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**2015 ISSUE I** 

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Note: To better reflect CSWEP's fluctuating publication schedule, we have changed naming conventions. In past years "Issue I" was known as the "Winter" issue.

The 2014 Report on the Status of Women in the Economics Profession begins on page 7.

# 2015 Business Meeting January Jubilance

Jubilation filled the room at the CSWEP Business Meeting held during the, January 2015 at the AEA Meeting in Boston. This event has grown into a large gathering with old and new CSWEP friends coming together to refresh connections, celebrate the new recipients of Elaine Bennett Research Prize and the Carolyn Shaw Bell Award, hear the Annual Report and share ideas on the future of CSWEP.

The 2014 Bennett Prize went to Emi Nakamura, Associate Professor of Business at Columbia University. Well known for her work on five facts about prices, her department chair, David E. Weinstein, Carl S. Shoup Professor of the Japanese Economy, delighted the audience with his introduction of Nakamura titled, "Five Facts About Emi Nakamura: A Re-evaluation of Her Contributions," a quintet of quintuples of Nakamura facts. Weinstein first noted that she is one of five economists in her family and listed her five accolades won prior to the Bennett Prize. He then described her five research areas (sticky prices, monetary policy, exchange-rate pass through, fiscal stimulus and rare events and consumption disasters) and observed that each of her five published papers has garnered over 100 citations. His fifth quintuple consisted of her five current working papers,

auguring well for her bright future. Many of Nakamura's current Columbia colleagues and former Harvard mentors turned out



Left to right: Marjorie McElroy, Jeffrey Williamson, Hilary W. Hoynes and Nancy Williamson.

to show their appreciation. Living up to her introduction, Nakamura summarized her research in monetary and fiscal policy in a beautifully accessible talk, Positive Macroeconomics.\*

The 2014 Bell Award went to Hilary W. Hoynes, Professor of Economics and Public Policy and the Haas Distinguished Chair in Economic Disparities in the Richard and Rhoda Goldman School of Public Policy at the University of California at Berkeley. Introduced by Diane Whitmore Schanzenbach, Associate Professor, School of Education and Social Policy at Northwestern University, Schanzenbach noted that Although Hoynes is well known for her rigorous and relevant research at the intersection of public and labor economics, she should also be well known for her tireless teaching and mentoring. In fact, when Schanzenbach sought three supporting letters for the nomination, she received 20! All spoke to Hoynes' ener-

gy, enthusiasm and efficacy as a mentor and of the gift of her advice delivered with an equal mix of candor and tact. Current and former colleagues from Berkeley and

> U.C. Davis, as well as Hoynes' mentees, and family members joined in showing their support. In her straightforward

Emi Nakamura 2014 Bennett Prize Recipient

#### **About the Authors**



Elizabeth Asiedu, Professor of Economics at the University of Kansas and President and founder of the Association for the Advancement of African Women Economists.

Marjorie B. McElroy, Professor of Economics at Duke University and Chair of the CSWEP Board.





Xiaopeng Pang, Professor at the School of Agricultural Economics and Rural Development, Renmin University of China, and Secretary General of the Chinese Women Economists Network.

Madeline Zavodny, Professor of Economics at Agnes Scott College and a member of the CSWEP Board.



# **CSWEP News Staff**

Marjorie McElroy, Editor Madeline Zavodny, Oversight Editor Jennifer Socey, Assistant Editor Leda Black, Graphic Designer

#### **About CSWEP**

A standing committee of the American Economic Association, the Committee on the Status of Women in the Economics Profession (CSWEP) is charged with serving professional women economists by promoting their careers and monitoring their progress. CSWEP sponsors mentoring programs, surveys economics departments and freely disseminates information on professional opportunities, career development and how the profession works, both on the web and via free digital subscriptions to the CSWEP News.

# Marjorie B. McElroy

I note with sorrow the passing of Barbara Bergmann, Chair of CSWEP from 1983 to 1985. In addition to well-known contributions to economics, Bergmann was a fundamental driver in the founding of CSWEP. Her tireless, even abrasive, advocacy for women in the profession, both directly and indirectly, benefited the careers of women economists in her generation and all that followed. She raised the consciousness of the profession. I have often thought that her advocacy for women, everywhere and all the time, opened the door to my first successful application to NSF. Her memorial service was held at American University on April 28, 2015. Bergmann's obituary appeared in the New **York Times.** The next issue of the *CSWEP* News will pay tribute to her.

Economists of all ages and stripes engaged in multiple CSWEP events at the 2015 AEA Meeting. To the many mentors and mentees who made our three mentoring breakfasts a success; to the authors, chairs and discussants in CSWEP's six excellent paper sessions; and to the colleagues, mentors, families and friends who converged on the Business Meeting to celebrate Emi Nakamura's 2014 Elaine Bennett Research Prize and Hilary Hoynes' 2014 Carolyn Shaw Bell Award, thank you! Through sharing our achievements, stories, ideas and advice we create the community of support so central to realizing CSWEP's mission.

This issue features a look at associations of women economists around the globe. Xiaopeng Pang, Secretary General of the Chinese Women Economists Network, and Elizabeth Asiedu, founder and President of the Association for the Advancement of African Women Economists inform us on the work of their respective organizations. Parenthetically, it is worth noting that under the auspices of the American Political Science Association, Jane Mansbridge of Harvard University, and Frances Rosenbluth, Yale University, are spearheading a best practices proposal for hiring and retaining women in academia. Similarly, Renee Adams, University of New South Wales, is exploring the formation of a women's standing

# From the Chair

committee of the American Finance Association parallel to CSWEP.

As always, this first issue of the year also contains CSWEP's *Annual Report*. Mandated by the AEA, Section I serves as an introduction to the work of the CSWEP Board and details CSWEP activities in 2014. Based on CSWEP's annual surveys, Section II contains the statistical report on the status of women in the economics profession.

Using data from the most recent 18 annual CSWEP surveys, 1997–2014, the report identifies two critical junctures in the careers of women: the declining fraction of baccalaureate women in the economics major (corroborating separate analysis by Claudia Goldin, *CSWEP Newsletter*, Spring/Summer 2013); and subsequently, the poorer chance of women relative to men in advancing from untenured assistant to tenured associate professor.

In recognition of the expansion of our activities, in January 2015 CSWEP proposed a restructuring of its Board. I am pleased to report that the Executive Committee of the AEA approved the restructuring. Hence, Margaret Levenstein (Executive Director, Michigan Census Research Data Center and Adjunct Professor of Business Economics and Public Policy from Michigan's Ross School of Business) will serve as our inaugural Associate Chair and Director of the CSWEP Survey and Terra McKinnish (Associate Professor of Economics, University of Colorado-Boulder and Director of the CeMENT National Workshops 2012-2014) will be our first Associate Chair and Director of Mentoring.

I am also happy to report that Cecilia Conrad, Kevin Lang, Serena Ng, Petra Todd and Anne Winkler have all agreed to serve another term on the Board. It is my privilege to work with them. To each of the distinguished and engaged members of the Board, I extend my heartfelt gratitude.

Finally, I have agreed to serve as chair of CSWEP for one more year. As always, I welcome your feedback and your ideas for the future: please let us hear from you. Contact board members directly (see back cover) or me at: cswep@econ.duke.edu.

# Associations of Women Economists Around the Globe

The number of associations of women economists around the world is growing. All provide mentoring for economists, organize conference sessions, promote research on gender issues, and raise awareness of issues of particular concern to women in the economics profession. While these organizations may focus on women, there are many positive spillovers for men. Much of the information and advice freely disseminated by these organizations can be of value to all economists—especially to any junior economist— whether male

#### **Associations**

or female, and whether minority or not.

Association for the Advancement of African Women Economists

http://www.aaawe.org/

**Canadian Women Economists Network** 

http://www.cwen-rfe.org/

**Chinese Women Economists Network** 

http://www.cwe.org.cn/

Committee on Women in Agricultural Economics

http://www.aaea.org/membership/sections/

**Economic Society of Australia's Committee** for Women Economists

http://www.esaqld.org.au/

**European Economics Association Committee on Women in Economics** 

http://www.eeassoc.org/

Royal Economic Society's Women's Committee in the UK

http://www.res.org.uk/view/womensComm.

**Korean Women Economists Association** 

http://www.e-kwea.or.kr/html/subo7\_o1.asp

For additional organizations, consult the:

**EDIRC Index of Economics Associations and Societies** 

https://edirc.repec.org/assocs.html

# **Madeline Zavodny**

And in many cases, these organizations, like CSWEP, also include men directly in their activities.

This issue features Xiaopeng Pang of Renmin University of China, who profiles the Chinese Women Economists Network (CHWEN), and Elizabeth Asiedu of the University of Kansas, who profiles the Association for the Advancement of African Women Economists (AAAWE).

A key theme that emerges from these articles is the insatiable hunger on the part of women economists for mentoring. As McElroy writes in the current Annual Report, to help satisfy this appetite, CSWEP has doubled the capacity of the national CeMENT workshops for economists at research-intensive institutions by moving them from a biennial to an annual basis. CSWEP has also increased the capacity of the biennial CeMENT workshops for economists at institutions that put more weight on teaching (the so-called "Regional" workshops). And there's more: CSWEP held its first networking and mentoring breakfast for junior economists at the 2013 AEA meeting, added a second breakfast at the 2014 AEA meeting, and a third for mid-career economists at the 2015 AEA meeting. Come join us next year!

In addition to the organizations profiled here, we know of the Canadian Women Economists Network, the Committee on Women in Agricultural Economics, the Economic Society of Australia's Committee for Women Economists, the Royal Economic Society's Women's Committee in the UK, the Korean Women Economists Association and the European Economics Association Committee on Women in Economics.

This is almost certainly an incomplete list! Please help CSWEP expand this list so that we can help to publicize their activities and learn from each other.

In closing, it is worth noting that other disciplines such as political science are beginning to see the value of this work and have contacted CSWEP to inquire about forming similar organizations. This is indeed an exciting development.

# Chinese Women Economists Network (CHWEN)

# **Xiaopeng Pang**

The Chinese Women Economists Network (CHWEN) is a nonprofit organization that seeks to improve the research capabilities of women economists in universities and research institutes throughout China, promote economic research on gender issues, and advance feminist inquiry of economic issues. CHWEN promotes collaboration and communication among female and male economists, activists and policymakers in China and overseas.

CHWEN's mission includes: (1) Build a professional network for Chinese women economists, and enhance communication and cooperation between women economists both in China and overseas; (2) Increase Chinese women economists' visibility in economic research by improving their research capabilities; and (3) Encourage research on women and gender issues, and bring a gender perspective to economic research and policy analysis.

continues on page 4



# Xiaopeng Pang continued from page 3

CHWEN was conceived as a result of small group discussions at the symposium celebrating the twentieth anniversary of the launch of rural reform in China hosted by the Hong Kong University of Science and Technology in 2001. At this symposium, a group of internationally established economists noted for research on the Chinese economy gave presentations. During the symposium, six participants, including Professors Dong Xiao-yuan, Zhao Yaohui, Song Lina, Denise Hare, Scott Rozelle and James Kung, expressed their shared concerns that women economists are disadvantaged in Chinese academia, that a gap in research capacity exists between domestic and international economists, and that gender issues are rarely touched upon by Chinese economists.

To address these issues, they proposed to initiate a program for women economists in China that would include training, mentoring and network building. With financial support from the Ford Foundation, the Chinese Women Economist (CWE) Research and Training Program was launched at the China Center for Economic Research (CCER), Peking University, in May 2002. The directors of the program are Professor Xiao-yuan Dong, who is from the University of Winnipeg in Canada, and Professor Yaohui Zhao from CCER.

As many program trainees start preparing to raise families, with conflicting familial responsibilities and career development, and face a "glass ceiling" in the workplace, they are in need of encouragement and support from one another and desire conversation with like-minded economists. A year-long collaborative process yielded the network which now provides a communication platform for Chinese women economists.

CHWEN was formally founded in 2003 at the 3rd Chinese Economic Association Conference in Shanghai in December 2003, making it the fifth network of feminist Economists, after the Committee for the Status of Women in the Economic Profession (CSWEP) in

the U.S., the Canadian Women Economists Network (CWEN) in Canada, the Royal Economic Society's Women's Committee (RESCWE) in the U.K., and the Economic Society of Australia's Committee for Women Economists (ESACWE). Representatives of CSWEP and CWEN participated in CHWEN's inauguration ceremony.

While the majority of CHWEN's 357 current members are women economists from universities, the group also includes scholars in other disciplines and institutions, students, activists and policy makers.

Annual activities of CHWEN include:

#### 1. Research Training and Mentoring

From 2002 to 2012, the network assisted the Chinese Women Economists Research and Training Program of CCER at Peking University in an annual offering of a two-week long course to train iunior female researchers from China's universities and research institutes. Emphasizing gender perspectives, the course systematically introduced economic theories on intra-household resource allocation, human capital investment, gender discrimination and segregation in labor markets, decisions of agricultural household production, rural land and credit markets, population aging, unpaid care work, time use, and program evaluation. With respect to empirical methodology, advanced econometrics using micro data were included in the course for in-depth analysis of the aforementioned topics. In addition, the course also covered writing skills for paper submission to peer-reviewed international journals and research grant application.

A total of 227 young researchers took the training course; 94 trainees received one-to-one research mentoring; and 90 trainees have completed the research projects and graduated from the training program. The outcomes of the completed projects have been published in reputable refereed journals in China and across the world. A total of 33 established experts in China studies from

Australia, Canada, China, the U.K., and the U.S. have participated in providing teaching and mentoring services for the training program.

#### 2. Conferences

An annual international conference on gender, development, and micro data empirical research is held in the summer. The conference not only provides a forum for women economists (both trainees and non-trainees), but also invites male economists to participate.

CHWEN also holds special sessions for women economists at national and international conferences, such as the Chinese Economics Annual Conference (CEAC), and the annual conferences organized by the Chinese Economists Society (CES) and International Association for Feminist Economics (IAFFE), which help Chinese women economists disseminate research outcomes and develop academic contracts.

#### 3. Research Grant Applications

CHWEN provides members with professional assistance on research grant applications for domestic and international funding agencies such as the Ford Foundation, the International Development and Research Center (IDRC) of Canada, the National Science Foundation (NSF) of China and the National Social Science Foundation (NSSF) of China, with the goal of helping to close the gender gap in the accessibility of academic resources.

#### 4. Publications

CHWEN emphasizes research outcome dissemination, having set up the CWE working paper series online, providing training on paper submissions to peer-reviewed journals and organizing book publications. Direct exposure to the peer-review process helps trainees hone their research abilities and publications in domestic and internationally highly regarded outlets contribute to increasing our women economists' exposure and influence.

# Association for the Advancement of African Women Economists (AAAWE)

The Association for the Advancement of African Women Economists (AAAWE) is the first and only organization that focuses on redressing the low representation of African women in the economics profession and building the capacity and skills of African women economists. A nonprofit international professional association with 501(c) (3) status, AAAWE advances the scholarship of its members by creating opportunities for networking, mentoring, and facilitating the creation and sharing of knowledge among members. AAAWE's activities include organizing paper presentations sessions, mentoring/technical workshops, professional development and networking sessions at international conferences. It also provides scholarships for graduate studies in Economics and sponsors a visiting scholars program.

AAAWE is the sixth and newest women's network to focus on increasing the number of women economists and facilitating their professional development. Four of the associations focus on women in developed countries, and the other one, on Chinese women: CSWEP was formed in 1973; the Canadian Women Economists Network in 1990; the Royal Economic Society's Women's Committee (U.K.) in 1996; the Committee for Women in Economics (Australia) in 2002; and the Chinese Women Economists Network in 2003. One difference between AAAWE and the other groups is that it serves women in several countries.

Membership is open to everyone—any individual (male or female) interested in the advancement of African women economists may join. AAAWE membership has increased from 320 in December 2012 to a current total of 840, representing 57 countries (39 countries in Africa and 18 outside Africa); 616 of the members (about 73 percent) are African women economists. Furthermore, 529 of the African women economists

live in Africa (302 professionals and 227 students), and the remaining 87 members (31 professionals and 56 students) live outside Africa.

#### Why AAAWE

While women are generally underrepresented in the economics profession throughout the world, the problem is particularly pronounced among African women. In particular, African women face severe challenges in moving up the career ladder due to a number of structural and cultural constraints, including: (1) Fewer African women than men pursue or complete graduate studies in economics; (2) Lack of senior women economists to serve as mentors and role models for junior female economists in Africa due to the male domination of the profession; (3) Women economists tend to be isolated, which is a problem given that networking is crucial for professional development; (4) Due to pervasive cultural bias against women involvement in math and science, women tend to be relatively less equipped than men in the kinds of technical skills needed to conduct rigorous research in economics; and (5) African women economists have difficulties in balancing family responsibilities and work obligations, resulting in slower professional advancement relative to their male counterparts, which perpetuates the systematic under-representation of African women in the echelons of the economics profession.

The under-representation of African women in the economics profession has been documented in several studies, such as Addressing Gender Bias: Graduate Training in Economics (1994) and Women in Economic Research and Graduate Training in Southern Africa (2010), both published by the African Economic Research Consortium (AERC), a think tank in Kenya. For example, the 2010 report notes that "... The evidence clearly suggests that economics departments

### Elizabeth Asiedu

are not only male-dominated but, in addition, the female economists—few of whom have a PhD—are generally not as well prepared for research as their male counterparts." Indeed, the ratio of women to men is extremely low in most African universities. The problem is more pronounced in Francophone countries compared with Anglophone countries. Moreover, the underrepresentation of women in the profession worsens progressively from junior to senior professors—women who enter the profession have difficulties moving up the professional career ladder.

In addition to being a social equity issue, the systematic under-representation of African women in the economics profession has profound implications for the responsiveness of economics research and policy making to social and economic development issues faced by women. Given the lack of adequate voice and representation of women, economic policies developed in this context may not adequately focus on building strong and inclusive economies nor properly address the interests and needs of the largest segment of the population. There is therefore an urgent need to foster women's representation in the profession through tailored programs that support training and professional development of African women economists. This view is well articulated in the 2010 AERC report which outlines the following recommendations: (I) More females can be initiated into research through peer mentoring and with the help of research-oriented institutions; and (2) Economics departments must try harder to persuade female candidates to apply to PhD programs. This could be done as part of a strategy of identifying "high-flyer" females with a master's degree, recruiting them as lecturers and later granting them study leave to pursue a PhD.

## Asiedu continued from page 5

The above clearly provides a rationale for establishing AAAWE.

#### **AAAWE Activities**

AAAWE has engaged in a number of activities since its inception in March 2012, including:

#### 1. Visiting Scholars Program

Members spend 3-6 months at the University of Kansas or at the Political Economy Research Institute (PERI) at the University of Massachusetts at Amherst.

#### 2. Conferences

AAAWE has sponsored members to attend conferences as observers and as papers presenters. AAAWE organized paper sessions at the African Econometric Society (AES) conference in Uganda in July 2012; at the AES in Ghana in July 2013; at the Western Economic Association International conference in Seattle in June 2013; and at the African Development Conference at Oxford University in March 2015.

#### 3. Mentoring/Technical Workshop

AAAWE organized two pre-conference mentoring workshops at the AES conferences in Ghana and Uganda. The workshop in Uganda brought together 26 African women economists from 16 countries and six international senior faculty mentors. The workshop in Ghana was split into two parts. The first part was an informational session for members interested in pursuing graduate studies in economics abroad. There were 30 participants. The second workshop was modeled after the CSWEP Ce-MENT workshop. There were 12 junior researchers and eight international senior faculty mentors.

#### 4. Scholarships

AAAWE funds four scholarships for graduate studies in economics.

More information about AAAWE activities is available at <a href="http://www.aaawe">http://www.aaawe</a>. org/aaawe-activities/.

#### **AAAWE Funding**

AAAWE's activities so far have mainly been supported by a loan and private contributions from within and outside Africa. It has received two grants: \$25,000 from the African Capacity Building Foundation (ACBF) in Zimbabwe in 2012, and \$75,000 from the Rockefeller Foundation in 2014. It has also received financial support from the Department of Economics at the University of Kansas. AAAWE is a very young organization that needs support to execute its activities and grow its membership, particularly among young African women economics graduates.

AAAWE needs your financial support. Please join and donate to AAAWE. To donate to AAAWE, go to <a href="http://">http://</a> www.aaawe.org/donate/, and for membership go to http://www.aaawe.org/ membership/.

For more information on the AAAWE, go to www.aaawe.org, or email questions to admin@aaawe.org.



#### 5. Research Visits

The program facilitates outstanding trainees to visit their mentors both in China and overseas to collaborate on publications. These academic visits bring trainees to the forefront of economic research and allow them to develop contact with the international academic community.

#### 6. Networking Events

CHWEN hosts a yearly luncheon at the CEAC to increase awareness of the organization and its mission, and to give members an opportunity to interact at the conference.

For more information on CHWEN, visit: http://cwe.org.cn.

# In Gratitude

Thanks to the following professors who generously gave three days worth of their time to serve as mentors in the highly successful 2015 CeMENT Mentoring Workshop. This annual workshop serves junior faculty in departments with doctoral programs or in institutions with similar publication requirements.

Anna Aizer, Brown University Martha Bailey, University of Michigan

Yoosoon Chang, Indiana University

Shin-Yi Chou, Lehigh University Courtney Coile, Wellesley College Catherine Eckel, Texas A&M

Karen Fisher-Vanden, Pennsylvania State University

Gita Gopinath, Harvard University Shoshana Grossbard, San Diego State University

**Brit Grosskopf**, University of Exeter

Rema Hanna, Harvard University, Kennedy School

Kate Ho, Columbia University Ginger Jin, University of Maryland

Catherine Kling, Iowa State University

Robin McKnight, Wellesley College

Kosali Simon, Indiana University

CSWEP also thanks special guest Nancy Lutz, Program Director, Economics Program at the National Science Foundation.

**CSWEP NEWS** 

# The 2014 Report 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 U.S. economics departments for its annual statistical report, CSWEP sponsors six competitiveentry 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 Elaine Bennett Research Prize and the exceptional mentoring and promotion of women's careers by conferring the Carolyn Shaw Bell Award. CSWEP also conducts a variety of formal and informal mentoring activities, most notably the Mentoring Breakfasts during the AEA Meeting and the CeMENT National and Regional Mentoring Workshops, all of which are consistently oversubscribed.

Before recounting CSWEP activities, it is worth noting that there are likely many spillovers from CSWEP's endeavors that are impossible to list or quantify. CSWEP activities raise 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 only to female economists but to all economists, and especially to any junior economist, whether male or female and whether minority or not.

CSWEP Board members individually and collectively do the work of the Board. In gratitude, this report highlights their work by bolding their names

as well as those of past Board members. Also bolded are the names of the many others who have advanced CSWEP's work, both male and female and from new acquaintances to long-time stalwart supporters.

Section I reports on new developments as well as ongoing CSWEP activities during the past year. These include: (1) restructuring the CSWEP Board, (2) five active mentoring programs, (3) prizes and awards, (4) CSWEP's activities at the annual meeting of the AEA as well as at the four regional meetings, (5) the CSWEP News, (6) the new CSWEP Liaison Network and (7) the possibility of CSWEP Chapters. Section II contains the statistical report on the status of women in the economics profession, including an executive summary in II.A and the full analysis in II.B. Section III concludes with well-deserved acknowledgements.

# I. CSWEP Activities in 2014

### A. CSWEP Board Restructuring

As is evident in the above introduction, CSWEP activities are growing. In fact, CSWEP has outgrown its current structure. In recognition of this, and pending approval by the AEA Executive Committee, the CSWEP Chair has proposed to substitute two executive positions for two at-large positions on the Board. Both would be Associate Chairs, one serving as the Director of Mentoring and the other as the Director of the CSWEP Survey. This restructuring would increase both the efficiency, as well as the amount, of leadership attention to all CSWEP functions, enabling the committee to keep up with the demand for its activities.

# **B.** Mentoring Programs

As success breeds success, the effective mentoring of young women

# Marjorie B. McElroy

economists has become ever more central to CSWEP's mission. While mentoring and creating professional networks is an ongoing informal aspect of most every CSWEP activity, the CeMENT Mentoring Workshops hold center stage, and the new and expanding CSWEP Mentoring Breakfasts have already proved their worth.

Now held annually, the internationally recognized CeMENT (previously CCOFFE) Mentoring Workshops target either women in departments where research accomplishments carry a heavy weight in promotion (the National Workshops) or women in departments where teaching receives more weight (the Regional Workshops). In addition to the vital direct benefits of these workshops, participants typically emerge with a network of peers and senior mentors. Many of these networks are still going strong years after the workshop concludes. The success of these workshops has been rigorously documented,2 and they are now funded by the AEA on an ongoing basis.

This section reports on the National and Regional Mentoring Workshops as well as the growing annual Mentoring Breakfasts and other mentoring activities.

#### 1. CeMENT National Mentoring Workshop

Funded by the AEA and internationally known for providing young women

continues on page 8

1....

<sup>1</sup> 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.

<sup>2</sup> 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). Future research will track these women over their tenure clocks and beyond.



Mentors and mentees converse at the 3rd Annual CSWEP Mentoring Breakfast for Junior Economists.

economists with know-how and networks that boost their careers, CSWEP's National Mentoring Workshops target junior women facing research expectations commensurate with U.S. departments with PhD programs in economics. Going back to the first CCOFFE workshop in 1998 and morphing into the CeMENT National Mentoring Workshops (in 2004, 06, 08, 10, 12, 14, with the next one following the January 2015 AEA Meeting), these national workshops have been consistently and seriously oversubscribed.

In response, in January 2014 the Executive Committee of the AEA approved moving the CeMENT National workshops from a biennial to an annual frequency, effectively doubling their capacity. Funding was provided from 2015 through 2018.3 Importantly, the Executive Committee also provided for continued funding for the ongoing scientific evaluation of their effectiveness.

Led by CeMENT Director Kosali Simon of Indiana University, the upcoming 2015 workshop will serve 40 participants joined by 16 mentors and several special guests as well as observers from other organizations. As usual,

both dedicated team sessions and presentations will cover topics that include research, grants, getting published, efficient and effective teaching, networking, tenure and work-life balance. The Boston Federal Reserve has graciously agreed to host the kick-off dinner. As before, all of the professional development materials provided to participants are available to all on the CSWEP Web site.4

For this upcoming workshop CSWEP received 110 applications for the 40 participant seats, on par with prior years when the workshop was held biennially.5 In response, next year priority will be given to qualified applicants who were randomized out of the 2015 or earlier workshops. We had anticipated that in steady state doubling this workshop's frequency would pretty well close the gap between qualified junior economists wanting to participate and available slots. This has not (yet) happened. In part this may be a temporary bulge in demand on the part of those who were randomized out in previous years. In part it may be due to better publicity. The 2016 numbers will help to sort this out.

It is hard, however, not to see this as yet more evidence of unmet demands for mentoring, underscoring the need to grapple with the big picture. The recent CSWEP proposal to restructure its Board speaks to this need. If adopted by the AEA Executive Committee, the new Associate Chair and Director of Mentoring, would be tasked, inter alia, with accessing the big picture and determining how best to move forward.

#### 2. Regional CeMENT Mentoring Workshop

Patterned after the National Workshops but targeted to junior women at institutions where teaching bears a relatively heavy weight in tenure decisions, the so-called "Regional" CeMENT Mentoring Workshops draw participants without regard to geographic location.6 At the April 2014 meeting of the of the Executive Committee of the AEA, members approved funding of the CeMENT Regional Workshop in 2015 and 2017 that will put its size on par with that of the National Workshop (40 participants).

The term of Director Ann Owen of Hamilton College covers the 2013 and 2015 workshops with the upcoming "Regional" to be held November 19-21, immediately preceding the 2015 annual Southern Economic Association Meeting.

#### 3. Mentoring Breakfasts: Further Expansion for Juniors and an Experiment for Mid-Career Economists

The 2013 AEA meeting saw CSWEP's inaugural Mentoring Breakfast for Junior Economists. Conceived by Board members Terra McKinnish and Linda Goldberg as a stand-in for the then-biennial CeMENT National Mentoring Workshop during its "off year," this informal meet and greet event brought together senior economist mentors (predominately senior women) and both male and female junior economist

<sup>3</sup> Capacity aside, the annual frequency better enables junior women to time their participation in the context of pressing tenure clocks.

<sup>4</sup> http://www.aeaweb.org/committees/CSWEP/mentoring/ reading.php.

<sup>5</sup> For example, in 2012 and 2014, applicants numbered 133 and 108, respectively.

<sup>6</sup> Currently a misnomer, the word "Regional" is a holdover from 1998, the year this workshop was first offered at each of the four regional association meetings. For practical reasons this workshop is now normally offered only just before the start of the Southern Economic Association Meeting, the largest of the four regional association meetings.

participants (primarily faculty 6 years or less post-PhD and graduate students on the job market). The first 120 junior applicants were admitted and met with 40 senior mentors. They gathered at tables to sort themselves by topic: research, grants, publishing, teaching, promotion and tenure, networking, job search, and work-life balance. Some conversations went on long after the two-hour session ended. Juniors as well as mentors expressed their appreciation.

So successful was this initial experimental breakfast that for 2014 Board members Linda Goldberg and Bevin Ashenmiller added a second breakfast. Despite wintry weather limiting travel, the 2014 breakfasts were attended by 180 juniors plus 60 senior mentors. This year will see a repeat of two



Adriana Kugler, opening speaker at CSWEP's inaugural Peer Mentoring Breakfast for Mid-Career Economists

Mentoring Breakfasts for Junior Economists, this time organized by Board members Bevin Ashenmiller, Ragan Petrie and Anne Winkler. In all, 65 senior economists will mentor 180 junior economists, a figure that includes an increased demand from junior faculty, post-docs and non-academics as well as from male economists. The latter indicated that their male colleagues who have previously attended spoke highly of the breakfasts' efficacy.

Provoked by the success of the junior mentoring breakfasts, numbers of senior economists, including earlier graduates of CeMENT workshops, expressed their desire for a parallel event to address concerns relevant to mid-career women. In response, sandwiched in between the two breakfasts for juniors, the 2015 Meeting will see the inaugural Peer Mentoring Breakfast for Mid-Career Economists on Sunday, January 4, 2015. Open to academics and non-academics, this event will provide a forum for female economists to explore Career Transitions for Mid-Career Women Economists. Participants are expected to be associate or full-rank tenured academics or non-academics 10 or more years beyond the PhD

The mid-career breakfast will break into an 8:00-9:00AM session and a 9:00-10:00AM session, both with opening remarks from Adriana Kugler, Vice-Provost for Faculty and Professor at the McCourt School of Public Policy, Georgetown University.7 The 60 registered participants can then join themed tables for discussions on career transitions—from associate to full professor; from tenured professor to administrative roles and back; between academic and non-academic institutions: and from academic or non-academic economist to policy or other leadership positions. If this Peer Mentoring Breakfast for Mid-Career Economists proves its worth, CSWEP will consider expanding the event to a half- or full-day workshop at the 2016 AEA Meeting.8

#### 4. Haworth Mentoring Committee

Named in honor of the singular contributions of the late **Joan Haworth**, a long-time stalwart CSWEP supporter, this new standing committee makes recommendations regarding one-off applications to cosponsor professional development events and also administers the *Haworth Fund* given by **Joan Haworth**. That fund, upon satisfactory application, can be used to augment campus

visits of external speakers to include mentoring activities. This year Bevin Ashenmiller and Amalia Miller constituted the committee and recommended funding extended visits of Kosali Simon (Indiana University) and Hilary W. Hoynes (University of California, Berkeley) to the University of San Francisco and Montana State, respectively, for the purpose of mentoring. The Committee may also recommend minor supplementary funding to cosponsor one-off events in support of CSWEP's mission with other groups (see section G below).

#### AEA Summer Economics Fellows Program

Begun in 2006 with seed monies 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 senior economists mentor the fellows who, in turn, work on their own research and have a valuable opportunity to present it.

The AEA Summer Economics Fellows Program had another banner year. Drawing from 43 applicants, 2014 saw the placements of 11 fellows (into 13 fellowships), of which four were from underrepresented minority groups—the most minority fellows ever placed. The number of sponsors hiring summer fellows increased from seven to 12, and the program picked up a new sponsor, with fellows immersed in research environments at the Urban Institute, the Federal Reserve Board and Reserve Banks in Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minnesota, New York, Richmond and St. Louis.9

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<sup>7</sup> http://explore.georgetown.edu/people/ak659/?PageTemplateID=364.

<sup>8</sup> Former Board member and CeMENT Director and Professor of Economics at the University of Kansas **Donna Ginther** has drafted a proposal for this.

<sup>9</sup> Gratitude to the 2014 committee for screening and matching: Daniel Newlon from the AEA (Chair), whose efforts have undergirded this program from the get go in 2006, CSWEP Board member Cecilia Conrad, CSMGEP Board member Gustavo Suarez 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 <a href="http://www.aeaweb.org/committees/cswep/summerfellows/history.php">http://www.aeaweb.org/committees/cswep/summerfellows/history.php</a>.

In the works are efforts to again increase the number of successful minority applicants and to solicit applications from graduate students earlier and more aggressively in an effort to increase the applicant pool for 2015.

#### C. Bennett Prize and Bell Award

Presentations of the Bennett Prize and Bell Award will open the 2015 CSWEP Business Meeting and Luncheon on January 3 during the AEA Meeting in Boston, and all are welcome to join the celebration.

Awarded biennially since 1998, the Elaine Bennett Research Prize recognizes and honors outstanding research in any field of economics by a woman at the beginning of her career. The 2014 prize goes to Emi Nakamura, Associate Professor of Business and Economics at Columbia University for her significant contributions to macroeconomics and related fields. Her research, which combines a powerful command of theory with detailed analyses of micro-level data, has made important contributions to the study of price rigidity, measures of disaster risks and of long-run risks, exchange rate pass-through, fiscal multipliers, and monetary non-neutrality. The press release is available online, to be followed by an interview with Professor Nakamura in the Spring/Summer 2015 CSWEP News.10

Given annually, and also since 1998, the Carolyn Shaw Bell Award recognizes an individual for outstanding work that has furthered the status of women in the economics profession. The 2014 award goes to Hilary W. Hoynes, Professor of Economics and Public Policy and Haas Distinguished Chair in Economic Disparities in the Richard & Rhoda Goldman School of Public Policy at the University of California, Berkeley. Professor Hoynes works at the intersection of public and labor economics and is best known for her work on poverty. Economists from every walk of the profession, male and female, current and former students, colleagues and

coauthors describe her as an "equal opportunity mentor" whose deep engagement in daily academic work models the professional behaviors that spurred their own professional growth and success. The **press release** is available online. We expect to publish an interview with Professor Hoynes in the Spring/Summer 2015 *CSWEP News*.

Sincere thanks are due to those who nominated and wrote letters in support of all of the highly competitive candidates for these awards as well as to the hard-working selection committees.<sup>12</sup>

# D. CSWEP's Presence at Annual Association Meetings

# 1. The 2014 American Economic Association Meeting

Critical to CSWEP's mission, CSWEP sponsors six highly competitive paper sessions at the annual AEA Meeting. Last year (2014) saw three gender sessions, organized by Kevin Lang and Susan Averett, as well as three econometrics sessions, organized by Serena Ng and Petra Todd. These committees then selected eight papers published as two pseudo-sessions in the May 2014 Papers & Proceedings of the American Economic Review.

The highly competitive submissions process encourages quality research, particularly in the area of gender-related topics. More generally, women consistently report that these sessions put their research before a profession-wide audience and are instrumental in their success as economists. It is worth noting that even with liberal requirements (i.e., papers in the non-gender session

11 https://www.aeaweb.org/committees/cswep/ PDFs/2014Bell-Award\_Hilary-Hoynes.pdf

12 Many thanks to the 2014 Bell committee: Board member Linda Goldberg (Chair) and previous Bell recipients Fran Blau (2001) and Sharon Oster (2011); and also to the 2014 Bennett committee: Board members Petra Todd (Chair) and Serena Ng and former Bennett winner Monika Piazzesi (2006). For holding to high standards and spotlighting the extraordinary accomplishments of women in economics, we owe an enormous debt to the each committee member on both of these committees. While they must remain anonymous, this debt extends with equal weight to all those who did the hard work of nominating the entire highly-competitive field of candidates for each award as well as to all those who wrote the thoughtful, detailed letters in support of each candidacy.

must be authored by at least one junior female, while papers in the gender session may be authored by a junior male) in 2015 these sessions still account for a disproportionate share of women on the AEA program.

Additional CSWEP activities (hospitality suite, mentoring breakfasts, business meeting and award presentations) at the 2014 AEA Meeting are reported elsewhere in this document.

# 2. Four 2014 Regional Economic Association Meetings

CSWEP maintains a strong presence at all four of the Regional Economic Association Meetings, offering up to 16 professional development panels and paper sessions. Additionally, following a model developed by **Anne Winkler** (CSWEP Board Midwestern Representative), in lieu of an evening reception, CSWEP now hosts a networking meal. The events are well attended by men as well as women and provide an informal opportunity for the CSWEP representative and development panelists to network and to mentor one-on-one.

2014 kicked off with the Eastern Economic Association Meetings (March, Boston, MA) at which Amalia Miller (CSWEP Board Eastern Representative) organized seven paper sessions and a networking breakfast. The sessions included papers and prepared discussions by female PhD students and junior faculty as well as senior faculty covering a range of topics in the area of applied microeconomics related to health, careerfamily conflict, and public policy issues in the U.S. and developing countries. The networking breakfast also drew a diverse group of economists, ranging from a pair of undergraduate economics majors to senior female faculty members who are leaders in the Association and the profession. Conversations were lively, and many new connections were formed among participants.

The Midwest Economic Association Meeting quickly followed (March, Evanston, IL) with Anne Winkler organizing two panels with her traditional networking lunch sandwiched in between.

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10 https://www.aeaweb.org/committees/cswep/PDFs/2014bennett-prize\_emi-nakamura.pdf

"Advice for Job Seekers" featured panelists from a variety of work environments, including the Federal Reserve, policy institutes, and teaching and research in liberal arts institutions and branch campuses of public universities. Panelists in the "Academic Careers" session explored issues such as children and the tenure clock, being proactive, facing administrative overload and moving up the academic ladder. All three events were well received by diverse audiences.

For the Western Economic Association International Meetings (June, Denver, CO) Bevin Ashenmiller (CSWEP Board Western Representative) put together panelists from government, academia and private industry for two highly successful panels, "Using Government Data" and "Jobs for Economists: A Panel on the Pros and Cons of Government, Academic, Research and Private Sector Jobs." She also organized a networking breakfast and three paper sessions on the topics of "Environmental Economics," "Investments in Children" and "Caregiving and Investment Choices for Older Americans."

Finally, for the Southern Economic Association Meeting (November, Atlanta, GA), Ragan Petrie (CSWEP Board Southern Representative) organized "CSWEP Monday at the Southerns." This full day of CSWEP events began with a joint presentation with Gary Hoover of CSMGEP, "The Status of Women and Minorities in the Economics Profession." A paper session, "Women and Development," a networking lunch and a professional development panel, "Research Publishing Challenges and Strategies," followed. When several panelists had to pull out at the last minute, Jon Hamilton (University of Florida) and Julie Hotchkiss (Federal Reserve Bank of Atlanta) came forward to help, joining original panelist Bill Neilson (University of Tennessee). Despite the last-minute panel change, the session was very successful, with animated discussion between panelists and participants.

All of these panels, receptions and paper sessions drew appreciative audiences and well served the missions of CSWEP and the AEA more generally.

## E. *CSWEP News:* 2014 Features **Interest Students and Faculty**

Under the able direction of oversight editor Madeline Zavodny<sup>13</sup> and the graphic design expertise of Leda Black, CSWEP published three issues in 2014.14 In a long-standing tradition, each issue features a theme chosen and introduced by a guest editor who, in turn, enlists several authors to write the featured articles. The quality of these features is consistently high, and many go on to be longlived career resources for junior economists. 15 On behalf of the CSWEP Board, the Chair (who is the official editor but does almost none of the work) extends a warm thanks to all these contributors.

#### 1. Getting Research Done in Departments without PhD Programs

Board member Anne E. Winkler of the University of Missouri-St. Louis guest edited the Winter 2014 issue featuring articles on "Getting Research Done in Departments without PhD Programs." Authors from a variety of institutions and at varying career stages contributed their expertise: Catalina Ameudo-Dorantes, San Diego State University, How I Get Research Done: A View from a Public Master's Program; Christina Peters, Metropolitan State University of Denver, Getting Research Done at a Teaching-Intensive University: Advice from a Recently Tenured Associate Professor; Lonnie Golden, Penn State University, Abington College, Four Steps to Getting Research Done at an Institution without Graduate Programs; and Susan L. Averett, Lafayette College, Tips on How to be a Productive Scholar at a Liberal Arts College. While targeted to economists working in departments with heavy teaching and service constraints, this feature section brims with tips and strategies applicable to most anyone seeking research productivity in an academic setting.

#### 2. Getting into & Finishing a PhD Program

The feature in the Summer 2014 issue proffers advice to undergraduates on "Getting into and Finishing a PhD Program." Guest edited by Board member Serena Ng of Columbia University, this feature followed up on the Summer 2013 feature on the lack of women in the undergraduate economics major. 16 Authors **John Bound**, University of Michigan; Susan Elmes, Columbia University; and Wendy A. Stock, Montana State University, cover every aspect from whether a PhD is right for you, to preparing for, selecting and applying to PhD programs, to succeeding in your program and what to expect upon graduation. The feature is capped by contributions from anonymous PhD students that capture salient highs and lows of life as a PhD student.

#### 3. Navigating the Job Market 2.0

Guest edited by Board member Cecilia Conrad, MacArthur Foundation, the Fall 2014 CSWEP News presented "Navigating the Job Market 2.0," an annotated, updated list of advice and resources for the job market candidate. This feature followed in the CSWEP tradition of highlighting some topics given minimal attention in other guides. Along with Conrad, authors Wendy A. Stock and Anne E. Winkler offer advice to new

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<sup>13</sup> The contributions of Madeline Zavodny cannot be overstated. Organizer par excellence, she helps guest editors match with a topic and generally facilitates their work, she makes sure that each issue covers the appropriate materials, 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, Jennifer Socey, CSWEP administrative assistant, formats the Newsletter, makes innovative suggestions and does substantial editing. She also puts up with the flow of last-minute changes from the Chair, coordinates with the printer and sees to distribution.

<sup>14</sup> Current and past issues of the CSWEP News are archived: http://www.aeaweb.org/committees/cswep/newsletters.php. For a free digital email subscription, visit http://cswep.org and click "Subscribe."

<sup>15</sup> 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.

<sup>16</sup> https://www.aeaweb.org/committees/cswep/newsletters/ CSWEP\_nsltr\_SprSum\_2013.pdf.

PhDs on the job market including the importance of the cover letter and how to assess a campus's commitment to gender equity. It is capped with resources on topics such as applying to teaching focused institutions and preparing the diversity statement now required by some schools.

Plans are underway to make the professional development features of these and past issues of CSWEP News more easily accessible online. CSWEP is also working with the AEA to streamline the subscription process and anticipates having a new subscription interface in place by early-2015. Special thanks go to Michael Albert, Jenna Kutz and Susan **B.** Houston of the AEA staff.

#### F. New CSWEP Liaison Network

In an effort to increase awareness among economists about the work of CSWEP, to expand the distribution of CSWEP opportunities and to streamline the yearly collection of departmental gender data for the CSWEP survey, the CSWEP Board created the CSWEP Liaison Network. The goal is to have one tenured faculty liaison in every department of economics, including where appropriate, economics groups in business, public policy and environmental schools as well as government and private research units. To date over 150 liaisons have signed up, with plans to double this number in 2015. The liaison's role is to: (1) ensure their department's timely response to the annual CSWEP Survey, thereby decentralizing the burden of reigning in responses for recalcitrant departments; (2) forward the CSWEP News three times yearly to the target audience in their department and encourage individuals to subscribe directly; and (3) generally work to making CSWEP opportunities well known both informally and formally by forwarding occasional emails to students and colleagues.17

## G. CSWEP Chapters?

In response to several requests to form CSWEP chapters, in 2014 CSWEP adopted a policy that would govern chapters in order to align them with CSWEP's mission and AEA policies (see the 2013 Annual Report).18 After "reading the rules" only one group, University of Washington Women in Economics, continues to work on becoming a chapter.

Other groups preferred to have CSWEP cosponsor with them particular *ad hoc* one-off events consistent with CSWEP's mission, with CSWEP contributing minor supplemental funding. For example, as detailed in last year's report CSWEP provided supplemental funds (paired with a grant from the Haworth Fund and also with direct support of the host institution, Indiana University) to defray the travel expenses of multiple mentors to a pre-conference junior mentoring workshop at the Meeting of the Midwest Econometrics Group. CSWEP also provided minor funding to cosponsor a Speed Mentoring event organized by DC-Women in the Economics Profession. As of now CSWEP has regularized the process, with applications going through the newly constituted Haworth committee and with corresponding announcements of this opportunity in the CSWEP News. The Haworth Committee also administers the Haworth Fund (Section B.4 above).

This report now turns to quantifying the current status of women in the economics profession with an eye toward understanding how we got here.

# II. Status of Women in the **Economics Profession**

# A. Women's Status in the **Economics Profession: Executive** 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 department and found that women represented 7.6% of new PhDs, 8.8% of assistant, 3.7% of associate and 2.4% of full professors. Much has changed. This year marks the 43rd survey year. At doctoral institutions, women have about quadrupled their representation amongst new PhDs to 32.9%, more than tripled their representation amongst assistant professors to almost 30%, increased their representation at the associate level more than six fold to 23.5% and increased their representation at the full professor level five-fold to 12.1%. This report presents the results of the 2014 survey, with emphasis on changes over the last 18 years and on the progress of cohorts of new PhDs as they progressed through the academic ranks.

This executive summary describes the survey, summarizes the main results, and concludes. Subsequent sections provide more detailed results.

#### 1. The CSWEP Annual Surveys, 1972-2014

In fall 2014 CSWEP surveyed 124 doctoral departments and 125 non-doctoral departments.<sup>19</sup> Of these, all 124 doctoral and 106 non-doctoral departments responded, yielding response rates of 100% and 86%, respectively. CSWEP also harvested faculty data from the Web for an additional II non-doctoral departments. 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 six departments in research universities that offer a Master's degree but not a PhD degree program in economics. As detailed in last year's report, because some of these departments do not comfortably fit under the terminology, "liberal arts," that was used in

<sup>17</sup> For example, the flyer Do You Know About CSWEP? (https://www.aeaweb.org/committees/cswep/PDFs/CSWEP-Informational-Flyer.pdf) sketches some of the opportunities provided by CSWEP, knowledge of which still seem to circulate mainly by word of mouth.

<sup>18</sup> https://www.aeaweb.org/committees/cswep/annual\_reports.php.

<sup>19</sup> The 2014 survey pool for doctoral departments remained the same as in 2013. However, last year of the 146 non-doctoral departments surveyed, 21 turned out to be composed mainly of business faculty and were therefore omitted from the 2014 survey of non-doctoral departments.

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

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
1st-year Students	31.3%	32.2%	35.6%	38.8%	31.9%	33.9%	34.0%	33.9%	31.9%	31.0%	32.7%	35.0%	33.5%	32.1%	32.4%	29.3%	32.7%	31.4%
ABD	26.8%	28.2%	33.0%	32.3%	30.2%	30.6%	32.7%	33.1%	33.9%	33.6%	32.7%	33.7%	33.5%	34.2%	34.3%	32.5%	31.9%	32.0%
New PhD	25.0%	29.9%	34.2%	28.0%	29.4%	27.2%	29.8%	27.9%	31.1%	32.7%	34.5%	34.8%	32.9%	33.3%	34.7%	32.5%	35.0%	32.9%
Asst Prof (U)	26.0%	25.9%	27.8%	21.4%	22.5%	23.2%	26.1%	26.3%	29.4%	28.6%	27.5%	28.8%	28.4%	27.8%	28.7%	28.3%	27.8%	29.5%
Assoc Prof (U)	11.1%	15.9%	27.3%	17.2%	10.0%	17.2%	24.0%	11.6%	31.2%	24.6%	20.0%	29.2%	25.0%	34.1%	30.8%	40.0%	25.9%	23.1%
Assoc Prof (T)	13.4%	14.0%	15.1%	16.2%	15.3%	17.0%	19.9%	21.2%	19.2%	24.1%	21.0%	21.5%	21.8%	21.8%	21.9%	21.6%	24.5%	23.5%
Full Prof (T)	6.5%	6.1%	6.5%	7.4%	5.8%	8.9%	9.4%	8.4%	7.7%	8.3%	7.9%	8.8%	9.7%	10.7%	12.8%	11.6%	12.0%	12.1%
All Tenured/ Tenure Track	13.4%	11.9%	missing	missing	15.2%	15.2%	15.5%	15.0%	16.1%	16.3%	15.5%	16.9%	16.9%	17.5%	19.0%	20.9%	18.6%	15.4%
Other (Non- tenure Track)	50.8%	31.8%	missing	missing	32.3%	38.4%	32.7%	32.3%	39.6%	34.4%	40.5%	33.5%	36.1%	33.0%	34.1%	39.5%	36.1%	39.8%
N Departments	120	118	120	120	120	120	128	122	122	124	124	123	119	121	122	122	124	124

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

earlier reports, this report will henceforth refer to this pool as "non-doctoral" departments.

Before proceeding, it is worth noting that while the observations below catch the main features of various trends in the representation of women, they abstract from serial changes in the composition of the sample and of respondents.20

#### 2. Summary of 2014 Results

This overview begins with an oftneglected group, teaching faculty outside *of the tenure track.* These faculty typically hold multiyear rolling contracts and carry titles such as adjunct, instructor, lecturer, visitor or professor of the practice. As seen in Table 1, in doctoral departments, the representation of women in these positions runs high, currently standing at 39.8%, exceeding that not just of assistant professors but even that of new PhDs by almost seven percentage points. In 2014 the share of nontenure track women was over two and one half times their share of all tenure track positions combined (15.4%), and

20 For example, for reasons given in note 19, the data for 2012 and earlier would overstate the representation of women in economics departments if, as compared to economics departments, business departments tended to have a higher representation. In addition, the response rates and composition of responding departments changed from year to year.

this disparity is greater still in the top 20 departments.

With regard to doctoral departments, with one exception, broadly speaking the last 18 years show some growth in the representation of women at each level of the academic hierarchy. The exception is the representation of women amongst first year PhD students. For nearly two decades this has hovered around 33%. As noted in the 2006 Annual Report and reinforced by Goldin (CSWEP Newsletter, Spring/Summer 2013), given that the share of baccalaureates going to women is rising, this constant 33% means that the fraction of women baccalaureates pursing a PhD in economics is actually falling.

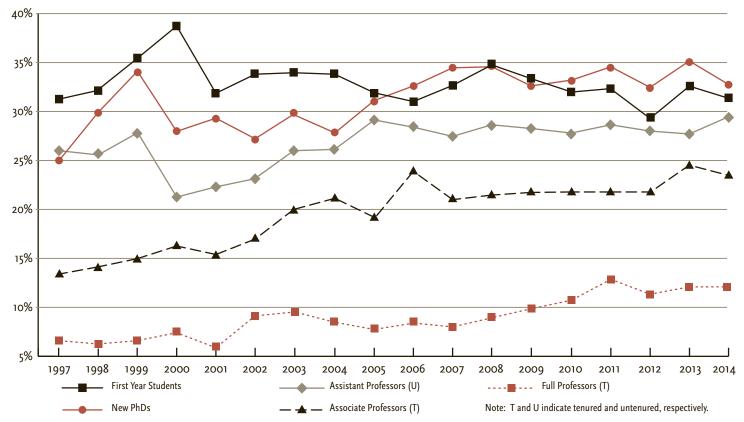
Two proverbial truths continue to hold: (i) At every level of the academic hierarchy, from entering PhD student to full professor, women have been and remain a minority. (ii) Moreover, within the tenure track, from new PhD to full professor, the higher the rank, the lower the representation of women. In 2014 new doctorates were 32.9% female, falling to 29.5% for assistant professors, to 23.1% for tenured associate professors and to 12.1% for full professors. This pattern has been characterized as the "leaky pipeline."

Because the growth in women's representation has differed across ranks.

the gaps in representation between adjacent ranks have changed. Thus, following some convergence between women's representation at the associate level to that at the assistant level around the turn of the century, convergence seems to have ceased, with a 6 to 7-percentage point difference stubbornly persisting to the present. In addition, this implies that the gap between women's representation at the full and associate levels has increased considerably over the last 18 years. It is worth noting that the latter is not necessarily an unwanted development. It is the result of relatively good growth in women's representation at the associate level as compared to the full level, where women's representation changes only slowly as the stock of full professors at any given time reflects something like a 25-year history of promotions from associate to full.

Turning to a comparison of nondoctoral with doctoral departments, at every level in the tenure track, women's representation in non-doctoral departments runs higher—roughly 10 percentage points higher—than in doctoral departments (see Figures 1 and 2). Similar to the trend in doctoral departments, women's representation at the assistant professor level has mildly trended up and at the full level somewhat more so.

Figure 1. The Pipeline for Departments with Doctoral Programs: Percent of Doctoral Students and Faculty who are Women In 2014, n = 124 responding departments of 124 surveyed



Deserving of attention, the non-doctoral departments do not share the strong upward trend at the associate level exhibited by doctoral departments. For non-doctoral departments for the past 12 years the trend for women's representation at the associate level is, if anything, down.

One consequence of this last fact is that for the non-doctoral departments, during the last 12 years, while the leak in the pipeline between associate and full professor has shown some tendency to lessen, that between assistant and associate has grown.

A further comparison of non-doctoral programs to a trifurcation of doctoral programs by rank shows that for all tenure track ranks combined, the representation of women declines as the emphasis on research increases, averaging 41.4% for non-tenure track teaching positions in non-doctoral departments, 39.8% of non-tenure track teaching positions in doctoral departments, 32.4%

of all tenure track positions in nondoctoral departments, 15.4% in all doctoral departments, 14.1% in the top-20 departments and 13.0% in the top 10 departments. This represents a remarkable decline in women's representation as departmental research intensity increases.

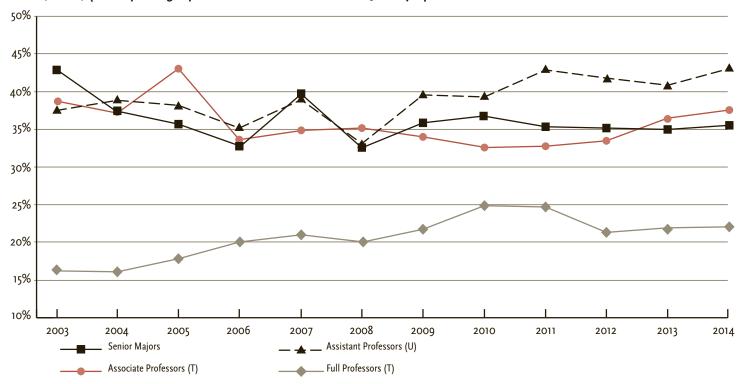
With regard to the advance of cohorts of academics through the ranks, this report presents a simple lock-step model of these advances. With a maximum of 41 years of data on each rank we can track the gender composition of some relatively young cohorts from entering graduate school though the PhD and of other older cohorts from receipt of the degree though the assistant and associate professor ranks. Unfortunately, these data do not suffice to analyze the advance of cohorts from associate to full professor. The analysis indicates that if recent trends continue, then 2001 marks the advent of policies in PhD programs that maintain women's representation from matriculation through graduation. In addition, the cohort analysis indicates little in the way of a serious loss of women relative to men as cohorts advanced from earning the degree to becoming assistant professors.

In contrast, the data show a significant and persistent loss of women relative to men in the transition from assistant to tenured associate professor. Of 26 cohorts of new PhDs (1974–1999), fully 23 saw a drop in the representation of women.21 The drop was usually greater than 5 percentage points and shows no obvious improvement over time.22 This result strongly corroborates the findings in earlier studies and draws attention to the paramount importance

<sup>21</sup> Under our lock-step assumptions, the 1999 PhD cohort became seventh-year associate professors in 2013 (= 1999 + 14).

<sup>22</sup> While a proper adjustment for a presumed overrepresentation of older men with extended years in rank as associate professor would reduce the size of the drop, this adjustment would grow smaller over time. Thus, it seems unlikely to account for the persistence of this gap.

Figure 2. The Pipeline for Departments without Doctoral Programs: Percent of Students and Faculty who are Women In 2014 n = 117 (106 responding departments + 11 Web-harvested of 125 surveyed)



of the tenure decision in women's advance, a characteristic of the economics profession but not shared by other analytical disciplines such as physics and mathematics.

#### 3. Summary Conclusions

Past intakes and subsequent advancements of women and men determine the contemporaneous distribution of men and women on the academic economists' ladder. This report points to two critical junctures: the failure to grow of the representation of women at the intake; and, relative to men, the subsequent poorer chance of advancing from untenured assistant to tenured associate professor. With regard to the first, in the face of the growing representation of women at the baccalaureate level, the stagnation of the share of women in entering PhD classes means that entering PhD students represent a declining fraction of new baccalaureate women. This latter decline is no doubt rooted in the analogous decline in the fraction of women

undergraduates who major in economics and may in part stem from the way we teach economics at the undergraduate level, as stressed by Goldin (CSWEP Newsletter, Spring/Summer 2013). This is an issue for both doctoral and non-doctoral departments.

With regard to the second juncture, the advancement of women from untenured assistant to tenured associate professor is no doubt intertwined and jointly determined with family-related decisions. Moreover, with rational expectations these decisions, in turn, feed back to the decision to major in economics and to enter a PhD program in the first place. Here, the institutional setting and expected institutional setting (length of the tenure clock, genderneutral family leave, on-site child care and so forth) can play significant roles.

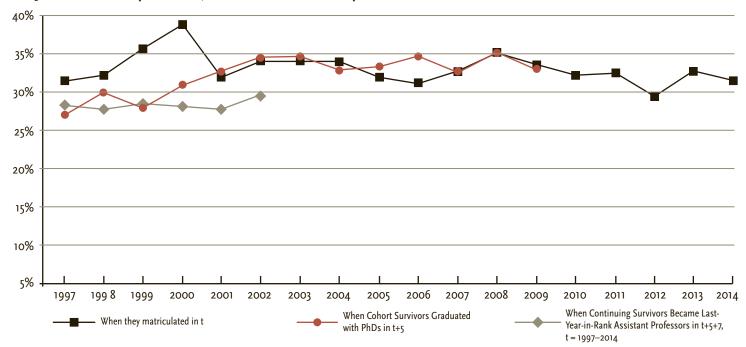
Finally, it is worth recognizing the high representation of women in non-tenuretrack teaching jobs and that the CSWEP data do not cover placement into these jobs, contracts, durations in such jobs or exits therefrom. The data also do not cover non-academic jobs.

In closing out this summary, it is worth noting that the 43 years of CSWEP data on the evolution of faculty composition at the department level are unique in the social sciences and beyond. It is time to document and maintain these data in a way that meets professional standards, to put in place a system for maintenance for future years and to make the descriptive statistics at group levels (e.g., doctoral, non-doctoral and others) available online. It is important to start now, before too many more of the early creators of the database pass from the profession. The recent CSWEP proposal to restructure its Board speaks to this need. If adopted by the AEA Executive Committee, the new Associate Chair and Director of the Survey, would be tasked, inter alia, with accessing the big picture and determining how best to move forward.

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Figure 3. Lock-Step Model: The Percentage of Women in the 18 Cohorts of First-year PhD Students When They Matriculated, for 13 of these When They Graduated, and for 6 of these When They Became Last-Year-in-Rank Assistant Professors



# B. Women's Status in the Economics Profession: The Full Findings

#### 1. Doctoral Departments, 1997-2014

Before analyzing the women's representation at various ranks in the tenure track, it is worth noting their representation outside of these ranks, that is, amongst non-tenure track faculty. These are typically teaching faculty who hold multiyear rolling contracts and carry titles such as adjunct, instructor, lecturer, visitor or professor of the practice. As show in Table 1, for the universe of doctoral departments in 2013, women's representation amongst non-tenure track faculty averaged almost twice that in the tenure track. As of Fall 2014, women constituted 39.8% of non-tenure track teaching faculty but only 15.4% of tenure track faculty.

Turning to the tenure track, for the universe of doctoral departments, Table 1 and Figure 1 summarize women's representation for years at each level of the

academic hierarchy, from first year PhD students to new PhD and then the assistant, associate and full professor. With the exception of entering PhD students, broadly speaking the last 18 years show some growth in the representation of women at each level of the hierarchy. Focusing on the gaps between levels this so-called "pipeline" representation of women in the stock of economists at each rank (from first-year PhD students to tenured full professor) emphasizes the decline or "leaks" in the representation of women with increased in rank. Table 1 and Figure 1 document two well-known relationships: (i) at every level in the academic hierarchy, women have been and remain a minority, and (ii) the higher the rank, the lower is the representation of women.23 This latter fact has been described as the "leaky pipeline." After first examining the trends in representation at the various ranks, we will see how the size of these leaks has changed over time.

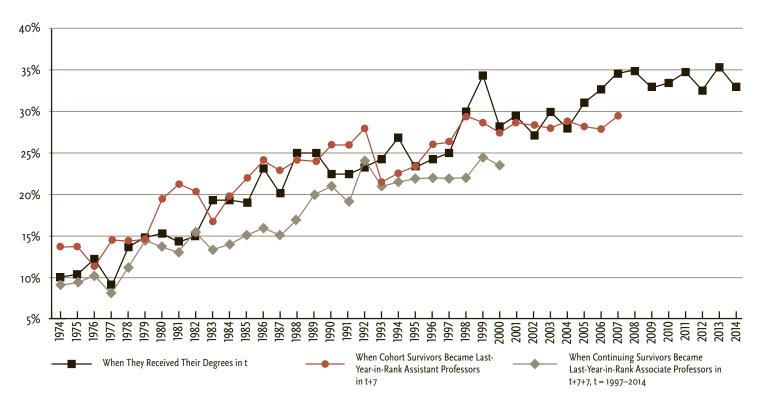
Table I and Figure I show varied levels of growth in women's representation across ranks. For example, the first row of Table I, as well as the blue line with squares in Figure 1, trace the share of first-year PhD students who are women over the most recent 18 years. As can be seen, the representation of women grew at different rates for different ranks. Despite two notable peaks (38.8% in 2000 and 35% in 2008) and one notable trough (29.3% in 2012), (a) the share of n-year PhD students who are women hovered around 33% with no obvious trend. As former AEA President Goldin would likely note, since the share of baccalaureates going to women is rising, this constant 33% means that the fraction of women baccalaureates pursing a PhD in economics is actually shrinking (CSWEP Newsletter, Spring/Summer 2013). Within the tenure ranks, growth in the share of women

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<sup>23</sup> At every stage subsequent to attaining the PhD, the percentage of women declines: roughly over the last six years, over 5.5 percentage points between new PhDs and assistant professors, about 6.5 percentage points between assistant professors and tenured associates, and over 11 percentage points between tenured associates and full. The sizes of these declines have been remarkably stable over time.

Figure 4. Lock-Step Model: The Percentage of Women in 41 Cohorts When They Received Their PhDs, for 34 of These When They Became Last-Year-in-Rank Assistant Professors and for 27 of These When They Became Last Year-in-Rank Associate Professors



has been (b) lowest at the assistant professor rank, (c) highest at the new PhD and associate professor levels and (d) in between at full rank.24

Turning from trends in the various levels to trends in the differences in the levels (the size of the "leaks"), we first compare the representation of women in the untenured assistant and tenured associate ranks. Earlier reports<sup>25</sup> showed a drop 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 15 years beginning with 2000 and ending with 2014. The earlier differences (1992-1999) hovered around 11.6 percentage points whereas

the drop in the representation of women from the assistant to the associate levels in the 15 later years averaged just over 6 percentage points with no trend. Thus, while there was a definite drop in the difference around the turn of the century, for the last 15 years there has been no further convergence in women's representation at the associate level to women's representation at the assistant level; an average difference of just over 6 percentage points stubbornly persists through 2014.26

Moving up one rung, we access the trend in the drop in women's representation between the associate and full levels. As a result of the considerably slower gain in women's representation at the full as compared to the associate level noted above, the gap in women's representation between the associate and full levels has increased. In percentage points it went from 6.9 in 1997 to 11.4 in 2014, averaging over 10 percentage points over the most recent 18 years.<sup>27</sup> This divergence could go on for a number of years as women become better represented in younger cohorts and thus in the associate professor rank, but when promoted have a small impact on the share of women at the full professor rank, a rank which contains disproportionately older, more male cohorts and where composition changes only slowly.

#### 2. Non-Doctoral Departments, 2003-2014

As noted above, in Fall 2014, CSWEP surveyed 125 non-doctoral economics departments. Figure 2 shows the representation of women amongst seniors in the major and amongst faculty in tenure track ranks for non-doctoral departments over the last 12 years. Over the

continues on page 18



<sup>24</sup> Simple comparisons of 2014 to 1997 show that over these 18 years, women's share of first-year PhD students, new PhDs, assistant professors, tenured associates and full professors grew 0.1, 7.9, 3.5, 10.1 and 5.6 percentage points, respectively.

<sup>25</sup> E.g., Joan Haworth, "2002 Report on the Status of Women in the Economics Profession."

<sup>26</sup> In 2013, due to a sizable uptick (2.9 percentage points) in representation at the associate level and a downtick at the assistant level, this 2013 gap was only 3.3 percentage points (= 2.9 - (-0.4)). Only future years can reveal if 2013 began the reversal of a persistent gap or recorded a transient narrowing. The 2014 suggest the latter.

<sup>27</sup> However tempting, the futility of focusing on short-term trends is illustrated by the years 2006 to 2012. In that interval the percent of associate professors who are women was flat while the corresponding percent of full professors was rising. Consequently the gap narrowed from the all-time recorded high of 15.8 percentage points in 2006 to 10.0 in 2012. As of 2012, one might have thought the gap was closing.

Table 2. The Pipeline for the Top 10 and Top 20 Departments: Percent and Numbers of Faculty and Students Who are Women

	Тор 10					Top 20						
Doctoral Departments	1997–2001	2002–2006	2007–2011	2012	2013	2014	1997–2001	2002–2006	2007–2011	2012	2013	2014
Faculty (Fall of year listed)												
Assistant Professor												
Percent	20.4%	22.0%	24.5%	20.6%	17.0%	20.0%	18.8%	25.0%	23.4%	20.5%	18.7%	21.3%
Number	21.0	23.0	23.7	22.0	15.0	18.0	32.5	44.9	48.3	44.0	37.0	43.0
Associate Professor												
Percent	13.2%	16.0%	18.8%	23.3%	23.3%	21.9%	14.6%	18.1%	22.4%	22.4%	19.1%	20.4%
Number	4.5	4.2	5.7	7.0	7.0	7.0	11.0	9.4	17.3	17.0	17.0	19.0
Full Professor												
Percent	5.9%	7.0%	8.7%	9.5%	9.6%	9.7%	6.2%	7.6%	9.6%	8.7%	9.6%	10.0%
Number	12.0	17.0	22.0	28.0	28.0	27.0	26.0	32.1	43.5	41.0	49.0	49.0
All Tenured/Tenure Track												
Percent	11.0%	12.0%	13.5%	13.2%	12.2%	13.0%	10.4%	13.2%	14.7%	13.4%	12.9%	14.1%
Number	37-5	44.2	51.3	57.0	50.0	52.0	69.5	86.4	109.2	102.0	103.0	111.0
Other (Non-tenure Track)												
Percent	34.8%	45.0%	31.6%	42.9%	43.4%	33.3%	38.8%	42.3%	32.6%	39.4%	33.8%	39.3%
Number	4.0	13.0	19.8	21.0	13.0	8.0	9.5	23.4	40.0	50.0	27.0	33.0
All Other (Full Time Instructor)												
Percent					50%	34.3%					51.2%	40.0%
Number					10.0	12.0					21.0	24.0
All Faculty												
Percent	18.2%	25.0%	18.2%	16.3%	15.7%	15.7%	17.5%	27.6%	19.2%	17.1%	16.6%	18.1%
Number	63.0	101.4	80.5	78.0	73.0	72.0	119.5	196.2	166.0	152.0	151.0	168.0
PhD Students												
First Year (Fall of year listed)												
Percent	26.7%	25.0%	25.9%	22.3%	27.9%	24.0%	30.3%	29.3%	27.3%	27.0%	28.4%	27.4%
Number	61.5	65.6	61.7	66.0	65.0	62.0	147.0	125.5	124.7	126.0	121.0	123.0
ABD (Fall of year listed)												
Percent	12.2%	27.0%	25.9%	24.8%	30.4%	25.4%	14.3%	28.0%	28.0%	28.3%	30.3%	26.5%
Number	165.5	216.8	206.0	246.0	255.0	217.0	269.0	380.8	393.5	430.0	444.0	427.0
PhD Granted (AY ending in year listed)												
Percent	24.5%	28.0%	26.4%	27.9%	31.3%	25.9%	24.7%	24.7%	28.4%	27.2%	33.2%	29.3%
Number	49.5	54-4	49.2	60.0	67.0	51.0	85.0	94.0	97.5	97.0	124.0	102.0
Undergraduate Senior Majors (AY ending in year listed)												
Percent			38.0%	37.7%	31.7%	37.3%			35.5%	35.9%	37.6%	37.7%
Number			898.50	1123.0	311.0	780.0			2019.0	2223.0	1505.0	2319.0
Undergraduate Economics Majors Graduated (in previous AY listed)												
Percent					39.6%	37.2%					38.6%	37.4%
Number					866.o	849.0					2000.0	2290.0
	1											

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. Prior to 2013, "All Other (Non-tenure Track)" included teaching faculty usually with multi-year contracts and carrying titles such as adjunct, instructor, lecturer, visitor, professor of the practice. Starting in 2013, the survey also asked for "All Other (Full Time Instructor)," any additional full-time instructors not counted by either tenure track or non-tenure track faculty. In 2013, the survey also began requesting "Undergraduate Economics Majors Graduated (in previous AY year listed)" in addition to "Undergraduate Senior Majors (AY ending in year listed)."

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Table 3. Percent of Women in Job Placements of New PhDs from the Top-10 and Top-20 Economics Departments, 1997-2014

		Тор 1	0			Тор 20						
Doctoral Departments	1997–2001	2002–2006	2007–2011	2012	2013	2014	1997–2001	2002–2006	2007–2011	2012	2013	2014
U.S. Based Job Obtained												
Percent	25.6%	24.8%	25.2%	28.5%	30.8%	25.0%	25.9%	21.9%	32.7%	27.6%	26.6%	26.9%
Number	22.0	37.0	32.3	41.0	41.0	36.0	41.0	59.0	59.8	59.0	68.o	66.o
<b>Doctoral Departments</b>												
Percent	15.9%	30.3%	25.3%	26.4%	24.4%	25.3%	17.6%	25.6%	27.2%	28.2%	28.5%	24.6%
Number	14.5	27.0	19.0	23.0	22.0	20.0	22.0	38.0	32.5	35.0	35.0	29.0
Academic Other												
Percent	38.9%	42.1%	41.9%	50.0%	66.7%	22.2%	44.4%	30.7%	26.0%	25.0%	50.0%	37.0%
Number	3.5	3.0	2.2	3.0	4.0	2.0	8.0	7.0	5.5	3.0	8.0	10.0
Non Faculty, Any Academic Department												
Percent					66.7%	31.3%					35.3%	34.8%
Number					4.0	5.0					6.0	8.0
Public Sector												
Percent	22.9%	26.2%	28.1%	36.8%	30.4%	16.7%	30.1%	27.3%	30.5%	24.4%	28.0%	20.7%
Number	4.0	2.0	7.2	7.0	7.0	2.0	11.0	14.0	12.7	10.0	14.0	6.0
Private Sector												
Percent	40.3%	20.4%	26.4%	25.0%	26.7%	25.0%	37.9%	31.3%	30.1%	24.4%	32.0%	27.1%
Number	9.5	5.8	8.2	8.0	8.0	7.0	12.5	12.8	13.5	11.0	16.0	13.0
Foreign Based Job Obtained												
Percent	15.9%	26.1%	21.3%	22.0%	34.0%	25.6%	17.9%	17.2%	24.0%	21.4%	33.3%	26.3%
Number	3.5	9.0	9-5	9.0	16.0	10.0	7.0	17.0	23.7	18.0	37.0	21.0
Academic												
Percent	60.0%	27.0%	20.4%	19.4%	25.8%	31.0%	20.0%	18.2%	23.0%	13.3%	32.1%	32.2%
Number	1.5	7.0	6.7	6.0	8.0	9.0	3.5	12.0	15.8	8.0	25.0	19.0
Nonacademic												
Percent	5.9%	16.0%	26.9%	30.0%	25.8%	10.0%	6.3%	11.5%	28.8%	41.7%	36.4%	9.5%
Number	1.5	2.0	2.8	3.0	8.0	1.0	2.5	4.0	7.8	10.0	12.0	2.0
No Job Obtained												
Percent	29.2%	22.6%	33.3%	0.0%	0.0%	0.0%	32.3%	33.3%	21.9%	16.7%	0.0%	0.0%
Number	7.0	1.0	0.2	0.0	0.0	0.0	10.5	4.0	1.2	1.0	0.0	0.0
Total On the Job Market												
Percent	20.6%	31.1%	26.3%	26.6%	27.9%	25.1%	21.9%	31.7%	28.8%	25.7%	28.6%	26.7%
Number	32.5	59.0	46.2	50.0	57.0	46.0	69.0	100.0	90.3	78.0	105.0	87.0

Note: For five year intervals, simple averages are reported.

first six years, representations at the assistant and associate levels track each other closely, but a noticeable gap characterizes the last six. In contrast, the gap in representation between the associate and full levels began at over 20 percentage points, declined fairly steadily to about 7 percentage points as of 2011 but has since widened to about 15.

Table 6 details the responses for 2014 showing that for the tenure-track

faculty as a whole 32.4% were women. A comparison of Figures 1 and 2 with Tables 1 and 6 shows that representation of women amongst seniors in the major ran higher in non-doctoral departments than in doctoral departments. Conversely, the representation amongst faculty in the tenure ranks is more than ten percentage points higher in non-doctoral departments as compared to doctoral departments.

In sum, over the 12 years for which we have data, in sharp contrast to doctoral departments, for non-doctoral departments the leak in the pipeline between associate and full professor shows some tendency to have lessened while that between assistant and associate seems to have grown.

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Table 4. Employment Shares by Gender	Тор	10	Тор 1	1–20	All Others		
and Department Rank for New PhDs in the 2013–14 Job Market	Women	Men	Women	Men	Women	Men	
U.S. Based Job (Share of all individuals by gender)	78.3%	78.8%	73.2%	69.6%	68.6%	64.1%	
Doctoral Departments	55.6%	54.6%	30.0%	42.3%	17.5%	29.3%	
Academic, Other	5.6%	6.5%	26.7%	14.1%	27.1%	26.3%	
Non Faculty Job	13.9%	10.2%	10.0%	5.6%	11.4%	13.3%	
Public Sector	5.6%	9.3%	13.3%	18.3%	10.8%	13.3%	
Private Sector	19.4%	19.4%	20.0%	19.7%	33.1%	17.8%	
Foreign Job Obtained (Share of all individuals by gender)	21.7%	21.2%	26.8%	29.4%	24.8%	31.4%	
Academic	90.0%	69.0%	90.9%	66.7%	71.7%	66.7%	
Nonacademic	10.0%	31.0%	9.1%	33.3%	28.3%	33.3%	
No Job Found (Share of all individuals by gender)	0.0%	0.0%	0.0%	1.0%	6.6%	4.5%	
Total Number of Individuals	46	137	41	102	242	421	

# 3. Cohorts of Academics and Their Advances Up the Ranks

The above picture of the general fall in women's representation with increase in rank (the leaky pipeline) tells us where we have been and where we are now—it does not tell us how we got here or where improvement is most critical.28 Past studies have found that, conditioning on years since degree and other observables, as compared to men women in economics have a lower probability of attaining tenure, take longer to attain tenure and have a lower probability of being promoted to full.29 To see how the annual CSWEP survey results fit with these past results, we turn to tracking the progress of academic cohorts over time.

# 3a. Up the Academic Ladder: 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. At each step some men and some women are lost. The focus is on whether a disproportionate share of women is lost. Assume that movements through the ranks for those who survived 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 by looking at degree recipients in t+5, assistant professors in t+5+7(by which time no assistant professors remain from cohorts older than the tth) and associate professors in t+5+7+7 (by which time no associate professors remain from cohorts older than the tth).

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 of female associate professors, a caveat to bear in mind.30 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 of females at the associate level.

Using this lock-step model, we create synthetic cohorts and graph their progress from new PhD students, to obtaining the degree, to becoming seventh-year assistant professors and then to becoming seventh-year associate professors. In every graph we use all of the available data, which necessarily means that we observe fewer transitions for younger cohorts. The extreme case is the transition to full professor. *Unfortunately, even CSWEP's 41-year time series* 

<sup>28</sup> One could isolate earlier sentences and mistakenly interpret some as showing our profession is doing well and others as 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 are comprised of individuals from different cohorts.

<sup>29</sup> 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, "Academc Women's Careers in the Social Sciences" in *The Economics of Economists*, Alessandro Lanteri and Jack Vromen, eds. Cambridge: Cambridge University Press, 2014.

<sup>30</sup> 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, 10 years would not work because something like 30-year lags would be required. For this we do not have the data.

Table 5: The Current Gender Composition of Faculty and Students: **Economics Departments with Doctoral Programs** 

Faculty Composition (Fall 2014)	Women	Men	Percent Female
Assistant Professor	224	551	28.9%
Untenured	213	509	29.5%
Tenured	11	42	20.8%
Associate Professor	149	486	23.5%
Untenured	6	20	23.1%
Tenured	143	466	23.5%
Full Professor	187	1364.5	12.1%
Untenured	1	10	9.1%
Tenured	186	1354.5	12.1%
All Tenured/Tenure Track	560	2401.5	18.9%
Other (Non-tenure Track)	165	250	39.8%
All Other Full Time	55	111	33.1%
All Faculty	780	2762.5	22.0%
Students and Job Market			
Students			
Undergraduate Senior Majors (2014–15 AY)	6019	12459	32.6%
Undergraduate Economics Majors Recently Graduated (2013–14, including Summer 2014)	6326	12690	33.3%
First-year PhD Students (Fall 2014)	493	1075	31.4%
ABD Students (Fall 2014)	1318	2800	32.0%
PhD Granted (2013–2014 Academic Year)	356	727	32.9%
Job Market (2013–2014 Academic Year)			
U.S. Based Job	232	449	34.1%
Doctoral Departments	58	168	25.7%
Academic, Other	55	88	38.5%
Non Faculty	27	51	34.6%
Public Sector	24	59	28.9%
Private Sector	68	83	45.0%
Foreign Job Obtained	81	191	29.8%
Academic	62	128	32.6%
Nonacademic	19	63	23.2%
No Job Found	16	20	44.4%
Number on Job Market	329	660	33.3%
Total Number of Departments	12	4 of 124 Survey	red

of departmental data is insufficient to present a meaningful number of cohort transitions to full professor.

#### 3b. Up the Academic Ladder: Results for Economists

#### 3b. i. The PhD Program: From Matriculation to Graduation

Figure 3 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).31 If these plots were coterminous, for each cohort of entering graduate students, the representation of women relative to men would not then have changed between matriculation and graduation. Observe

**Table 6. Gender Composition of Faculty and Students: Economics Departments without Doctoral Programs** 

Faculty Composition	Women	Men	Percent Female
Assistant Professor	131	171	43.4%
Untenured	124	163	43.2%
Tenured	7	8	46.7%
Associate Professor	110	189	36.8%
Untenured	4	13	23.5%
Tenured	106	176	37.6%
Full Professor	108.5	370	22.7%
Untenured	8	16	33.3%
Tenured	100.5	354	22.1%
All Tenured/Tenure Track	349-5	730	32.4%
Other (Non-tenure Track)	61	86.17	41.4%
All Other (full time)	25	64	28.1%
All Faculty	435-5	880.17	33.1%
Student Information (2013–2014 Academic Yea	r)		
Undergraduate Seniors Expecting to Graduate (2014–2015)	1943	3637	34.8%
Undergraduate Economics Majors Graduated in Previous Year (2013—2014)	1941	3494	35.7%
Completed Masters	61	92	39.9%
<b>Total Number of Departments</b>	1	17 of 125 Surve	yed

that the four oldest cohorts (matriculated 1997-2000) experienced a drop in the representation of women between entry and graduation from their PhD programs (red line below blue). In contrast, the younger cohorts (matriculated 2001-2008) experienced no such decline. If this result continues to hold for the 2009 and subsequent cohorts of first-year PhD students, then 2001 marks the advent of policies in PhD programs that maintain women's representation from matriculation through graduation.

# 3b. ii. The Tenure Track: From the PhD to Assistant and to

While the data on first-year PhD students only go back to 1997, the data for graduating PhDs goes back to 1974. Hence, Figure 4 graphs the representation of women in 41 cohorts of new PhDs at graduation (red with circles), when cohort survivors became seventh-year assistant professors (green with diamonds) and when continuing survivors became seventhyear associate professors (purple with triangles).32 Thus, for example, the circle, diamond and triangle above 2000 depict the fall in the percentage of women in the 2000 cohort of new PhDs as survivors advanced from obtaining the PhD (circle) to seventh-year assistant professors (diamond) and then to seventh-year associate professors (triangle). If these

continues on page 22  $\P$ 

<sup>31</sup> CSWEP first collected data on entering PhD classes in 1997. In the model graduate students who enrolled in 2008 graduated in 2013 and so 2008 is the last cohort we can observe.

<sup>32</sup> 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.

three points were coincident, there would have been no drop in women's representation as this 2000 cohort of new PhDs advanced through the ranks.

As manifested in the truncations in the graphs, cohorts who received their PhD in 2008 or later are too young to have been seventh-year assistant professors by 2014. Hence, Figure 4 depicts the representation of women in 34 cohorts as they progressed from new PhDs to seventh-year assistant professors. For the oldest cohorts (PhDs dated 1974-1992), women's representation most often rose between PhD receipt (red) and the last year as assistant professor (purple). Among the 15 more recent cohorts (1993-2007), several experienced noticeable drops. But overall these two lines track each other reasonably well. For the observable 34 cohorts, these data reveal no worrisome drop in the representation of women in their transition from new PhD to assistant professor.

Turning to the transition from assistant to tenured associate professor, the picture is less rosy. Cohorts that received their PhDs in 2001 or later are still too young to have been seventh-year associate professors by 2014. Thus, Figure 4 depicts this transition for 27 cohorts of new PhDs graduating 1974-2000. Fully 24 of these cohorts saw a drop in the representation of women.33 The drop was most often greater than 5 percentage points and shows no obvious improvement over time.34 This cohort analysis likely provides the best available evidence on the extent to which in economics women fall off of the academic ladder at the point where they would become tenured associates. The evidence shows a sizable and persistent fall in women's representation in the transition from assistant to tenured

associate professor. It is worth noting that failure to climb at tenure time is not found in other analytical disciplines such as physics and mathematics.

Turning from the advance of cohorts through the ranks, we return to the analysis of stocks of academic economists, this time breaking out the data on top departments and also recording the job placements of new PhDs in the job market last year.

#### 4. Departments by Type: Top-10, Top-20 and All Doctoral Departments

Tables 2 and 3 break out the survey results for the doctoral programs ranked as top-10 and top-20.35 As seen by comparing Tables 1 and 2, at each rank in the tenure track and at each stage in the PhD program, the average representation of women in top-20 departments is lower than for all doctoral departments. Moreover for all tenure track ranks combined, the representation of women declines as the emphasis on research increases, in 2014 averaging 32.4% for non-doctoral departments, 15.4% for all doctoral departments, 14.1% for the top-20 departments and 13.0% for the top 10 departments.

Of special note are the data for nontenure track, rolling-contract teaching positions. For the top-20 departments, women's representation in non-tenure track jobs was well over two and a half times as high as their representation in tenure track jobs (Table 2 shows 39.3/14.1 = 2.78 >2.5). This ratio is about the same as for all doctoral departments (Table 1 shows 39.8/15.4 = 2.58).

Going back to 1997, Table 3 gives placements of PhD students from the top 10 and the top 11-20 departments. The number of placements outside of the U.S. about tripled. Note that the number of women in any category tends to be small. With this warning, the reader is invited to interpret these data.

#### 5. Placements of New PhDs

Table 4 shows the types of jobs obtained by new PhDs in the 2013-14-job market. The first column shows that of the 46 women in the job market from top-10 departments, 78.3% took a job in the U.S. Of those who took a job in the U.S., 55.6% landed jobs in doctoral departments and 5.6% in non-doctoral departments. The remaining 13.9%, 5.6% and 19.4% went to non-faculty jobs, the public sector and private sectors, respectively. As shown in the second to last line, virtually all graduates of top-20 departments found a job. Success in the market was also high for other doctoral departments, with no job found by 6.6% of women and no job found 4.5% of men.

Focusing on U.S.-based jobs, as line 2 shows, on average, and for women and men, the higher the rank of the department granting the PhD, the more likely the first job was in a doctoral department. With regard to gender disparities in placements into doctoral departments, a single year of data provides no reliable evidence. Indeed, looking over these same gender comparisons in this and in the previous four CSWEP Annual Reports, for departments ranked 21 and below the male new PhDs were slightly more likely to place into doctoral departments than their female counterparts. However, in the analogous comparisons for both top-10 and 11-20 ranked departments, about half of such comparisons show a male bias and the other half show a female bias. The caveat here is that the CSWEP data on placements of new PhDs into doctoral departments likely includes placements into nontenure track teaching positions and in these women are overrepresented.

<sup>33</sup> Under our lock-step assumptions, the 2000 PhD cohort became seventh-year associate professors in 2014 (= 2000

<sup>34</sup> While a proper adjustment for a presumed overrepresentation of older men with extended years in rank as associate professor would reduce the size of the drop, this adjustment would grow smaller over time. Thus, if anything, over time this effect would increase the size of these drops in representation.

<sup>35</sup> The motive for using the top 20 rather than those ranked 11-20 is to have more individuals in the cells. The rankings are the 2013 rankings from US News and World Report as at the time of this writing the 2014 rankings had not yet been released. Due to a three-way tie for 19th, for the purposes of this report, there are 21 departments in the "top 20." The top 10 are Harvard University, Massachusetts Institute of Technology, Princeton University, University of Chicago, Stanford University, University of California-Berkeley, Northwestern University, Yale University, University of Pennsylvania and Columbia University. The next 11 are New York University, University of Minnesota-Twin Cities, University of Michigan-Ann Arbor, University of Wisconsin-Madison, California Institute of Technology, University of California-Los Angeles, University of California-San Diego and Cornell University at 18th with Brown University, Carnegie Mellon University (Tepper) and Duke University all tied for

Turning to other types of placements, 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. With regard to foreign placements, overall, those who take jobs outside the U.S. (and especially women) tend to take academic jobs. In 2012 and earlier, regardless of the rank of her graduate school, a woman was more likely to take a job in the U.S. than her male counterpart. Last year the pattern reversed as female graduates from departments ranked 11-20 were four percentage points more likely than their male counterparts to take jobs outside of the U.S., and in 2014 this gap grew to 6.6 percentage points. This pattern, as well as others exhibited by the data on foreign placements, is nonetheless difficult to interpret. As incomes and the quality of economics departments in foreign countries rise, so too may the representation of women both amongst foreign students in U.S. graduate schools and amongst new doctorates obtaining jobs in foreign countries. However, with no data in the CSWEP survey on the prevalence of foreign students, much less their countries of origin, meaningful interpretations of gender differences in foreign placements are simply not possible.

On the whole the evidence from the 2014 Survey indicates that our profession is doing well, finding jobs for nearly 96% of its new PhDs. However, except for placements by the top-10 departments, in 2014 women graduates were more likely than men to find their first job in a department without a doctoral program

#### 6. 2014 Survey Details

Tables 5 and 6 contain more details from the 2014 surveys of doctoral and nondoctoral departments, respectively. This is the fifth year that CSWEP has asked departments to report their numbers of male and female senior economics majors. Here we simply note that for doctoral departments the combined total of seniors in the major for all departments responding to the 2013 CSWEP survey was 17,748, of which 32% were women. In 2014 these numbers were 18,478 and 32.6%, respectively. This shows no growth in the percent of females and, as the share of women in the undergraduate population continues to grow, a continuing decline in the share of women undergraduates who major in economics (see Goldin, CSWEP Newsletter, Spring/Summer 2013).

# III. Board Rotations and Acknowledgements

CSWEP members may serve more than two terms on the Board as long as they are not consecutive for more than two terms. Given this I am thrilled to announce that, back by popular demand and starting a third term on the Board is Cecilia Conrad! Starting second terms on the Board are Kevin Lang, Serena Ng, Petra Todd and Anne Winkler, all with contributions too long to list. Thanks are also due to new Board members Ragan Petrie (our new Southern Representative) and Kosali Simon (our new CeMENT Director). Both have already assumed important committee roles. Finally, plaudits for advancing CSWEP's mission to Linda Goldberg and Madeline Zavodny, in their second terms, and Bevin Ashenmiller and Amalia Miller in their first terms. The quality of the ideas that bubble up from this Board, as well as the willingness of Board members to make the ideas work, is remarkable. Contributions of individual members were noted above in Section I of this report, but it is impossible to report anything close to all of them. All Board members enthusiastically advance the mission of CSWEP and it is my privilege and pleasure to work with them.

Special thanks go to Jennifer Socey, my Administrative Assistant. She has embraced the mission of CSWEP, using her skills as organizer, writer, editor, communicator and web-expert to handle everything from the mundane to substantive initiatives. She has made my role as chair possible and enjoyable. I also thank Daniel Osuna Gomez, a

Duke University MA student, who graciously produced the figures and tables for the 2014 statistical report.

CSWEP is fully funded by the American Economic Association. We are especially grateful to Peter Rousseau, secretary-treasurer and his excellent staff: Regina H. Montgomery, Barbara H. Fiser, Marlene V. Hight and Susan B. Houston as well as Michael P. Albert, Jenna Kensey, Gwyn Loftis, Linda Hardin and Julia Merry.

Finally the Committee is indebted to the Economics Department of Duke University for the administrative support of CSWEP's activities, office space, IT support, computer equipment, office supplies and substantial additional resources.

# January Jubilance from page 1

and insightful acceptance, Hoynes explored the four chapters of her career—growing up with economist parents, graduate studies at Stanford University and academic appointments at Berkeley and Davis. Given in her characteristically relaxed style with warmth and wit, Hoynes concluded her talk\* by urging all of us to make mentoring an integral part of our professional lives.

Economics (and humor) run deep in the families of both winners and a parent of each recipient spoke—Hilary's father, Professor Jeffrey Williamson of Harvard University and Emi's mother Professor Alice Nakamura, University of Alberta School of Business. Both suggested the secret to nurturing children to become economists is two-fold. First, as they sleep, whisper the mantra, "supply and demand." Second, engage them in conversation about economics: it can't fail to entice!

Marjorie McElroy, CSWEP Chair, concluded the meeting with brief overview of the 2014 Report on the Status of Women in the Economics Profession. The full report begins on page 7 of this issue.

View the acceptance talks of Hilary Hoynes and Emi Nakamura at https://www.aeaweb.org/home/committees/ CSWEP/videos.php.

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# Brag Box

"We need every day to herald some woman's achievements ... go ahead and boast!" -Carolyn Shaw Bell

Rebecca Judge, St. Olaf College, was promoted to Full Professor. She is the first female economist at St. Olaf to attain this rank.

Amanda Kowalski, Yale University, received an NSF CAREER Award for her proposal "Public Health Insurance, Medical Expenditures, and Labor Market Outcomes,"

Susanne Schennach, Brown University, and Janet Yellen, Federal Reserve Board, were elected as 2014 Fellows to the Econometric Society.

#### We want to hear from you!

Send announcements of honors, awards, grants received, promotions, tenure decisions and new appointments to cswep@econ.duke.edu. It will be our pleasure to share your good news with the CSWEP Community.

# **CSWEP** @ the Regionals

#### **Midwest Economics Association**

Anne Winkler, Midwestern Representative http://web.grinnell.edu/MEA/

2015 Annual Conference, March 27–29, 2015 Minneapolis, MN: Hyatt Regency Minneapolis

#### **Western Economics Association International**

Bevin Ashenmiller, Western Representative http://www.weainternational.org

90th Annual Conference, June 28–July 2, 2015 Honolulu, HI: Hilton Hawaiian Village, Waikiki

#### **Southern Economic Association**

Ragan Petrie, Southern Representative http://www.southerneconomic.org 85th Annual Meeting, November 21-23, 2015 New Orleans, LA: New Orleans Marriott

#### **Eastern Economic Association**

Amalia Miller, Eastern Representative http://www.quinnipiac.edu/eea/ 2016 Annual Conference, Dates TBA Washington, DC: Washington Marriott Wardman Park

# Join the CSWEP Liaison Network!

Three cheers for the 150+ economists who have agreed to serve as CSWEP Liaisons! We are already seeing the positive effects of your hard work with increased demand for CSWEP paper sessions, fellowships and other opportunities. Thank you!

Dissemination of information—including notice of mentoring events, new editions of the CSWEP News and reporting requests for our Annual Survey and Questionnaire—is an important charge of CSWEP. For this key task, we need your help. Visit CSWEP.org to see the list of current liaisons and departments for whom we'd like to identify a liaison. We are also seeking liaisons from outside the academy. To indicate your willingness to serve, send an e-mail with your contact information to cswep@econ.duke.edu.