts of new PhDs (1974–1992) women's representation most often rose between PhD receipt and the last year as assistant professor. Of the 13 more recent cohorts (1993–2005), three experienced a noticeable drop in women's representation between PhD receipt and the last year as assistant professor. With some caution, it can be said that overall the data do not point to the transition from new PhD to assistant professor as a worrisome one.

Tuning to the transition from seventh-year assistant professor (red with circles) to seventh-year associate professor (purple with triangles), the picture is less rosy. We can observe this transition for 25 cohorts of new PhDs (1974–1998).¹⁹ For 22 of these, the representation of women fell during this transition (albeit a proper adjustment for a presumed overrepresentation of men with extended years in rank would reduce the size of the drop).

Disquietingly, among the last (youngest) five cohorts of new PhDs for whom we can observe the transition from assistant to associate (1994–1998), the fall for each successive cohort was larger than for its predecessor. It seems unlikely that any overrepresentation of men with extended years in the associate rank could explain this recent trend of what appears to be an increasingly leaky pipeline for women from assistant to associate professor.

¹⁸ Because these data go back to the first CSWEP survey in 1974, Figure 3 permits a considerably longer look back than was the case in Figure 2.

¹⁹ Under our lock-step assumptions, the 1998 PhD cohort would have been seventh-year associate professors in 2012 (= 1998 + 14).

With regard to the transition from associate to full, a lock-step model is not useful because the required long lags mean that the data are available only for three cohorts with PhDs from the mid 1970s, telling us little if anything about how the profession is doing now.²⁰

Breaking Out the Top 10 and Top 20 Departments

Tables 2 and 3 break out the survey results for the top ten and the top 20 ranked departments separately. Over the 16 years covered, entering PhD students are more heavily female at top 20 than at top ten schools, but by completion of the PhD, the reverse holds. With regard to faculty, these departments currently have shares of women faculty at the assistant and full professor levels that are lower than the national average, but higher shares of women at the associate level. By far the most striking feature of Table 2 is that the percentage of women in non-tenure track positions is about three times as high as that for tenure track positions.

Table 3 contrasts placements of PhD students from top departments versus others. For the top ten and top 11–20 departments, the number of women in any category tends to be small. With this warning, the reader is invited to assess these data.

Placements of New PhDs

Table 4 shows the types of jobs obtained by the most recent crop of new PhDs.²¹ The first column shows that of the 50 women in the job market from top ten departments, 82 percent took jobs based in the United States. Of those who took a job in the United States, 56.1 percent and 7.3 percent went to departments with and without doctoral programs, respectively, and

²⁰ We can track at most four cohorts who got their PhDs in the mid 1970s, such a different era that their experience is likely irrelevant for the present. Tracking a cohort from when they were seventh-year associate professors to when they were twenty-fifth year full professors requires in excess of 25 years of data.

²¹ We do not have data on the prevalence of foreign versus domestic students. Since men are likely overrepresented among foreign students, foreign students are more likely to go to jobs in foreign countries, and jobs in foreign countries may be easier to land than domestic jobs, it is difficult to interpret the gender differentials shown here.

TABLE 2—THE PIPELINE FOR THE TOP 10 AND TOP 20 DEPARTMENTS:
PERCENT AND NUMBER OF FACULTY AND STUDENTS WHO ARE WOMEN

Doctoral departments	Top 10				Top 20			
	1997–2001	2002–2006	2007–2011	2012	1997–2001	2002–2006	2007–2011	2012
<i>Faculty (fall of last year)</i>								
Assistant professor								
Percent	20.4	22.0	24.5	20.6	18.8	25.0	23.4	20.5
Number	21.0	23.0	23.7	22.0	32.5	44.9	48.3	44.0
Associate professor								
Percent	13.2	16.0	18.8	23.3	14.6	18.1	22.4	22.4
Number	4.5	4.2	5.7	7.0	11.0	9.4	17.3	17.0
Full professor								
Percent	5.9	7.0	8.7	9.5	6.2	7.6	9.6	8.7
Number	12.0	17.0	22.0	28.0	26.0	32.1	43.5	41.0
Subtotal								
Percent	11.0	12.0	13.5	13.2	10.4	13.2	14.7	13.4
Number	37.5	44.2	51.3	57.0	69.5	86.4	109.2	102.0
Other (non-tenure track)								
Percent	34.8	45.0	31.6	42.9	38.8	42.3	32.6	39.4
Number	4.0	13.0	19.8	21.0	9.5	23.4	40.0	50.0
All faculty								
Percent	18.2	25.0	18.2	16.3	17.5	27.6	19.2	17.1
Number	63.0	101.4	80.5	78.0	119.5	196.2	166.0	152.0
<i>PhD students</i>								
First year (fall of year listed)								
Percent	26.7	25.0	25.9	22.3	30.3	29.3	27.3	27.0
Number	61.5	65.6	61.7	66.0	147.0	125.5	124.7	126.0
ABD (fall of year listed)								
Percent	12.2	27.0	25.9	24.8	14.3	28.0	28.0	28.3
Number	165.5	216.8	206.0	246.0	269.0	380.8	393.5	430.0
PhD granted (AY ending in year listed)								
Percent	24.5	28.0	26.4	27.9	24.7	24.7	28.4	27.2
Number	49.5	54.4	49.2	60.0	85.0	94.0	97.5	97.0
<i>Undergraduate senior majors (AY ending in year listed)</i>								
Percent	NA	NA	38.0	37.7	NA	NA	35.5	35.9
Number	NA	NA	898.50	1,123.0	NA	NA	2,019.0	2,223.0

Notes: For each category, the table gives women as a percentage of women plus men. For the five-year intervals, simple averages are reported. Due to missing data, the columns for the 1997–2001 interval report averages over 1997, 1998, and 2001. The assistant, associate, and full ranks all include both tenured and untenured faculty.

17.1 percent and 19.5 percent went to the public and private sectors, respectively. As shown in the first line, regardless of the rank of department granting her PhD, a woman is more likely to take a job in the United States than her male counterpart. As lines two and three show, given a job in the United States, a new female PhD is less likely to land a job in a doctoral department than her male counterpart and more likely to land one in a non-doctoral department.²² As

lines four and five show, the representation of women among new PhDs landing in the public as opposed to the private sector varies with departmental rank. Overall, those who get jobs outside the United States tend to get academic jobs, with this tendency stronger for newly

²² As compared to the doctoral versus nondoctoral contrast, if the contrast were instead between tenure-track jobs in departments with a doctoral program versus more teaching-oriented jobs (rolling contracts to teach in departments

with doctoral programs plus all jobs in nondoctoral economics departments), women from other than top-20 departments would be even less likely to get a tenure-track job in a department with a doctoral program and still more likely to get a teaching-oriented job. Unfortunately, the current and earlier surveys do not permit this breakdown.

TABLE 3—PLACEMENTS OF WOMEN FROM THE TOP 10 AND TOP 20 ECONOMICS DEPARTMENTS IN THE NEW PHD JOB MARKET

	Top 10				Top 20			
	1997–2001	2002–2006	2007–2011	2012	1997–2001	2002–2006	2007–2011	2012
Doctoral departments								
<i>US-based job obtained</i>								
Percent	25.6	24.8	25.2	28.5	25.9	21.9	32.7	27.6
Number	22.0	37.0	32.3	41.0	41.0	59.0	59.8	59.0
Doctoral departments								
Percent	15.9	30.3	25.3	26.4	17.6	25.6	27.2	28.2
Number	14.5	27.0	19.0	23.0	22.0	38.0	32.5	35.0
Academic other								
Percent	38.9	42.1	41.9	50.0	44.4	30.7	26.0	25.0
Number	3.5	3.0	2.2	3.0	8.0	7.0	5.5	3.0
Public sector								
Percent	22.9	26.2	28.1	36.8	30.1	27.3	30.5	24.4
Number	4.0	2.0	7.2	7.0	11.0	14.0	12.7	10.0
Private sector								
Percent	40.3	20.4	26.4	25.0	37.9	31.3	30.1	24.4
Number	9.5	5.8	8.2	8.0	12.5	12.8	13.5	11.0
<i>Foreign-based job</i>								
Obtained								
Percent	15.9	26.1	21.3	22.0	17.9	17.2	24.0	21.4
Number	3.5	9.0	9.5	9.0	7.0	17.0	23.7	18.0
Academic								
Percent	60.0	27.0	20.4	19.4	20.0	18.2	23.0	13.3
Number	1.5	7.0	6.7	6.0	3.5	12.0	15.8	8.0
Nonacademic								
Percent	5.9	16.0	26.9	30.0	6.3	11.5	28.8	41.7
Number	1.5	2.0	2.8	3.0	2.5	4.0	7.8	10.0
<i>No job obtained</i>								
Percent	29.2	22.6	33.3	0.0	32.3	33.3	21.9	16.7
Number	7.0	1.0	0.2	0.0	10.5	4.0	1.2	1.0
<i>Total on the job market</i>								
Percent	20.6	31.1	26.3	26.6	21.9	31.7	28.8	25.7
Number	32.5	59.0	46.2	50.0	69.0	100.0	90.3	78.0

Notes: The (2, 4) cell shows that among 2012 PhDs from top-10 schools in the 2011–2012 job market, 23 women placed in US-based doctoral departments, and these women accounted for 26.4 percent of such placements. For five-year intervals, simple averages are reported.

TABLE 4—EMPLOYMENT SHARES FOR NEW PHDs IN THE 2011–2012 JOB MARKET

	Top 10		Top 11 through 20		All others	
	Women	Men	Women	Men	Women	Men
US-based job (share of all individuals by gender)	82.0	74.6	64.3	59.1	70.1	61.5
Doctoral department	56.1	62.1	66.7	48.1	29.0	33.2
Academic, other	7.3	2.9	0.0	11.5	32.3	32.0
Public sector	17.1	11.7	16.7	21.2	16.8	22.0
Private sector	19.5	23.3	16.7	19.2	21.9	12.7
Foreign job obtained (share of all individuals by gender)	18.0	23.2	32.1	38.6	18.6	29.9
Academic	66.7	78.1	22.2	79.4	56.1	60.3
Nonacademic	33.3	21.9	77.8	20.6	43.9	39.7
No job found (share of all individuals by gender)	0.0	2.2	3.6	2.3	11.3	8.6
Total number of individuals	50	138	28	88	221	421

TABLE 5—THE GENDER COMPOSITION OF FACULTY AND STUDENTS IN ECONOMICS DEPARTMENTS WITH DOCTORAL PROGRAMS, FALL 2012

	Women	Men	Percent female
<i>Panel A. Faculty composition (fall 2012)</i>			
Assistant professor	218	555	28.2
Untenured	198	502	28.3
Tenured	20	53	27.4
Associate professor	129	443	22.6
Untenured	12	18	40.0
Tenured	117	425	21.6
Full professor	191	1,312	12.7
Untenured	21	12	63.6
Tenured	170	1,300	11.6
All tenured/tenure track	538	2,310	18.9
Other (non–tenure track)	201	308	39.5
All faculty	1,597	6,683	19.3
<i>Panel B. Students and job market</i>			
<i>Students</i>			
Undergraduate senior majors (2011–2012 AY)	8,507	19,056	30.9
First-year PhD students (fall 2012)	437	1,052	29.3
ABD students (fall 2012)	1,271	2,642	32.5
PhD granted (2011–2012 academic year)	332	688	32.5
<i>Job market (2011–2012 academic year)</i>			
US-based job	214	414	34.1
Doctoral departments	80	175	31.4
Academic, other	53	92	36.6
Public sector	36	80	31.0
Private sector	45	67	40.2
Foreign job obtained	59	192	23.5
Academic	31	128	19.5
Nonacademic	28	64	30.4
No job found	26	41	38.8
Number on job market	299	647	31.6

Note: ABD indicates students who have completed “all but dissertation.”

minted males than for females.²³ Finally, except for graduates of top-ten departments, women are more likely than men to report no job found.

For 2012, Table 5 contains more details for departments with doctoral programs. This is the fourth year that CSWEP has asked departments to report their numbers of male and female senior economics majors. As seen in Tables 2 and 5, at doctoral departments, the fraction of these majors who are women increases, on average, with the ranking of the department and stands at

31 percent for all departments and at 38 percent for top-ten departments.

III. Acknowledgements

The terms of five of our Board members ended in January 2012: Debra Barbezat (Colby College), Donna Ginther (University of Kansas), Ron Oaxaca (University of Arizona), Rohini Pande (Harvard Kennedy School of Public Policy), and Kaye Husbands Fealing (Committee on National Statistics). They have all made outstanding contributions, and we are grateful for their willingness to serve.

Also ending her extraordinary term was Chair Barbara Fraumeni (University of Southern Maine). In this space it is impossible to

²³ Of new female PhD's from departments ranked 11–20, only nine took foreign-based jobs, precluding any sensible analysis by departmental rank.

adequately thank her for her outstanding service, and I am especially in her debt for laying the path for a smooth transition.

I would also like to thank new committee members Cecelia Conrad (Pomona College, Director of the MacArthur Fellows Program), Kevin Lang (Boston University), Serena Ng (Columbia University), Petra Todd (University of Pennsylvania), and Anne Winkler (University of Missouri-St. Louis) *along with all the other Board members* for their exceptional efforts over the past year to advance the goals of CSWEP.

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MARJORIE B. McELROY,
CSWEP Chair

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