

Report of the Committee on the Status of Women in the Economics

Profession 2007 - submitted by Lisa M. Lynch*

The Committee on the Status of Women in the Economics Profession was established by the American Economic Association to monitor the status of women in the profession and to engage in other efforts to promote the advancement of women in economics. This report presents results from our annual survey of economics departments, a supplemental survey of economists in the top twenty business schools and CSWEP's activities over the past year.

Data on Women Economists

The 2007 CSWEP surveys were sent to 124 economics departments with doctoral programs and 147 non-Ph.D. departments listed in the Carnegie Classification of Institutions of Higher Education (2000 Edition) "Baccalaureate Colleges – Liberal Arts" and six departments with an undergraduate and Masters only economics degree. We obtained our highest response ever for the Ph.D. survey of 82.2 percent (102 departments responded) and a lower rate of 52.4 percent (77 departments) for our non-Ph.D. programs survey.

Figure 1 and Table 1 summarize the trends in women's representation in Ph.D. granting departments over the past decade. These charts are labeled as female economists "in the pipeline" to show the progression of women through the ranks from newly minted Ph.D.s to tenured full professors. As shown in Table 1, after reaching a peak of 38.8 percent in 2000 the share of 1st graduate students who are women fell to a low of 31 percent in 2006 but recovered somewhat to 32.7 percent by 2007. The female share of newly completed Ph.D.'s has increased for the third year in a row to a new high

of 34.5 percent in 2007. Assuming 5 years or more to complete a doctorate in economics this suggests that the pipeline is not very leaky at least through completion of the Ph.D.

However, the female share of untenured assistant professors fell for the second year in a row to 27.7 percent from its peak of 29.4 percent in 2005. In addition, the female share of tenured associate professors declined from 24.1 percent in 2006 to 21.2 percent in 2007. Finally there has been little growth in women's representation in the ranks of tenured full professors over the past decade with the fraction tenured who are women at just 8.1 percent in 2007. All of this suggests that while the pipeline is not leaky through completion of the Ph.D., there are some worrying developments once women enter the job market.

Figure 2 presents data on the status of women in economics departments located in liberal arts institutions over the past five years. Here the pipeline is much less leaky with the share of female economics majors, assistant professors, and tenured associate professors very similar. The share of tenured full professors in liberal arts institutions who are women is more than double that in Ph.D. departments and has been rising over time to just over 20 percent in 2007.

Detailed Results for Ph.D.-Granting Departments (2007-2008)

Tables 2 and 3 present results from the 2007 CSWEP survey for Ph.D. granting departments in greater detail, first for all departments and then for the top ten and twenty ranked departments¹ separately. There is little difference between the share of women

¹ These rankings are taken from *US News and World Report* 2005 Edition. The top ten departments include Massachusetts Institute of Technology; Harvard University; Princeton University; Stanford University; University of Chicago; University of California-Berkeley; Yale University; Northwestern University; University of Pennsylvania; and the University of California-San Diego. The top twenty departments additionally include, University of California-Los Angeles; University of Michigan-Ann

faculty by rank for all Ph.D.-granting programs and those in the top ten or twenty at the assistant and full professor level. At the associate professor level however, the share of tenured women is lower for the top twenty departments (14.5 percent) versus all Ph.D. granting departments (21.2 percent). In terms of students, there is a gap in the share of women at the student level for all Ph.D. programs and the share of women in the top twenty programs. Women are 32.7 percent of first year Ph.D. students in all Ph.D. departments but 29.5 percent in the top ten departments and 29.0 percent in the top twenty departments. The gap is larger for those who received their Ph.D. in 2006-2007. For all Ph.D. programs the female share of doctorates granted was 34.5 percent, but just 27.5 percent in top ten departments and 30.8 percent in top twenty departments.

Tables 2 and 3 also show how women have fared in the job market for new Ph.D.'s relative to their male counterparts. The vast majority of male and female graduate students in economics end up taking jobs in the United States and women are somewhat more likely to take a U.S.-based job than their male counterparts (81 vs. 75 percent). Historically women have been underrepresented in academic positions in Ph.D.-granting institutions and "over-represented" (relative to their share of all graduates) in academic positions in non-PhD. granting institutions and in public sector jobs. Focusing just on the U.S. job market, women constituted 29.4 percent of new hires in Ph.D. granting departments and 44.7 percent in non Ph.D. granting academic programs. Table 4 provides more detailed analysis of where male and female Ph.D.'s end up becoming employed by rank of department -- the top ten departments, the top 11-20

Arbor; University of Wisconsin-Madison; University of Minnesota-Twin Cities; California Institute of Technology; Columbia University; University of Rochester; Cornell University; Carnegie Mellon; and New York University.

departments, and all the remaining departments. While there is a slightly higher fraction of males in the top ten programs that end up in an academic position in a PhD program than females, there is little other difference in the types of other positions students in these departments end up in by gender. However in the top 11-20 departments a much higher fraction of male students end up as faculty members in Ph.D. departments than female students (61.4 versus 41.4 percent), while a much higher fraction of female students leave academia for public or private sector jobs. For students in the remaining 104 doctoral programs a slightly higher share of male students end up in academic positions in Ph.D. departments while a slightly higher share of female students end up as faculty in non-Ph.D. departments. Interestingly for those who end up in non-US based employment, women are much more likely to end up in an academic job 72% than men 57%.

The CSWEP survey also includes information on non-tenure track faculty. As seen in Tables 2-3, this category is disproportionately female. Among all Ph.D.-granting economics departments in the US, 40.5 percent of the non-tenure track faculty is female in 2007 compared to 15.5 percent of the tenured/tenure track faculty. Similarly, in the top ten(twenty) departments women comprise 34.7(35.7) percent of the non-tenured faculty versus 13.5(14.1) percent of the tenured/tenure track faculty. More generally we see an increase in the share of all faculty in non-tenured positions increasing from 10.8 percent in 2005 to 13.1 percent in 2007.

Detailed Results for non-Ph.D. programs (2007-2008)

As shown in Figure 2 female faculty are better represented at liberal arts institutions than at Ph.D.-granting institutions. In our 2007 survey of liberal arts

institutions (plus 6 departments that only granted BA/MA economics degrees) women were 39.1 percent of untenured assistant professors, 34.9 percent of tenured associate professors and 21.0 percent of tenured full professors; comprising 29.3 percent of tenured or tenured track faculty versus just 15.5 percent in Ph.D.-granting programs. In terms of the pipeline of women entering doctoral programs in economics there is good news in this year's survey as the fraction of undergraduate majors who were women at these institutions rose to almost forty percent.

Liberal arts institutions are not the only place in academia where economists become faculty members. Many academic economists are also employed in schools of public policy, public health, agricultural economics, employment and labor relations, and business schools. Therefore the annual CSWEP on economics provides an incomplete picture of the representation and status of female economists at universities, especially if women economists are more likely by the nature of their field of study to be located in these other types of programs. To begin to address this gap CSWEP conducted in 2004 its first survey of economists at business schools and we conducted a second survey this year. It is not trivial to collect data on the employment of economists at business schools. Within business schools economists may be located in a separately designated economics department but may also be found in other departments such as finance or marketing. Therefore, we have replicated the methodology used in 2004 (see the Winter 2005 CSWEP Newsletter for more details) and collected data on faculty via the web. The Chair is extremely grateful to Nancy Rose and Fiona Scott Morton for designing and undertaking this data collection. In order to keep the project manageable and comparable

to our 2004 survey we focused on the top 20 business schools as designated in 2002.² We define a faculty member as an “economist” if they have a Ph.D. in economics regardless of what department they are actually teaching in. We downloaded from the web the list of faculty on staff in the Fall term of 2007 from each of these business schools and identified the economists from this list. The results of this data collection are reported in Table 6 with data from 2004 for comparison. Note that there is a very large number of economists in these twenty business schools (689 compared to 802 in the top 20 Ph.D. programs) and this number has been growing over time. The representation of women economists at these business schools is similar to the share of women in the top twenty Ph.D. departments at the assistant professor level (26.0 versus 25.1 percent) but higher at the associate professor level (18.5 versus 14.5) and full professor level (10.7 versus 8.6 percent). Since 2004 the share of women faculty in these business schools has remained constant at the assistant professor level but increased at both the associate and full professor rank.

The Committee’s Recent Activities

On-going Activities

² These were based on 2002 *Business Week* Rankings and include: Harvard Business School; Stanford Graduate School of Business; The Wharton School (University of Pennsylvania); Sloan School of Management (Massachusetts Institute of Technology); Kellogg School of Management (Northwestern University); University of Chicago Graduate School of Business; Columbia Business School; The Fuqua School of Business (Duke University); The Amos Tuck School of Business Administration (Dartmouth College); Yale School of Management; The Johnson School of Management (Cornell University); The Stephen M. Ross School of Business (University of Michigan); The Haas School of Business (University of California at Berkeley); Darden Graduate School of Business Administration (University of Virginia); Leonard N. Stern School of Business (New York University); Anderson School of Management (University of California at Los Angeles); Kenan-Flagler Business School (University of North Carolina at Chapel Hill); Tepper School of Business (Carnegie Mellon University); Kelley School of Business (Indiana University); Goizueta Business School (Emory University).

One of CSWEP's major activities is the production of our thrice-yearly newsletter. In addition to reporting on the annual survey of departments, the Winter newsletter, co-edited by Nancy Rose, included articles on how to have difficult discussions with your department chair or Dean including how to negotiate job offers and discuss parental leave. Donna Ginther co-edited the Spring Newsletter that included articles on striking the balance on work and family in academia. This issue also included an interview with 2006 Carolyn Shaw Bell Award winner, Barbara Fraumeni. The Fall newsletter was co-edited by Anna Paulson and featured a timely discussion on navigating the job market. These newsletters would not be possible without the tireless efforts of Karine Moe.

As part of its ongoing efforts to increase the participation of women on the AEA program, CSWEP organized five sessions plus a panel discussion on the pipeline of female economists for the January 2007 ASSA meetings in Chicago. Ann Owen and David Weil organized two sessions on long-run growth and Gail Hoyt and Karine Moe organized three sessions on gender-related issues.

In 2007 CSWEP celebrated its 35th anniversary and as part of these celebrations we had a lively business meeting at the 2007 January national meetings in Chicago attended by close to 100 people. I presented results on the annual department survey and summarized CSWEP activities over the past year. During this meeting the Carolyn Shaw Bell Award was presented to Barbara Fraumeni at the University of Southern Maine and the Elaine Bennett Research Prize was presented to Monica Piazzesi of the University of Chicago. As part of this prize Professor Piazzesi presented a special lecture that summarized her research. The Carolyn Shaw Bell award is given annually to a woman

who has furthered the status of women in the economics profession through her example, achievements, contributions to increasing our understanding of how women can advance through the economics profession, and mentoring of other women. The Elaine Bennett Research Prize was established in 1998 to recognize and honor outstanding research in any field of economics by a woman at the beginning of her career. The Chair thanks Sharon Oster, Patricia Moser and Caren Grown for their service on the 2006 Carolyn Shaw Bell Awards Committee and Susan Athey, Marianne Baxter and Judith Chevalier for their service on the 2006 Elaine Bennett Research Prize. The 2007 winner of the Carolyn Shaw Bell award is Olivia Mitchell and the Chair would like to thank Barbara Fraumeni, Patricia Mosser and Caren Grown for all their work on this award committee.

As part of our ongoing mentoring efforts CSWEP sponsored one regional mentoring workshop for junior faculty in economics after the February 2007 Eastern Economic Association meetings in Boston. Participants were enthusiastic in their exit survey about the quality and usefulness of the panels and overall activities of the workshop. We thank all the mentors and organizers who participated in these workshops especially Rachel Croson and Kim Marie McGoldrick. We will conduct an additional national workshop after the January 2008 national meetings in New Orleans. The National Science Foundation has extended our funding for these national and regional workshops through 2010. From 2011-2014 the American Economic Association has agreed to fund two additional national workshops and two regional workshops for mentoring junior faculty. In addition, we also started a new Summer Fellows initiative in 2007 supported by NSF and the AEA and run jointly with CSMGEP. The purpose of this program is to increase the participation and advancement of women and underrepresented

minorities in economics. The fellowship allows the fellow to spend a summer in residence at a sponsoring research institution such as a Federal Reserve Bank, other public agencies, and think-tanks. We had over 70 applications for 6 positions in 4 Federal Reserve Banks. In the upcoming year we plan to increase number of sponsoring institutions, broaden field coverage, provide help on visas for non-citizen fellows, and increase outreach to under-represented minority candidates.

CSWEP's Regional Activities

CSWEP's regional representatives organized sessions at each of the regional association meetings—including the Eastern, Southern, Midwest, and Western Economic Association. Our thanks go to Anna Paulson (Midwest), Ann Owen and Linda Bell (Eastern), Gail Hoyt (Southern) and Martha Olney (Western), for their excellent programs and efforts to help women economists in their regions maintain and increase their professional networks. Abstracts of the papers presented at these association meetings are presented in the newsletters each year.

Additional Words of Thanks

The Chair would like to thank the membership chair, Joan Haworth and her staff, including Lee Fordham and Donya Samara, for their essential contribution to our outreach mission. The terms of three of our Committee members ended in January 2008—Katharine Abraham, Gail Hoyt and Nancy Rose. They have all made outstanding contributions and we are enormously grateful to them for their willingness to serve. The Chair thanks new committee members Fiona Scott Morten, Patricia Mosser, and Martha Olney along with all the other members of the Committee for their exceptional efforts over the past year to advance the goals of CSWEP. CSWEP receives both financial and

staff support from the American Economic Association. We are especially grateful for all the help we receive from John Siegfried and his staff -- Edda Leithner, Barbara Fiser and Susan Houston. The Chair also warmly thanks Kathy Spagnoli from Tufts University who has provided extraordinary and indispensable administrative support for the Committee over the past year. Finally the Committee is deeply indebted to Tufts University for their administrative support of CSWEP's activities and for providing CSWEP with office space and other resources.

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Figure 1: Percentage of Economists in the Pipeline Who Are Women--
Ph.D. Granting Departments

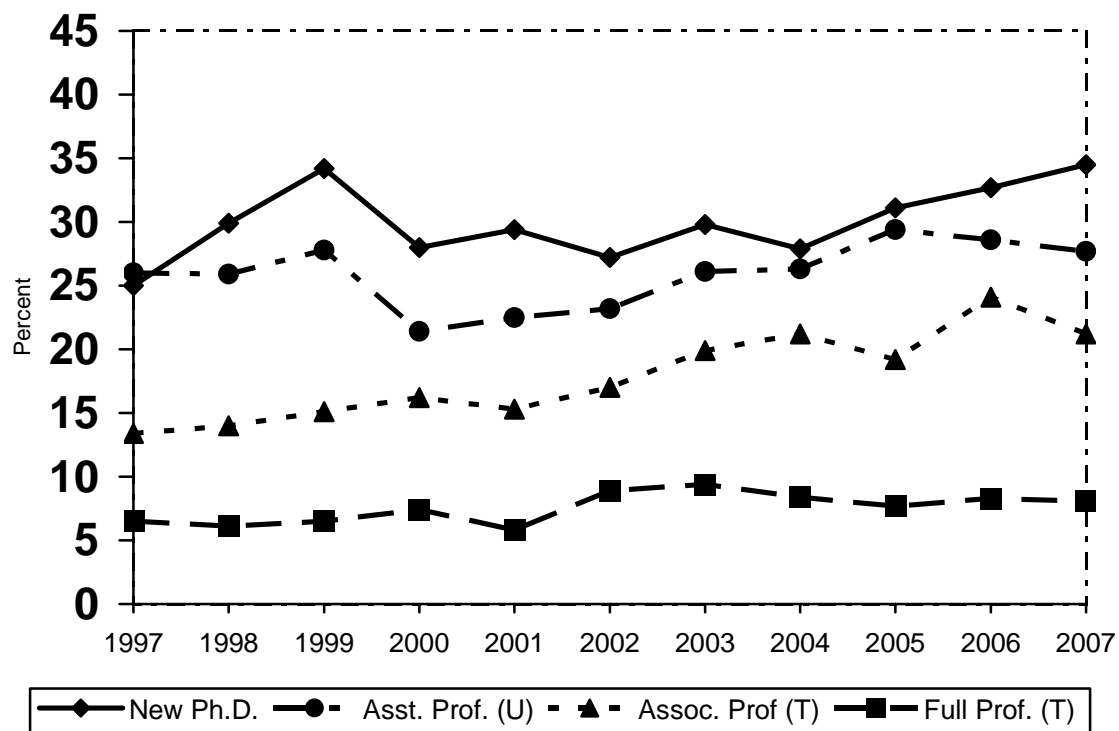


Figure 2: Percentage of Economists in the Pipeline Who are Women--Liberal Arts Departments

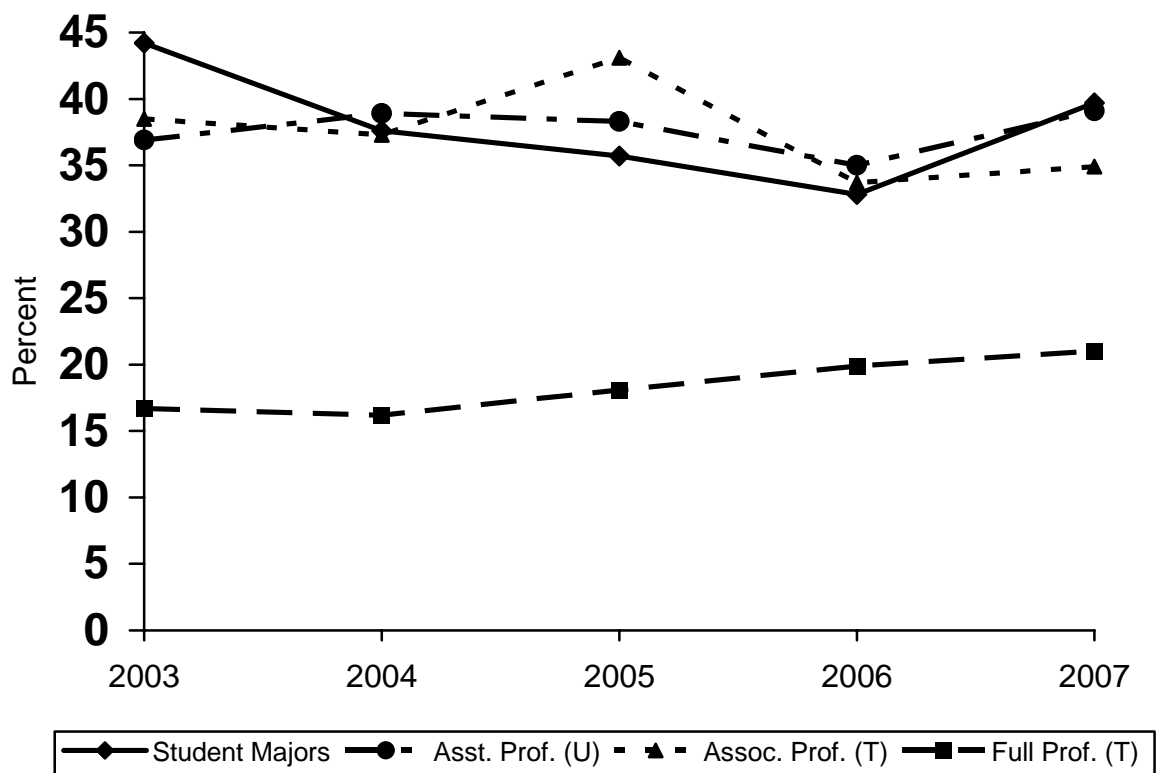


Table 1 -- The Percentage of Economists in the Pipeline Who Are Female, 1997-2007

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
All Ph.D. Granting Departments											
1st yr students	31.3	32.2	35.6	38.8	31.9	33.9	34.0	33.9	31.9	31.0	32.7
ABD	26.8	28.2	33.0	32.3	30.2	30.6	32.7	33.1	33.9	33.6	32.7
New Ph.D.	25.0	29.9	34.2	28.0	29.4	27.2	29.8	27.9	31.1	32.7	34.5
Assistant Professor (U)	26.0	25.9	27.8	21.4	22.5	23.2	26.1	26.3	29.4	28.6	27.7
Associate Professor (U)	11.1	15.9	27.3	17.2	10.0	17.2	24.0	11.6	31.2	24.6	17.1
Associate Professor (T)	13.4	14.0	15.1	16.2	15.3	17.0	19.9	21.2	19.2	24.1	21.2
Full Professor (T)	6.5	6.1	6.5	7.4	5.8	8.9	9.4	8.4	7.7	8.3	8.1
N departments	95	92	77	76	69	83	95	98	93	96	102
Top 10 Ph.D. Granting Departments											
1st yr students	20.3	27.2	29.6	29.5	26.9	28.5	21.2	26.0	26.0	24.8	29.5
ABD	25.0	22.0	25.2	25.2	26.6	27.0	26.1	26.3	26.3	27.8	27.6
New Ph.D.	16.5	25.9	24.3	23.0	30.5	25.7	26.3	25.5	31.4	30.3	27.5
Assistant Professor (U)	20.0	17.7	14.7	18.2	18.8	15.8	21.9	21.3	24.1	27.4	25.6
Associate Professor (U)	12.5	36.4	45.5	30.8	13.3	7.7	11.1	12.5	30.0	27.3	0.0
Associate Professor (T)	12.5	7.7	28.6	36.4	23.5	28.6	17.6	6.7	14.3	10.0	18.5
Full Professor (T)	5.0	3.7	3.9	7.1	6.3	5.6	7.0	8.2	7.3	8.0	7.9
N departments	8	7	7	7	10	9	10	10	10	10	10
Top 20 Ph.D. Granting Departments											
1st yr students	21.5	28.8	31.1	32.8	30.5	31.9	26.1	27.7	27.0	27.4	29.0
ABD	28.6	24.1	25.4	26.2	27.2	27.2	28.4	29.7	28.9	28.9	27.1
New Ph.D.	24.9	27.1	28.1	24.6	26.8	24.7	24.8	28.2	30.7	30.7	30.8
Assistant Professor (U)	17.8	16.4	21.6	17.7	18.8	21.5	25.1	24.1	27.0	26.2	25.1
Associate Professor (U)	7.7	36.4	46.2	26.7	13.3	13.3	23.1	20.7	26.7	24.4	23.1
Associate Professor (T)	16.0	8.3	16.3	12.8	19.6	22.9	18.9	12.1	14.3	12.5	14.5
Full Professor (T)	5.9	4.7	4.8	7.4	7.0	9.0	6.3	7.6	7.5	7.9	8.6
N departments	17	16	15	15	18	18	19	19	20	20	20

Notes: U refers to untenured and T refers to tenured. ABD indicates students who have completed "all but dissertation."

Table 2 -- Percentage Female for Ph.D. granting Economics Departments (2007)

A. Faculty Composition (2007-2008 Academic Year)	Women	Men	Percentage Female
Assistant Professor	183	493	27.1
Untenured	182	474	27.7
Tenured	1	19	5.0
Associate Professor	97	367	20.9
Untenured	6	29	17.1
Tenured	91	338	21.2
Full Professor	114	1,289	8.1
Untenured	1	8	11.1
Tenured	113	1,281	8.1
All tenured/tenure track	394	2,149	15.5
Other (non-tenure track)	155	228	40.5
All faculty	549	2,377	18.8
B. Students and Job Market	Women	Men	Percentage Female
Students (2007-2008 Academic Year)			
First-year Ph.D. students	464	955	32.7
ABD students	1,104	2,273	32.7
Ph.D. granted (2006-2007 Academic Year)	314	597	34.5
Job Market (2006-2007 Academic Year)			
U.S. based job	207	396	34.3
Academic, Ph.D. granting department	80	192	29.4
Academic, Other	51	63	44.7
Public sector	25	49	33.8
Private sector	51	92	35.7
Foreign Job obtained	47	129	26.7
Academic	34	74	31.5
Nonacademic	13	55	19.1
No job found	9	20	31.0

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

Table 3: Percentage Female for Top 10 and Top 20 Ph.D. Granting Economics Departments (2007)

A. Faculty Composition (2007-2008 Academic Year)	Top 10			Top 20		
	Women	Men	% Female	Women	Men	% Female
Untenured Assistant Professor	30	87	25.6	52	155	25.1
Associate Professor	5	27	15.6	11	57	16.2
Untenured	0	5	0.0	3	10	23.1
Tenured	5	22	18.5	8	47	14.5
Tenured Full Professor	21	244	7.9	38	405	8.6
All tenured/tenure track	56	358	13.5	101	617	14.1
Other (non-tenure track)	17	32	34.7	30	54	35.7
All faculty	73	390	15.8	131	671	16.3
B. Students and Job Market	Women	Men	% Female	Women	Men	% Female
Students (2007-2008 Academic Year)						
First-year Ph.D. students	71	170	29.5	131	321	29.0
All But Dissertation students	245	644	27.6	377	1,012	27.1
Ph.D. granted (2006-2007 Academic Year)	50	132	27.5	101	227	30.8
Job Market (2006-2007 Academic Year)						
<i>U.S. based job</i>	46	107	30.1	75	164	31.4
Academic, Ph.D. granting department	28	72	28.0	40	107	27.2
Academic, Other	3	6	33.3	5	10	33.3
Public sector	5	10	33.3	13	19	40.6
Private sector	10	19	34.5	17	28	37.8
<i>Foreign Job obtained</i>	4	29	12.1	16	59	21.3
Academic	2	18	10.0	11	35	23.9
Nonacademic	2	11	15.4	5	24	17.2
<i>No job found</i>	1	2	33.3	2	4	33.3
TOTAL	51	138	27.0	93	227	29.1

Table 4: Employment Share by Gender for US based Jobs 2007

	Top 10		Top 11-20		All Others	
	Women	Men	Women	Men	Women	Men
Academic PhD department	60.9	67.3	41.4	61.4	30.3	36.6
Academic Other	6.5	5.6	6.9	7.0	34.8	22.8
Public Sector	10.9	9.3	27.6	15.8	9.0	12.9
Private Sector	21.7	17.8	24.1	15.8	25.8	27.6
TOTAL	46	107	29	57	132	232

Table 5 – Faculty Composition by Gender for Economics Departments in Liberal-Arts Institutions (2007)

A. Faculty Composition (2007-2008 Academic Year)	Women	Men	% Female
Assistant Professor	69	109	38.8
Untenured	68	106	39.1
Tenured	1	3	25.0
Associate Professor	63	120	34.4
Untenured	3	8	27.3
Tenured	60	112	34.9
Full Professor	61	236	20.5
Untenured	0	7	0.0
Tenured	61	229	21.0
All tenured/tenure track	193	465	29.3
Other (non-tenure track)	57	96	37.0
All faculty	250	561	30.8
B. Student Information	Women	Men	% Female
Student Majors (2006-07 Academic Year)	1,356	2,057	39.7

Table 6: Percentage Female of Top 20 Business School Faculty 2004 and 2007

Rank	Women		Men		% Female	
	<u>2004</u>	<u>2007</u>	<u>2004</u>	<u>2007</u>	<u>2004</u>	<u>2007</u>
Assistant Professor	40	41	114	117	26.0	26.0
Associate Professor	15	17	70	75	17.6	18.5
Full Professor	32	37	278	307	10.3	10.7
All Faculty	87	95	462	594	15.8	16.0