

Royal Economic Society's Report on The Gender Balance in UK Economics Departments and Research Institutes in 2016

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Executive Summary

This report covers the eleventh (2016) survey of gender balance amongst academic economists in UK departments that are members of CHUDE (Conference of Heads of University Departments of Economics), as well as several non-CHUDE departments and research institutions. The full web-based survey covers 112 UK institutions. The web-based data were sent to Heads of Departments to be verified or amended; the response rate was 57% (64 departments). The results in the main text are based on the verified sample. The Appendix contains results from the full web-based sample.

A few highlights:

- women account for a 28% of all academic staff in UK economics departments.
- women are under-represented among Professors; one in three men are Professors, compared to one in seven women
- the proportion of women is substantially higher in research jobs than in standard academic jobs
- 20% of men and women have part-time employment in the sector; men are more often found in senior positions than women
- men and women share similar research disciplines, the most popular research discipline for both is Microeconomics

Taking a longer perspective and comparing the 2016 balanced sample results to those of early surveys, we observe:

- in aggregate, the proportion of the workforce that is female has increased substantially over the twenty years of surveys (in 1996 women made up 17.5% of the workforce; by 2016 this has risen to 28%)
- the numbers of Professors (male and female) amongst all staff has doubled over the time period (from 13% of all staff to 25.7%)
- women are more than twice as common in the standard academic grades in 2016 than they were in 1996; in 1996 women made up approximately 16.6% of the Lecturers (34.6% in 2016), 9.6% of the Readers/Senior Lecturers/Associate Professors (25.8% in 2016) and 4.2% of the Professors (15.5% in 2016).

It is also of interest to compare the results from the 2016 survey with that from 2014. Balanced sample comparison is less than perfect; with that in mind, the findings indicate:

- the proportion of women among academic economists increased from 27% to 28%
- the representation of women in each grade rank showed small increases
- female Professors are more commonly promoted within their department rather than hired into the grade from outside
- job separations are rarer for more senior women

1. Introduction to the 2016 survey

This report covers the eleventh survey of gender balance in academic employment in economics in Britain in a series started in 1996 by the Royal Economic Society (RES) Women's Committee and repeated bi-annually thereafter.¹

The web pages of ninety three CHUDE departments, seven non-CHUDE departments², and fifteen leading research institutes were surveyed in November-December 2016. The survey collected information on academic staff (full-time and part-time) by grade of employment, gender, and research discipline. It also collected information on promotions, new hires and job leavers. These survey entries were then emailed to respective institutions for verification in January 2017. The overall verified survey response rate from the 112 institutions was 57% (60% or 56 responses from the 93 CHUDE departments, 14% or 1 response from the 7 non-CHUDE departments, and 58% or 7 responses from the 12 research institutes).³

Multiple attempts to obtain a return from each of the non-responding departments were made; nevertheless, several did not participate perhaps reflecting a weakness in survey design or apathy on the part of departments (Georgiadis and Manning, 2007; page 3). Section 2 of the report presents results from the verified returns, which is referred to as the "Respondents Survey." Results from analyzing the full web based survey (verified and non-verified data containing all departments and research institutes) are discussed in Section 3 of the report and additional results are reported in the Appendix. Section 4 of the report compares findings across the Women's Committee surveys using balanced and unbalanced analyses and presents evidence of staff changes over time. Section 5 presents concluding remarks.

¹ Findings from previous surveys are reported in Mumford 1997; Booth and Burton with Mumford, 2000; Burton with Joshi and Rowlatt, 2002; Burton and Joshi, 2004, Burton with Humphries, 2006; Azariadis and Manning, 2008; Mumford, 2009; Blanco and Mumford, 2011; Blanco, Mitka, Mumford and Roman, 2013; Mitka, Mumford and Sechel, 2015.

² Tables A8 and A9 of the Appendix list all departments and research institutes surveyed, indicating respondents and non respondents.

³ There are major difficulties in covering economists working outside conventional economics or business departments.

2. Overview of the findings for the Respondents Survey, November 2014

Table 1 reports the numbers of economists employed in academia in the UK from the total verified web survey returns, including CHUDE and non-CHUDE departments, and research institutions. In aggregate, information is available for 2,077 people who work as economists in academic appointments in the UK, 584 (or 28.1%) of whom are women.

Table 1. Primary employment function: All academic staff in economics departments and research institutes (responding sample, 2016).

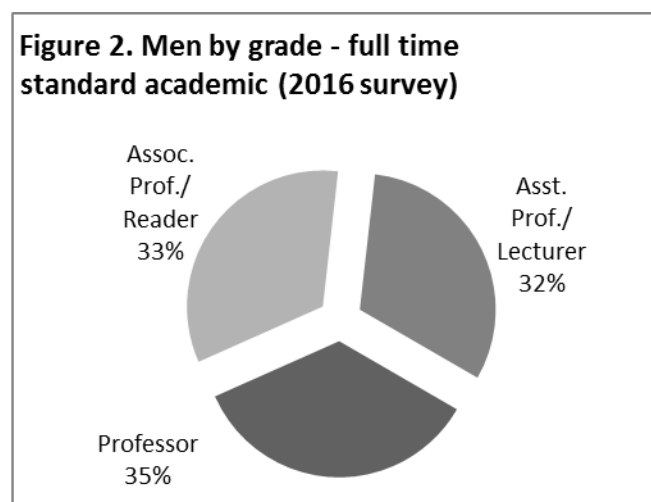
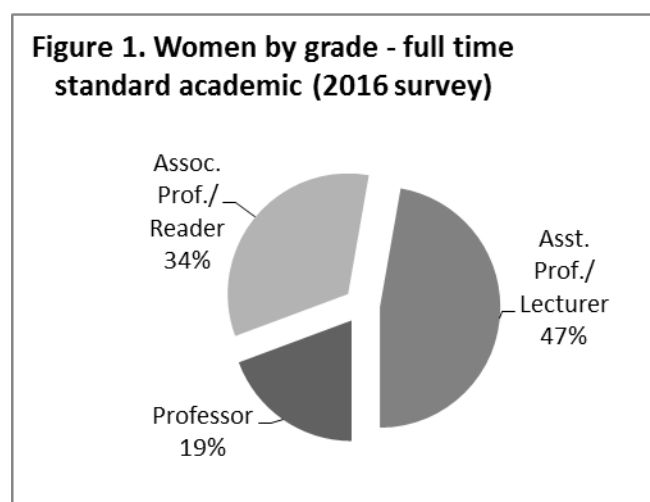
Primary Employment Function	2016 respondent's survey			
	Female	Male	Total	% Fem
All Staff: full time				
Professor	70	352	422	16.6%
Reader - Associate Professor	121	336	457	26.5%
Assistant Professor - Lecturer	171	317	488	35.0%
Researcher	74	112	186	39.8%
Other	29	71	100	29.0%
Totals	465	1188	1653	28.1%
All Staff: part time				
Professor	13	95	108	12.0%
Reader - Associate Professor	7	34	41	17.1%
Assistant Professor - Lecturer	15	39	54	27.8%
Researcher	53	67	120	44.2%
Other	31	70	101	30.7%
Totals	119	305	424	28.1%
Grand Total	584	1493	2077	28.1%

Source: RES Women's Committee Survey 2016.

A significant share of these economists (75.6%) are working in standard academic appointments (that is, mixed teaching and research jobs as opposed to research-only appointments); this figure is lower for women than for men (68% and 78.6%, respectively). If the research-only categories are excluded from the calculation, women make up 26.5% of the standard full-time academic workforce (or 362 out of 1,367 employees).

Women are substantially more likely to be employed at lower academic grade levels, as is seen in the final column of Table 1. For example, amongst full time staff, the proportion female decreases from 35% of the Permanent Lecturers or Assistant Professors, to 26.5% of the Readers or Associate Professors and 16.6% of the Professors.

Of all the women employed full time in standard academic appointments (see Figure 1), 19% are Professors and a further 33% are Associate Professors, Readers, or Senior Lecturers. Slightly less than one in every two of the women is an Assistant Professor or Lecturer and less than one in five is a Professor. Carrying out a similar exercise for the men (Figure 2) reveals that 35% of the male academics are in the Professorial grade with another 33% in the Associate Professor or Reader/Senior Lecturer grades. Male academics are nearly twice as likely to be Professors, and are substantially less likely to be Lecturers, than are female academics.

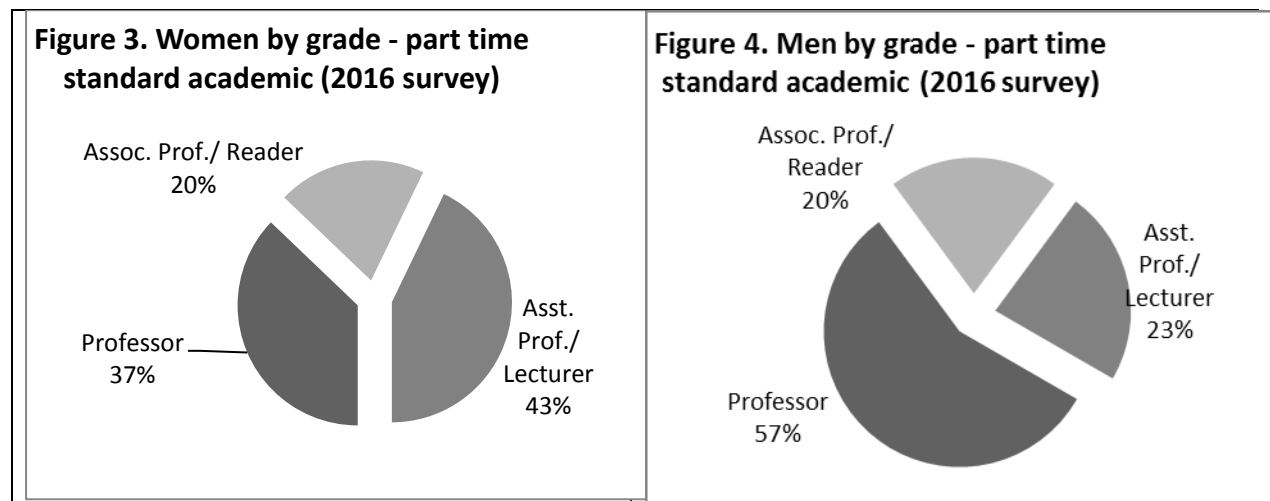


1.2 Part-time employment

The number of men working part-time is considerably larger than the number of women (see the lower panel of Table 1); although, their numbers relative to the total pool of male employees are similar to the share of females working part-time: 20.3% of female and 20.4% of male economists in academia are working part-time. Men working part-time are more likely to have a standard academic job whereas part-time employment is more common for women in research only positions. Of the economists in standard academic jobs, 8.9% of the women work part-time whilst

14.3% of the men do. Women are particularly prevalent amongst the Researchers and Lecturers with permanent part-time contracts.

Considering the relatively few women employed part-time in standard academic appointments, 37% are Professors and 43% are Assistant Professors or Lecturers (see Figure 3). Carrying out a similar exercise for the men (Figure 4) reveals that 57% are in the Professorial grade with 23% in the Lecturer grade. In other words, in accordance with full-time staff ratios, amongst part-time employees males are considerably more likely to be Professors and less likely to be Lecturers.



1.3 Temporary employment

Temporary employment contracts are unsurprisingly most commonly found amongst the Research grades (see Appendix Table A1). Table 2 presents data for all staff (full-time and part-time, permanent and fixed term) in panel 1; panel 2 lists those staff who are on fixed term contacts; and panel 3 lists those fixed term employees who are also employed part-time.

Much of the information in Table 2 has already been presented and discussed above, for example, the fixed term and part-time status for Assistant Professors or Lecturers and Researchers is presented in Table 1. However, Table 2 also presents this information for Professors and Senior Researchers. Combining part-time and full-time staff, temporary and permanent staff, women

constitute: 34.6% of Assistant Professors or Lecturers, 25.8% of Readers or Associate Professors, and 15.5% of Professors (see panel 1 of Table 2).

Table 2. Employment function: All academic staff, fixed term staff, fixed term and part-time staff (responding sample, 2016).

Primary employment function	Female	Male	Total	% Fem	% of all staff in the rank	% of fixed term staff in the rank
All staff						
Professor	82	447	529	15.5%	25.6%	
Reader - Associate Professor	128	368	496	25.8%	24.0%	
Assistant Professor - Lecturer	186	352	538	34.6%	26.0%	
Researcher	127	179	306	41.5%	14.8%	
Other	59	140	199	29.6%	9.6%	
Total	582	1486	2068	28.1%	100.0%	
Fixed term staff						
Professor	3	44	47	6.4%	2.3%	10.1%
Reader - Associate Professor	3	13	16	18.8%	0.8%	3.4%
Assistant Professor - Lecturer	15	39	54	27.8%	2.6%	11.6%
Researcher	86	131	217	39.6%	10.5%	46.6%
Other	44	88	132	33.3%	6.4%	28.3%
Total	151	315	466	32.4%	22.5%	100.0%
Fixed term and part-time staff						
Professor	3	36	39	7.7%	1.9%	
Reader - Associate Professor	1	10	11	9.1%	0.5%	
Assistant Professor - Lecturer	7	20	27	25.9%	1.3%	
Researcher	42	60	102	41.2%	4.9%	
Other	28	60	88	31.8%	4.3%	
Total	81	186	267	30.3%	12.9%	

Source: RES Women's Committee Survey 2016.

Reading across the columns in panel 1 of Table 2 reveals that, in total, there are 529 Professors, 82 of whom (15.5%) are female. The Professors constitute 25.6% of all academic staff (column 5). Of these Professors, 47 are working on a fixed-term contract (see panel 2), 3 of whom (or 2.3%) are female. Only 9% (47 out of 529) of the Professors are on a fixed term contract, amounting to 2.3% of all staff (column 5) and 10.1% of all the fixed term staff are Professors (column 6).

Panel 3 (combined with Panel 2) reveals that a majority of the academics working on a fixed-term contract are also working part-time (267 out of the 466 or 57 %), as are all three female Professors working on a fixed-term contract (reading down column 1). About 71% of the Researchers are employed on a fixed term basis and 47% of these are also working part-time.⁴ In contrast, only 7.5% of the academic staff are working part-time. Researchers are disproportionately more likely to be female, and male economists working on fixed term and part-time appointments are more likely to be at the senior ranks than are female economists.

1.4 Considering a role model effect

It may be that departments with female Professors find it easier to recruit, promote and/or retain other women (a role model effect). Table 3 reports for all academic staff (in the verified web survey) the proportion of Readers/Associate Professors/Senior Lecturers and Lecturers who are female in departments with and without a female Professor. The first four rows of the first column of Table 3 provide alternative ranges of the percentage of staff below the grade of Professor that are female. The second column relates specifically to departments with at least one female Professor, and the third column to those departments with no female Professors. For example, considering the first row of Table 3, there are 4 departments where less than 10% of their non-professorial staff is female. Of these 4 departments, 2 of them have a female Professor. Similarly, row four reveals that there were also 26 departments (47% of the sample) with more than 30% of their Reader/Associate Professor/Senior Lecturer or Lecturer posts held by women: 10 of these departments lack a female Professor. Considering the final rows of Table 3, in aggregate, departments with a female Professor had an average of 29.2% of female staff in non-professorial job ranks; in departments with no female professor this proportion was 33%. Additionally, departments with at least one female Professor are larger in size, as measured by the number of staff below Professor (30.4 relative to 15.1). There is little indication that the presence of at least one Professorial woman in a department enhances the representation of women more generally in that department. Taken in combination, the simple evidence presented in Table 3 does not provide compelling support for the role model hypothesis (a similar conclusion was reached for the 2006,

⁴ The majority of Researchers working on part-time fixed-term contracts are found in the Research Institutes.

2008, 2010, and 2012 surveys, see Georgiadis and Manning, 2007; Mumford, 2009; Blanco and Mumford, 2011; Blanco, Mitka, Mumford and Roman, 2013; Mitka, Mumford and Sechel, 2015).

**Table 3. Proportion of female academic staff below Professor, CHUDE departments only
(responding sample, 2016 survey)**

	Number of departments with a female Professor	Number of departments with no female Professor	Number of departments
Proportion of female staff below Professorial rank			
0<=pr<=10%	2	2	4
10%< pr<=20%	4	3	7
20%<pr<=30%	15	4	19
pr>30%+	16	10	26
Average number of staff below Professorial rank	30.43	15.05	
Average proportion of female staff below Professorial rank	29.16%	32.98%	
Number of departments	37	19	<i>n</i> =56

Source: RES Women's Committee Survey 2016.

1.5 Research discipline

Information on the research discipline of academic staff was requested as part of the survey sent to departments. Table 4 presents results for economists in standard academic appointments (full or part-time) in CHUDE departments from the verified survey (additional information including discipline breakdown by rank and within research institutions is provided in Tables A3 and A4 of the Appendix). Column 4 shows that the most popular research disciplines are the core areas of Microeconomics (15.8% of all staff); Macroeconomics and Monetary Economics (13.8%); Financial Economics (9.5%), and Mathematical and Quantitative Methods (8.6%); and Economic Development, Technological Change and Growth (7.9%).⁵ These, together with Labour and Demographic Economics, are also the research areas which are the most common amongst the Professors (see column 7 of Table 4), although the ordering is slightly different, with Labour and Demographic Economics featuring third in the rankings (8.9% of Professors).

⁵ In contrast, within the Research Institutions (see Appendix Table A3) the most popular research area is Health, Education and Welfare (nearly half the staff in research institutions work in this discipline area). Economic Development, Technological Change and Growth is the second most relevant research area in these institutions with 18.5% of the staff employed by these research institutions.

The five most popular research areas for women (see column 6) are Microeconomics; Financial Economics; Economic Development, Technological Change and Growth; Labour and Demographic Economics; and Macroeconomics and Monetary Economics. There are some differences in the ordering between men and women, however, (as can be seen by comparing columns 5 and 6 of Table 4). Men and women both have as the most popular area Microeconomics (15.7% of the men and 15.9% of the women). The second most popular choice for both women and men differs: men favor Macroeconomics and Monetary Policy and women favor Financial Economics (at 15.4% and 10.3%, respectively). Women then opt for Economic Development, Technological Change and Growth and Labour and Demographic Economics (9.4% and 9.7% respectively) and men opt for Mathematical and Quantitative Methods (9.1%) and Financial Economics (9.2%). For their fifth choice women favor Macroeconomics and Monetary Economics whilst men choose Economic Development, Technological Change and Growth.

Column 8 of Table 4 provides the percentage of all those choosing that research discipline who work in a department scoring above 3 in the last REF exercise. Of the 1657 standard academic appointments, 811 or 48.9% worked in these higher ranked departments. In row one of Table 4, we can see that of the 73 staff choosing General Economics and Teaching, 22 (or 30%) of these staff members worked in a department scoring above 3 (see also Table A4). There are some small number issues (reading across columns 3, 4 and 8) suggesting caution when interpreting the percentages in column 8. Nevertheless, combining columns 3 and 8, the table suggests that departments with higher REF scores have a significant proportion of staff specializing in the core research areas mentioned above.

Table 4. Main research discipline, by gender (responding sample 2016, CHUDE depts only).

JEL research discipline	Female (1)	Male (2)	Total (3)	% All (4)	% Male (5)	% Fem (6)	% All Profs (7)	% Total in REF>3 (8)
A - General Economics and Teaching	13	60	73	4.4%	4.9%	3.0%	0.7%	30.1%
B - History of Economic Thought, Methodology, and Heterodox Approaches	8	16	24	1.4%	1.3%	1.8%	0.4%	41.7%
C - Mathematical and Quantitative Methods	31	111	142	8.6%	9.1%	7.1%	8.7%	40.8%
D - Microeconomics	69	192	261	15.8%	15.7%	15.9%	16.5%	49.8%
E - Macroeconomics and Monetary Economics	40	188	228	13.8%	15.4%	9.2%	13.9%	48.2%
F - International Economics	26	56	82	4.9%	4.6%	6.0%	3.3%	52.4%
G - Financial Economics	45	112	157	9.5%	9.2%	10.3%	8.7%	37.6%
H - Public Economics	16	37	53	3.2%	3.0%	3.7%	3.3%	56.6%
I - Health, Education, and Welfare	29	42	71	4.3%	3.4%	6.7%	3.7%	42.3%
J - Labor and Demographic Economics	41	84	125	7.5%	6.9%	9.4%	8.9%	56.8%
K - Law and Economics	2	5	7	0.4%	0.4%	0.5%	1.1%	42.9%
L - Industrial Organization	9	51	60	3.6%	4.2%	2.1%	3.7%	51.7%
M - Business Administration and Business Economics; Marketing; Accounting	6	20	26	1.6%	1.6%	1.4%	2.4%	73.1%
N - Economic History	4	26	30	1.8%	2.1%	0.9%	2.4%	66.7%
O - Economic Development, Technological Change, and Growth	42	89	131	7.9%	7.3%	9.7%	8.7%	59.5%
P - Economic Systems	1	3	4	0.2%	0.2%	0.2%	0.2%	0.0%
Q - Agricultural and Natural Resource Economics; Environmental and Ecological	21	54	75	4.5%	4.4%	4.8%	5.4%	33.3%
R - Urban, Rural, Regional, Real Estate, and Transportation Economics	6	23	29	1.8%	1.9%	1.4%	2.0%	55.2%
Y - Miscellaneous Categories	12	24	36	2.2%	2.0%	2.8%	2.4%	88.9%
Z - Other Special Topics	14	29	43	2.6%	2.4%	3.2%	3.7%	55.8%
Total	435	1222	1657	100%	73.7%	26.3%	100.0%	48.9%

Source: RES Women's Committee Survey 2016.

1.7 Flows into and out of standard academic positions in the previous year

Changes in the stock of individuals in any job rank due to inflows from new hires, job separations (resignations and retirements), and promotions (within and across departments) can also be addressed from the data set. As the web based surveys are tracking individuals, we can calculate movements more accurately (for example, tracking those who left one department but were hired into another, and if they received a promotion in this move). Before 2010, the Women's Committee data on promotions only included promotions that were internal to departments and total staff movements were essentially gross rather than net. (For comparison sake, full and balanced sample (from the 2016 and 2014 surveys) analysis using the previous gross sample measures is provided in Appendix tables A5 to A7.)

Table 5 presents staff movements in the 2015/16 academic year from the 2016 respondents survey (i.e. the verified returns). Columns 1 to 4 are those promotions internal to the department, columns 5 to 8 are those promoted from other UK departments. These numbers of promotions are obviously small so we should be cautious about how valid the implications of these flows for changes in relative employment stocks actually are. Nevertheless, Comparing columns 4 and 8 (showing the percentage female by rank amongst the flows) with columns 21 (showing the percentage females amongst the stock by rank), suggests some small gains were made in the 2015/16 time period via promotions, especially amongst Professors and Readers.

Panel two of Table 5 provides information on hiring in the 2015/16 academic year: columns 9 to 12 present information on new staff hired in the last year. This is staff entering the sector; and columns 13 to 16 are hires across UK departments. The sub-sample of respondents to this question is particularly small so the numbers should be read with caution. We can see that there were 192 economists hired from outside of the UK academic sector (column 11) in the 2015/16 academic year, and a further 29 economists hired from other UK departments (column 15). Hires from outside of the UK academic sector are relatively less likely to be female than are either hires from within the sector (comparing columns 12 and 16), or internal promotions into the grade rank (column 4). Comparing columns 9 to 12 in Table 5 with columns 1 to 4 in Table 2, suggests that these external hires are typically lowering the proportion female academics in each rank. In

aggregate, the representation of women amongst the hiring inflow seems to have contributed very little to improve the overall representation of women in the stock by rank (column 21).

The third flow affecting the stock of academic economists is, of course, leavers (see panel 3 of Table 6). In aggregate, women make up a similar proportion of these separations as they do of the total pool of academic economists (28% relative to 28.3%, columns 20 and 21).

Information on the job leaver's destination was also gathered (see Table 6).⁶ The most common destination employment for the job leavers is to another academic appointment (170 out of the 302 leavers reporting destination or 56% of those reporting destination) followed by 'unknown job' (28% of those reporting destination), implying considerable churning within the sector, with non-employment taking up a further 6%. The proportion of female economists across job leavers (28.4%) is similar to the female share of the total workforce. A high proportion of leavers go on to other academic appointments (51 out of 104 female leavers reporting destination or 52%, and 58.3% of male leavers) or to unknown jobs (33.7% of the female leavers, and 25.5% of the males). The relative findings for the UK and EU destinations suggest an international marketplace exists for academic economists, both male and female, and that female economists move in a similar proportion to their presence in the workforce.

The 2016 survey also asks departments about the reasons for these separations (see Table 7), the responses were not overly informative (in 59% of the cases, there are "other", "unknown" or "missing" responses). Of the remaining 245 cases, roughly one in four leavers moved for a promotion (32% of the female leavers, 24% of the males); 17.6% retired (5.5% of females leavers, 22.7% of the males); about 5.7% cited family reasons for quitting their jobs (11% of the female leavers and only 3.5% of the male leavers); and 47.3% reported that they had reached the end of their contract. The higher proportion of female leavers due to family reasons might reflect the combination of family tasks falling more heavily on women and insufficient family-friendly work practices in UK departments.

⁶ Note there are 29 missing observations for sector destination (Table 6); 28 for geographic destination (Table 6) and 24 for reasons for leaving (Table 7).

Table 5. Staff movements 2015/2016 (responding sample 2016)

	Internal promotions				Promotions from other UK depts.			
	Female	Male	Total	%Fem	Female	Male	Total	%Fem
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Professor	8	14	22	36.4%	0	0	0	-
Reader - Associate Professor	14	26	40	35.0%	0	1	1	0.0%
Assistant Professor - Lecturer	5	7	12	41.7%	0	1	1	0.0%
Researcher	1	8	9	11.1%	0	0	0	-
Other	0	2	2	0.0%	1	0	1	100.0%
Total	28	57	85	32.9%	1	2	3	33.3%
	Hires from outside sector				Hires from other UK depts.			
	Female	Male	Total	%Fem	Female	Male	Total	%Fem
	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Professor	0	7	7	0.0%	0	3	3	0%
Reader - Associate Professor	6	19	25	24.0%	2	4	6	33%
Assistant Professor - Lecturer	16	53	69	23.2%	7	5	12	58%
Researcher	24	42	66	36.4%	4	2	6	67%
Other	12	13	25	48.0%	1	1	2	50%
Total	58	134	192	30.2%	14	15	29	48%
	Separations				% Fem in grade		% Fem in grades below	
	Female	Male	Total	%Fem	(21)	(22)		
	(17)	(18)	(19)	(20)				
Professor	6	112	118	5%	15.5%	30.4%		
Reader - Associate Professor	19	60	79	24%	25.8%	34.6%		
Assistant Professor - Lecturer	35	78	113	31%	34.6%	-		
Researcher	51	89	140	36%	41.5%	n/a		
Other	60	93	153	39%	29.6%	n/a		
Total	171	432	603	28%	28.1%			

Source: RES Women's Committee Survey 2016.

Table 6. Job leaver's destinations

Sector	Leavers sector destination				Location	Leavers geographic destination			
	Female (1)	Male (2)	Total (3)	%Fem (4)		Female (5)	Male (6)	Total (7)	%Fem (8)
Academic	51	119	170	30.0%	United Kingdom	40	82	122	32.8%
Private Sector	5	2	7	71.4%	European Union	8	22	30	26.7%
Other Govt/NGO	6	16	22	27.3%	Other	17	38	55	30.9%
Non-Employed	3	15	18	16.7%	Unknown	31	48	79	39.2%
Unknown Job	33	52	85	38.8%	Missing	75	241	316	23.7%
Missing	73	228	301	24.3%					
Total	171	432	603	28.4%	Total	171	432	603	28.4%

Source: RES Women's Committee Survey 2016.

Table 7. Reasons for leaving

Sector	Female (1)	Male (2)	Total (3)	%Fem (4)
Promotion	24	42	66	36.4%
End of contract	36	80	116	31.0%
Retired	4	39	43	9.3%
Resignation, family reasons	8	6	14	57.1%
Death	1	5	6	16.7%
Other	24	38	62	38.7%
Unknown	8	24	32	25.0%
Missing	66	198	264	25.0%
Total	171	432	603	28.4%

Source: RES Women's Committee Survey 2016.

3. Overview of the findings for the full web-based survey, 2016.

Table 8 provides the results from the 2016 respondents' survey (the verified subset of the full web-based survey), reported in columns 1 through 4; the results from the 2016 web-based survey balanced to match the respondents' sample in 2016, reported in columns 5 to 8; and results from the full 2016 web-based survey (including all 112 departments), reported in columns 9 to 12. It should be noted that there is obviously a limit to the information that can be reliably collected from web pages. For example, information concerning full-time or part-time status, permanent or temporary employment contracts is often ambiguous hence the fundamental need to seek verification from the relevant institutions.

The full web-based survey balanced sample and the respondents' verified survey differ in the number of staff in each rank, with the web-based sample reporting more people than the verified sample. This might be due to slow updating of webpages once people leave, or listing of visiting or honorary positions not considered to be "salaried members of academic and research staff". There is, however a reasonable similarity in the shares of women within each rank.

Another finding from comparing the 2016 data sources is that including information from the web pages of the non-responding departments into the totals (see columns 9 to 12) does not suggest that the departments choosing not to participate in the 2014 email survey were less likely to contain women. The overall female shares are only slightly lower. This was also true in 2014 (see Table 9) and is consistent with earlier findings (Mitka, Mumford and Sechel, 2015; Georgiadis and Manning, 2007, page 3; Mumford, 2009, page 20; Blanco and Mumford, 2011, page 23; and Blanco, Mitka, Mumford and Roman, 2013, page 18).

It was interesting to compare the balanced sample in 2014 and 2016. This corresponds to the same sample of departments and institutions. To our surprise, the 2014 contained more academics than the 2016 sample (Table 9). When we asked respondents why that was the case, they acknowledged having misplaced students (research assistants) and administrative staff as academic staff in the 2014 edition. With caution on the comparability of the two samples, the results indicate that the share of female academic staff increased between 2014 and 2016 from 26.9% to 28.1% in the balanced sample (and 27.9% to 28.1% in the unbalanced sample).

Table 8. Employment function: Academic staff in economics departments and research institutes (balanced and unbalanced samples from the 2016 email and web based surveys)

Primary Employment Function	2016 respondent's survey				2016 web balanced sample to match the respondents' survey				2016 full web survey			
	Female ▶ (1)	Male ▶ (2)	Total ▶ (3)	% Fem ▶ (4)	Female ▶ (5)	Male ▶ (6)	Total ▶ (7)	% Fem ▶ (8)	Female ▶ (9)	Male ▶ (10)	Total ▶ (11)	% Fem ▶ (12)
All Staff												
Professor	90	478	568	15.8%	80	508	588	13.6%	106	672	778	13.6%
Reader - Associate Professor	132	393	525	25.1%	148	427	575	25.7%	212	583	795	26.7%
Assistant Professor - Lecturer	198	377	575	34.4%	183	383	566	32.3%	251	520	771	32.6%
Researcher	127	188	315	40.3%	118	221	339	34.8%	185	300	485	38.1%
Other	60	143	203	29.6%	58	110	168	34.5%	64	128	192	33.3%
Total	607	1579	2186	27.8%	587	1649	2236	26.3%	818	2203	3021	27.1%
Number of institutions	64				64				112			

Sources: RES Women's Committee Survey 2016, web based; RES Women's Committee Survey 2064, email based. Note: Difference to T1 is due to missing info about FT/PT

Table 9. Primary employment function: Academic staff in economics departments and research institutes (balanced samples for the 2014 and 2016 responding samples).

Primary Employment Function	2016 respondents' sample				2016 respondents' balanced sample				2014 respondents' sample				2014 respondents' balanced sample				
	Female	Male	Total	% Fem	Female	Male	Total	% Fem	Female	Male	Total	% Fem	Female	Male	Total	% Fem	
All Staff: full time																	
Professor	69	352	421	16.6%	69	352	421	16.4%	92	545	637	14.4%	75	408	483	15.5%	
Reader - Associate Professor	121	335	456	26.5%	120	335	455	26.4%	193	522	715	27.0%	134	390	524	25.6%	
Assistant Professor - Lecturer	171	313	484	35.0%	171	310	481	35.6%	237	504	741	32.0%	178	380	558	31.9%	
Researcher	74	112	186	39.8%	74	112	186	39.8%	143	217	360	39.7%	90	154	244	36.9%	
Other	28	70	98	29.0%	28	70	98	28.6%	29	73	102	28.4%	21	60	81	25.9%	
Totals	463	1182	1645	28.1%	462	1179	1641	28.2%	694	1861	2555	27.2%	498	1392	1890	26.3%	
All Staff: part time																	
Professor	13	95	108	12.0%	13	95	108	12.0%	19	160	179	10.6%	12	136	148	8.1%	
Reader - Associate Professor	7	33	40	17.1%	7	33	40	17.5%	9	31	40	22.5%	6	24	30	20.0%	
Assistant Professor - Lecturer	15	39	54	27.8%	14	36	50	28.0%	17	49	66	25.8%	14	43	57	24.6%	
Researcher	53	67	120	44.2%	53	67	120	44.2%	75	110	185	40.5%	44	65	109	40.4%	
Other	31	70	101	30.7%	30	70	100	30.0%	109	180	289	37.7%	97	167	264	36.7%	
Totals	119	304	423	28.1%	117	301	418	28.0%	229	530	759	30.2%	173	435	608	28.5%	
Grand Total	584	1493	2068	28.1%	579	1480	2059	28.1%	923	2391	3314	27.9%	671	1827	2498	26.9%	

Source: RES Women's Committee Survey 2014 and 2016.

4. Staff changes over time.

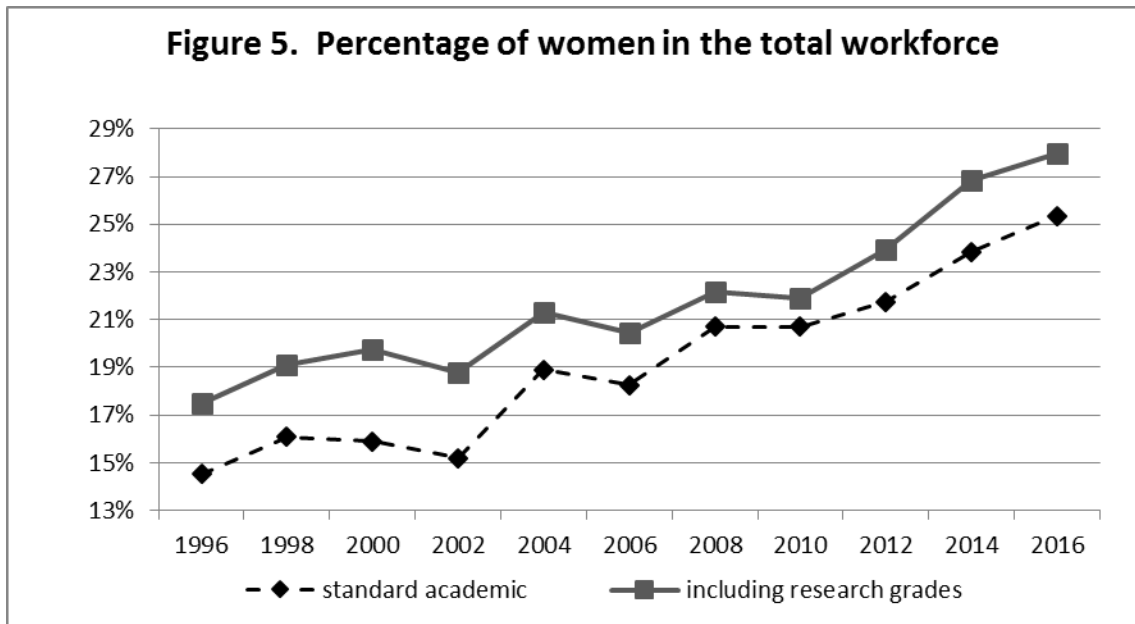
A fundamental role for the newly established Royal Economic Society Women's Committee⁷ in 1996 was to monitor and, where necessary, collect data on the position of female economists in academic appointments in the UK. In response to a shortage of available data suitable to its needs, the Committee Chairs have carried out a series of biennial questionnaires to all Heads of Departments listed as members of CHUDE (and to a selection of research institutions) since December 1996.⁸ As discussed in the Introduction, this report covers the eleventh of these surveys.

Figure 5 plots the percentage of women amongst the total academic economics workforce (including research grades) and amongst the standard academic workforce for each of the Women's Committee surveys using unbalanced samples (reflecting the fullest sample information for each of the surveys).⁹ An overall growth trend in the percentage of women in the workforce can clearly be seen in Figure 5 (with or without the inclusion of the research grades).

⁷At its meeting in November 1996, the Council of the Royal Economic Society established a Women's Committee to promote the role of women in the UK economics profession. The founding membership of the Women's Committee was Denise Osborn (Chair), Tony Atkinson, Stephen Hall, David Hendry, Karen Mumford, Carol Propper, Maureen Pike and Amanda Rowlatt.

⁸The current survey also includes a small number of non-CHUDE university departments (as discussed in the Introduction).

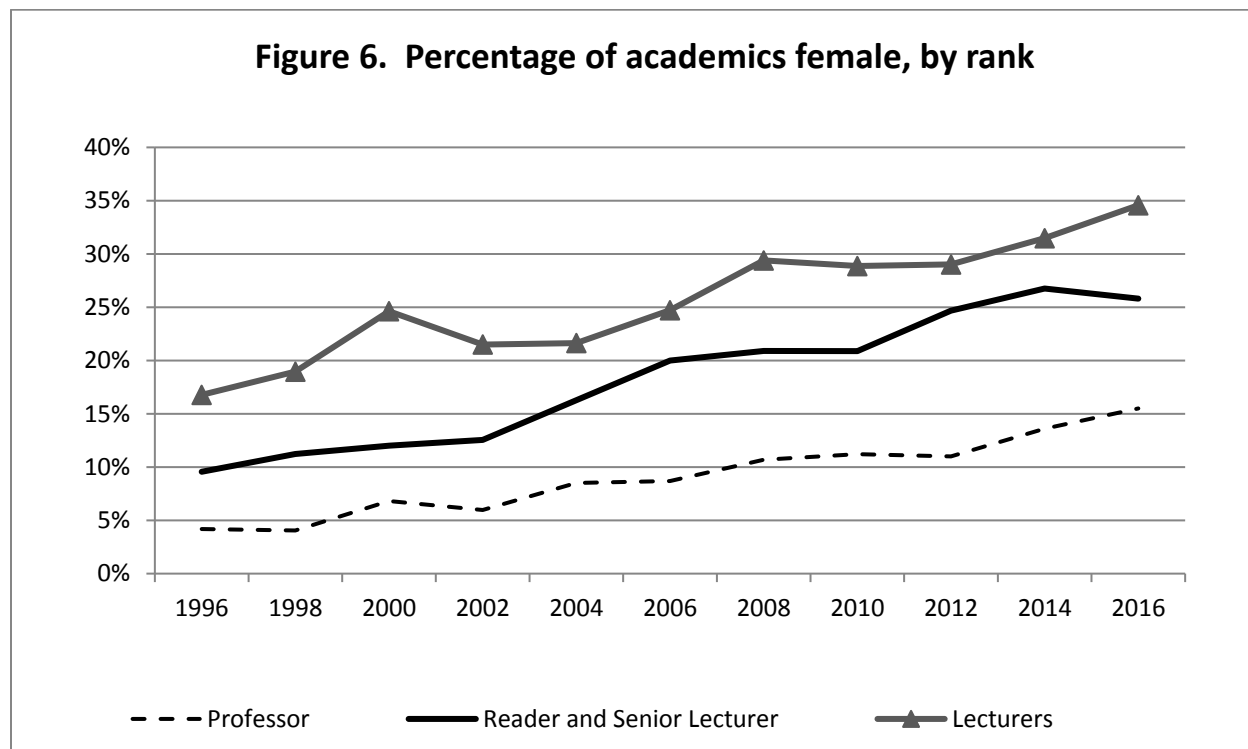
⁹The samples changed quite dramatically in 2002 and 2006. In 2006 there were only 45 responding departments from the CHUDE membership list (in contrast to the 79 in 2004 and the 93 included in the web survey of 2008). In 2002 the survey was sent to many more groups beside just those departments listed as CHUDE members (to 192 institutions of which 55 were economics departments and a further 74 were business and management centres, Burton and Joshi, 2002; page 4). Constructing a genuinely balanced sample from 1996 to 2012 is not trivial, for example, some of the departments and research institutions present in 1996 have merged and/or disappeared over the time period. Furthermore, many institutions present a single return which appears to include economists working in different research clusters within their institution. The web-based surveys reveal that many of individuals associated with research institutions are also employed on standard academic appointments in departments; this is especially true for more senior ranked economists. (For more discussion of the matching of the samples over time see Mumford, 2009).



The percentage of women working in full-time standard academics jobs in CHUDE departments by rank (using unbalanced samples from the bicentennial surveys) is shown in Figure 6. In 1996, approximately 4.2% of the Professors were female, 9.6% of the Senior Lecturer/Readers/Associate Professors and 16.8% of the Lecturers. By 2016, these shares have increased by factor of 3.7 for Professors and doubled for Lecturers. The increase in the share of Senior Lecturer/Readers/Associate Professors was somewhere in between, scaling up by a factor of 2.7.

Comparing the results from the first of the Women’s Committee’s surveys (a postal survey for 1996) with the verified survey of the web pages from 2016 in more detail (see Appendix Table A2) supports the conclusion that the grade rank composition of the total workforce has changed dramatically over the two decades: the proportion of Professors has increased by 93% (from 13.3% to 25.6% of the total workforce); the proportion of Readers and Senior Lecturers/Associate Professors has increased by 56%; whilst Lecturers/Assistant Professors are about 30% less prevalent. Considering the women, in 1996, 16.3% of academic economists were female: 16.8% of Lecturers/Assistant Professors, 9.6% of Senior Lecturers, Readers/Associate Professors, and 4.2% of Professors. In the aggregate 2016 verified sample, 28.3% of academic economists were female: 34.6% of Lecturers, 25.8% of Senior Lecturers and Readers/Associate Professors, and 15.5% of Professors. Women are roughly twice more likely to be amongst the Lecturers, 2.7 times

amongst the Associate Professor/Reader/Senior Lecturers and 3.7 times more likely to be amongst the Professors in 2016 than they were in 1996.



These intertemporal changes are more clearly seen in Figures 7 (and 8) which show the percentage of full-time female (male) UK academics by rank over time, using the unbalanced samples from each of the biennial surveys. (This is directly comparable information to that presented in Figures 1 (and 2) for the longer time period.) In 1996, roughly one in every two male academic was a Lecturer; one in four males was a Senior Lecturer/Reader/Associate Professor and slightly over one in five males was a Professor. By 2016, these proportions have changed dramatically with roughly one in three men a Lecturer, and two thirds of men a Professor or Senior Lecturer/Reader/Associate Professor (see Figure 2). The 1996 position for women was vastly different to the males, with almost three quarters of female staff members being a Lecturer and only one in sixteen a Professor. These gaps have closed substantially for women over the years. Nevertheless, women finished the twenty year time period much less favorably than did the males,

with a roughly one in two chance of being a Lecturer, one in three a Senior Lecturer/Reader/Associate Professor and less than one in five of being a Professor.

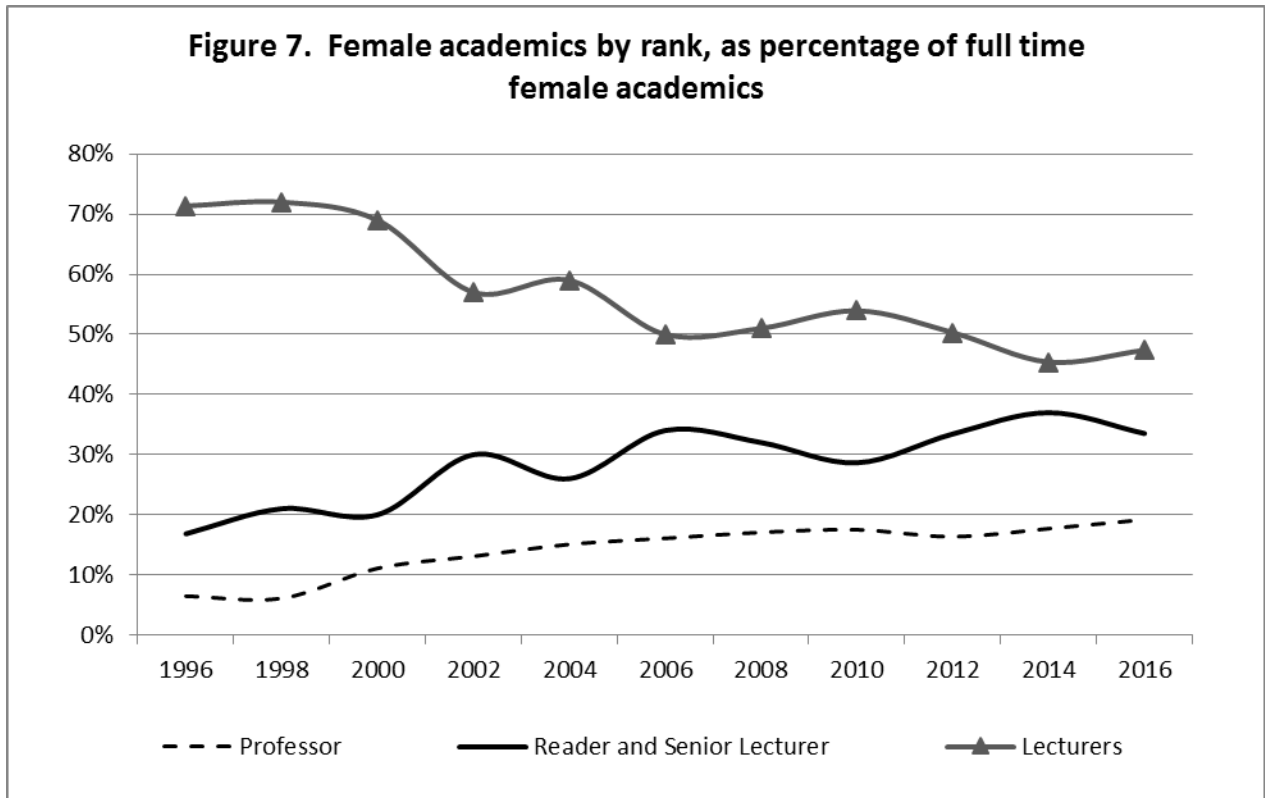
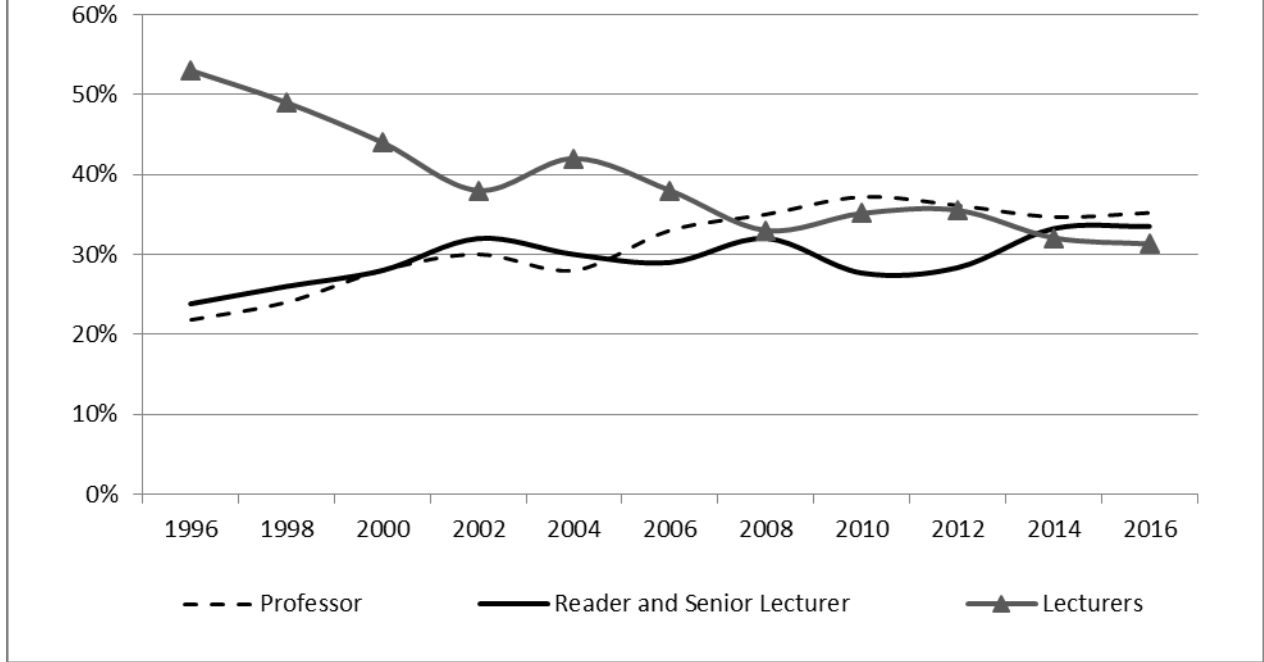


Figure 8. Male academics by rank, as percentage of full time male academics



5. Conclusions

The conclusions have been amply foreshadowed. The analysis of the 2016 survey data indicate that the great majority of economists working in academia in the UK have standard academic (teaching and research as opposed to research-only) jobs which are full-time and permanent. Based on evidence from the 2016 respondents' survey, women make up about 28% of the total academic economics workforce.

Over the past twenty years, the progress has been steady---though slow. Comparing the 2016 sample results to those of our first survey in 1996, the proportion of the workforce that is female has increased from 17.5% of the workforce in 1996 to 28% in 2016. The overall rank composition of the workforce has also changed: the share of Professors (both male and female) amongst all staff has doubled over the time period from 13% of all staff in 1996 to 25.7% in 2016. Women are more than twice as common in the standard academic grades in 2016 than they were in 1996; in 1996 women made up approximately 16.8% of the Lecturers (34.6% in 2016), 9.6% of the

Readers/Senior Lecturers/Associate Professors (25.8% in 2016) and 4.2% of the Professors (15.5% in 2016).

Recent changes in the stock of individuals in any job rank due to inflows from new hires, job separations (resignations and retirements), and promotions (within departments) were addressed by tracking individuals' movements and balanced-sample comparisons across the surveys. The findings indicate that, in contrast to males, female Professors are considerably more likely to be promoted in their own department rather than hired from another department within the UK. Furthermore, hires from outside the UK academic sector are less likely to be female than male academics. A significantly larger share of women tends to leave or resign due to family reasons.

In aggregate, the relative numbers of women are increasing in the higher grade ranks but the rate of change is slow. Comparison with 2014 yields an increase in the proportion of women among academic economists over the two years from 27% to 28.1% in the balanced sample of respondents (and 27.9% to 28.1% in the unbalanced sample). At the current rate of increase, it could take another 50 years before the profession reaches a 50-50 gender balance. Changes in retirement legislation may result in a decline in male exit rates and slow the relative growth in female representation. Similarly, the observed decline in the share of female undergraduate students studying economics may slow down the progress towards more gender balance in economics in the UK.

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Appendix

Table A1. Primary employment function: All academic staff in economics departments and research institutes (responding sample, 2016).

Primary Employment Function	2016 respondents' survey			
	Female	Male	Total	% Fem
All Staff: full time				
Professor - Permanent Contract - Fixed Term	69	344	413	16.7%
Professor - Fixed Term	0	8	8	0%
Reader - Associate Professor - Permanent Contract	119	332	451	26.4%
Reader - Associate Professor - Fixed Term	2	3	5	40%
Assistant Professor - Lecturer - Permanent Contract	163	294	457	35.7%
Assistant Professor - Lecturer - Fixed Term	8	19	27	30%
Researcher - Permanent Contract	30	41	71	42%
Researcher - Fixed Term	44	71	115	38%
Other - Permanent Contract	12	42	54	22.2%
Other - Fixed Term	16	28	44	36.4%
Totals	463	1182	1645	28.1%
All Staff: part time				
Professor - Permanent Contract - Fixed Term	3	36	39	7.7%
Professor - Fixed Term	10	59	69	14.5%
Reader - Associate Professor - Permanent Contract	1	10	11	9.1%
Reader - Associate Professor - Fixed Term	6	23	29	20.7%
Assistant Professor - Lecturer - Permanent Contract	7	20	27	25.9%
Assistant Professor - Lecturer - Fixed Term	8	19	27	29.6%
Researcher - Permanent Contract	42	60	102	41.2%
Researcher - Fixed Term	11	7	18	61.1%
Other - Permanent Contract	28	60	88	31.8%
Other - Fixed Term	3	10	13	23.1%
Totals	119	304	423	28.1%
Grand Total	582	1486	2068	28.1%

Source: RES Women's Committee Survey 2016

Table A2. Primary employment function: Academic staff in economics departments and research institutes (1996 postal and 2016 respondent surveys).

Primary Employment Function	1996 postal survey						2016 respondent survey						
	Female ▲ (1)	Male ▲ (2)	Total ▲ (3)	% Fem ▲ (4)	% Total Staff ▲ (5)	% of all Females ▲ (6)	Female ▲ (8)	Male ▲ (9)	Total ▲ (10)	% Fem ▲ (11)	% Total Staff ▲ (12)	% of all Females ▲ (13)	% of all Males ▲ (14)
All Staff													
Professor	14	320	334	4.2%	13.3%	3.4%	82	447	529	15.5%	25.6%	14.1%	30.1%
Reader - Associate Professor	37	350	387	9.6%	15.4%	9.0%	128	368	496	25.8%	24.0%	22.0%	24.8%
Assistant Professor - Lecturer	157	779	936	16.8%	37.2%	38.3%	186	352	538	34.6%	26.0%	32.0%	23.7%
Researcher	118	218	336	35.1%	13.3%	28.8%	127	179	306	41.5%	14.8%	21.8%	12.0%
Other	84	440	524	16.0%	20.8%	20.5%	59	140	199	29.6%	9.6%	10.1%	9.4%
Total	410	2107	2517	16.3%			582	1486	2068	28.1%			
Number of Departments	83						64						
Response rate	92%						57%						

Sources: RES Women's Committee Survey 2016, RES Women's Committee Postal Survey 1996.

Table A3. Main research discipline, by academic ranking (responding sample 2016).

JEL research discipline	Professor	Reader - Associate Professor	Assistant Professor - Lecturer	Researcher	Other	Total	% All	% Prof
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CHUDE departments								
A - General Economics and Teaching	3	27	19	0	24	73	4.4%	0.7%
B - History of Economic Thought, Methodology, and Heterodox Approaches	2	14	5	0	3	24	1.4%	0.4%
C - Mathematical and Quantitative Methods	40	40	43	10	9	142	8.6%	8.7%
D - Microeconomics	76	76	77	18	14	261	15.8%	16.5%
E - Macroeconomics and Monetary Economics	64	59	80	6	19	228	13.8%	13.9%
F - International Economics	15	25	31	4	7	82	4.9%	3.3%
G - Financial Economics	40	52	52	3	10	157	9.5%	8.7%
H - Public Economics	15	13	16	3	6	53	3.2%	3.3%
I - Health, Education, and Welfare	17	16	17	15	6	71	4.3%	3.7%
J - Labor and Demographic Economics	41	33	34	10	7	125	7.5%	8.9%
K - Law and Economics	5	1	0	0	1	7	0.4%	1.1%
L - Industrial Organization	17	14	21	2	6	60	3.6%	3.7%
M - Business Administration and Business Economics; Marketing; Accounting	11	7	6	1	1	26	1.6%	2.4%
N - Economic History	11	10	5	3	1	30	1.8%	2.4%
O - Economic Development, Technological Change, and Growth	40	30	38	8	15	131	7.9%	8.7%
P - Economic Systems	1	2	1	0	0	4	0.2%	0.2%
Q - Agricultural and Natural Resource Economics; Environmental and Ecologic	25	14	19	12	5	75	4.5%	5.4%
R - Urban, Rural, Regional, Real Estate, and Transportation Economics	9	14	4	2	0	29	1.8%	2.0%
Y - Miscellaneous Categories	11	11	8	3	3	36	2.2%	2.4%
Z - Other Special Topics	17	9	14	2	1	43	2.6%	3.7%
Total	460	467	490	102	138	1657	100%	100%
Research groups and non-CHUDE departments								
A - General Economics and Teaching	0	1	0	0	0	1	0.5%	0.0%
B - History of Economic Thought, Methodology, and Heterodox Approaches	0	0	1	0	1	2	0.9%	0.0%
C - Mathematical and Quantitative Methods	1	0	3	0	0	4	1.9%	3.4%
D - Microeconomics	0	0	1	6	0	7	3.3%	0.0%
E - Macroeconomics and Monetary Economics	0	0	1	8	0	9	4.3%	0.0%
F - International Economics	0	0	0	4	0	4	1.9%	0.0%
G - Financial Economics	0	0	1	0	0	1	0.5%	0.0%
H - Public Economics	0	0	0	0	0	0	0.0%	0.0%
I - Health, Education, and Welfare	23	4	1	70	1	99	46.9%	79.3%
J - Labor and Demographic Economics	3	0	0	16	0	19	9.0%	10.3%
K - Law and Economics	0	0	0	0	0	0	0.0%	0.0%
L - Industrial Organization	0	0	0	0	0	0	0.0%	0.0%
M - Business Administration and Business Economics; Marketing; Accounting	0	0	0	0	0	0	0.0%	0.0%
N - Economic History	0	0	0	0	0	0	0.0%	0.0%
O - Economic Development, Technological Change, and Growth	1	0	0	38	0	39	18.5%	3.4%
P - Economic Systems	0	0	0	0	0	0	0.0%	0.0%
Q - Agricultural and Natural Resource Economics; Environmental and Ecologic	0	0	0	1	0	1	0.5%	0.0%
R - Urban, Rural, Regional, Real Estate, and Transportation Economics	0	0	0	14	0	14	6.6%	0.0%
Y - Miscellaneous Categories	0	0	0	8	0	8	3.8%	0.0%
Z - Other Special Topics	1	0	0	2	0	3	1.4%	3.4%
Total	29	5	8	167	2	211	100%	100%

Source: RES Women's Committee Survey 2016.

Table A4. Main research discipline, by gender (responding sample 2016, CHUDE depts only).

JEL research discipline	Female	Male	Total	% Fem	REF gpa<=2.5	2.5<REF gpa<=3	REF gpa>3	% Total in REF>3
A - General Economics and Teaching	13	60	73	3.0%	9	42	22	30.1%
B - History of Economic Thought, Methodology, and Heterodox Approaches	8	16	24	1.8%	4	10	10	41.7%
C - Mathematical and Quantitative Methods	31	111	142	7.1%	16	68	58	40.8%
D - Microeconomics	69	192	261	15.9%	22	109	130	49.8%
E - Macroeconomics and Monetary Economics	40	188	228	9.2%	22	96	110	48.2%
F - International Economics	26	56	82	6.0%	9	30	43	52.4%
G - Financial Economics	45	112	157	10.3%	11	87	59	37.6%
H - Public Economics	16	37	53	3.7%	2	21	30	56.6%
I - Health, Education, and Welfare	29	42	71	6.7%	5	36	30	42.3%
J - Labor and Demographic Economics	41	84	125	9.4%	15	39	71	56.8%
K - Law and Economics	2	5	7	0.5%	0	4	3	42.9%
L - Industrial Organization	9	51	60	2.1%	6	23	31	51.7%
M - Business Administration and Business Economics; Marketing; Accounting	6	20	26	1.4%	3	4	19	73.1%
N - Economic History	4	26	30	0.9%	1	9	20	66.7%
O - Economic Development, Technological Change, and Growth	42	89	131	9.7%	9	44	78	59.5%
P - Economic Systems	1	3	4	0.2%	0	4	0	0.0%
Q - Agricultural and Natural Resource Economics; Environmental and Ecologic	21	54	75	4.8%	13	37	25	33.3%
R - Urban, Rural, Regional, Real Estate, and Transportation Economics	6	23	29	1.4%	2	11	16	55.2%
Y - Miscellaneous Categories	12	24	36	2.8%	0	4	32	88.9%
Z - Other Special Topics	14	29	43	3.2%	0	19	24	55.8%
Total	435	1222	1657	26.3%	149	697	811	48.9%

Source: RES Women's Committee Survey 2016.

Table A5 presents information on new staff hired in the academic year prior to the survey year: columns 1 to 4 for the 2016 respondents' sample; columns 5 and 6 are the 2016 survey balanced sample results for those departments responding to both the 2016 and the 2014 surveys; columns 7 and 8 are the 2014 survey balanced sample and columns 9 and 10 are the full 2014 survey results. The numbers involved are small and implications are accordingly far from confident.

Comparing the balanced samples in columns 5 through 8, hiring in 2015/16 (the 2016 survey) can be seen to be lower than it was in 2013/14 (the 2014 survey). The balanced samples also show a decrease in the percentage of women being hired in Professorial and Reading positions and an increase in the percentage of Lecturers and Researchers who are female. Returning to the full respondents' survey for 2016 (columns 1 to 4) clearly reveals that the percentage of women amongst those hired as Researchers or Lecturers is higher than that observed for Professors and Readers. Again, since there were many missing observations in this particular survey entry, numbers should be read with caution.

Table A5. New hires.

	2016 respondents' survey				2016 balanced sample		2014 balanced sample		2014 respondents' survey	
	Female (1)	Male (2)	Total (3)	%Fem (4)	Total (5)	%Fem (6)	Total (7)	%Fem (8)	Total (9)	%Fem (10)
Professor	0	10	10	0.0%	10	0.0%	44	13.6%	60	13.3%
Reader - Associate Professor	8	21	29	27.6%	29	27.6%	44	31.8%	71	25.4%
Assistant Professor - Lecturer	23	58	81	28.4%	77	29.9%	134	29.9%	177	32.2%
Researcher	28	44	72	38.9%	72	38.9%	96	35.4%	127	33.1%
Other	13	14	27	48.1%	26	46.2%	112	44.6%	136	45.6%
Total	72	147	219	32.9%	214	33.2%	430	33.5%	571	32.7%

Source: RES Women's Committee Surveys 2016 and 2014.

The majority of inflows into the senior academic grades (Professorial, Reader or Senior Lecturer) may be due to promotion rather than new hires. Table A6 presents information on promotions in the previous year and follows the same structure as Table A5: columns 1 to 4 are for the full 2014 respondents' sample; columns 5 and 6 are the 2014 balanced sample survey results for those departments responding to both the 2014 and the 2012 surveys; columns 7 and 8 are the 2012 balanced sample; and columns 7 and 8 are the 2012 survey results.

Table A6. Promotions.

	2016 respondents' survey				2016 balanced sample		2014 balanced sample		2014 respondents' survey	
	Female (1)	Male (2)	Total (3)	%Fem (4)	Total (5)	%Fem (6)	Total (7)	%Fem (8)	Total (9)	%Fem (10)
Professor	8	14	22	36.4%	22	36.4%	12	41.7%	19	36.8%
Reader - Associate Professor	15	24	39	38.5%	39	38.5%	62	22.6%	85	25.9%
Assistant Professor - Lecturer	5	8	13	38.5%	13	38.5%	18	22.2%	24	37.5%
Researcher	1	8	9	11.1%	9	11.1%	11	72.7%	35	62.9%
Other	0	0	0	-	0	-	0	-	0	-
Total	29	54	83	34.9%	83	34.9%	103	30.1%	163	36.8%

Source: RES Women's Committee Surveys 2016 and 2014.

These numbers of promotions are also obviously small so we should again be cautious about how valid the implications of these flows for changes in relative employment actually are. Comparing the balanced samples, internal promotions decreased between 2014 and 2016, from 103 promotions in 2014 to 83 in 2016, and women made up a higher proportion of these promotions in 2016. The relative promotion of female Readers and Lecturers increased in 2016.

The third flow affecting the stock of academic economists is leavers (see Table A7). In aggregate, women make up a slightly higher proportion of these separations than they do of the total pool of academic economists (31% relative to 28%) and such separations are rare for the most senior women (Professors and Readers).

Table A7. Separations.

	2016 respondents' survey				2016 balanced sample		2014 balanced sample		2014 respondents' survey	
	Female (1)	Male (2)	Total (3)	%Fem (4)	Total (5)	%Fem (6)	Total (7)	%Fem (8)	Total (9)	%Fem (10)
Professor	4	43	47	8.5%	47	8.5%	61	14.8%	83	13.3%
Reader - Associate Professor	10	35	45	22.2%	45	22.2%	40	15.0%	64	17.2%
Assistant Professor - Lecturer	16	36	52	30.8%	50	30.0%	58	27.6%	77	32.5%
Researcher	32	58	90	35.6%	90	35.6%	101	48.5%	159	44.0%
Other	48	72	120	40.0%	119	40.3%	88	38.6%	96	35.4%
Total	110	244	354	31.1%	351	31.1%	348	32.8%	479	31.5%

Source: RES Women's Committee Surveys 2016 and 2014.

Table A8. CHUDE Departments, by responding status

<i>Respondents</i>		
Aberystwyth University	School of Oriental and African Studies (SOAS)	University of Liverpool
Aston University Birmingham	Swansea University	University of London Birkbeck
Cardiff Metropolitan University	University of Aberdeen	University of Manchester
City University London	University of Bangor	University of Nottingham
Durham University	University of Birmingham	University of Oxford
Heriot-Watt University	University of Bristol	University of Portsmouth
Lancaster University	University of Buckingham	University of Reading
Liverpool John Moores University	University of Cambridge	University of Sheffield
London Business School	University of Derby	University of Southampton
London School of Economics and Political Science	University of Dundee	University of St Andrews
Manchester Business School	University of Edinburgh	University of Stirling
Manchester Metropolitan University	University of Essex	University of Surrey
Middlesex University	University of Exeter	University of Sussex
Newcastle University	University of Hertfordshire	University of Ulster
Nottingham Trent University	University of Huddersfield	University of Warwick
Oxford Brookes University	University of Hull	University of Westminster
Queen Mary University of London	University of Kent	University of York
Queens University Belfast	University of Leeds	University of the West of England Bristol
Royal Holloway University of London	University of Leicester	
<i>Non-respondents</i>		
Anglia Ruskin University	London South Bank University	University of East London
Brunel University	Loughborough University	University of Glasgow
Cardiff University	Napier University	University of Greenwich
Coventry University	Northumbria University	University of Plymouth
Cranfield University	Open University	University of Salford
De Montfort University	Robert Gordon University	University of South Wales
Glasgow Caledonian University	Staffordshire University	University of South Wales (HEPRU)
Imperial College London	University College London	University of Strathclyde
Keele University	University of Abertay Dundee	University of Teesside
King's College London	University of Bath	University of Wolverhampton
Kingston University	University of Bradford	University of the West of Scotland
Leeds Beckett University	University of Central Lancashire	
London Metropolitan University	University of East Anglia	

Source: RES Women's Committee Survey 2016.

Table A9. Non-CHUDE Departments and Research Institutes, by responding status

non-CHUDE departments		Research Institutes	
<i>Respondents</i>		<i>Respondents</i>	
New College of the Humanities		Centre for Economic Performance (LSE)	
<i>Non-respondents</i>		Centre for Health Economics (York)	
Queen Margaret University Edinburgh		Centre for Longitudinal Studies	
Regent's University London		Health Economics Research Unit (Aberdeen)	
University of Exeter (Finance)		Institute for Employment Research (Warwick)	
University of Nottingham BS		National Institute of Economic and Social Research	
University of St Andrews (Business School)		Policy Studies Institute (Westminster)	
University of York BS		<i>Non-respondents</i>	
		Centre for Social and Economic Research on Global Environment	
		Institute for Employment Studies	
		Institute for Fiscal Studies	
		Institute for Social & Economic Research (Essex)	
		Policy Research Institute (Leeds Met)	

Source: RES Women's Committee Survey 2016.

Table A10 presents the same results as table 1 but only reporting the primary employment function; e.g., a person cannot be both a standard academic and a part-time researcher in the table, whereas that was a possibility in Table 1.

Finally, Table A11 presents the shares of female academics, by rank for each of the respondents' institutions.

Table A10. Primary employment function: All academic staff in economics departments and research institutes (responding sample, 2016).

Primary Employment Function	2016 respondent's survey			% Fem
	Female	Male	Total	
All Staff: full time				
Professor	70	352	422	16.6%
Reader - Associate Professor	121	334	455	26.6%
Assistant Professor - Lecturer	170	317	487	34.9%
Researcher	73	112	185	39.5%
Other	28	71	99	28.3%
Totals	462	1186	1648	28.0%
All Staff: part time				
Professor	12	91	103	11.7%
Reader - Associate Professor	7	34	41	17.1%
Assistant Professor - Lecturer	15	38	53	28.3%
Researcher	53	65	118	44.9%
Other	27	63	90	30.0%
Totals	114	291	405	28.1%
Grand Total	576	1477	2053	28.1%

Source: RES Women's Committee Survey 2016.

**Table A11. Share of female economists in UK universities, by rank
(responding sample, 2016).**

Institution	2016 respondent's survey		
	Share of Female Professor	Share of Female Reader-Associate	Share of Female Lecturer
Aberystwyth University	0.000	1.000	0.143
Aston University Birmingham	0.333	0.000	0.308
Cardiff Metropolitan University	0.000	0.000	0.667
City University London	0.333	0.400	0.556
Durham University	0.071	0.111	0.435
Heriot-Watt University	0.000	0.250	0.800
Lancaster University	0.000	0.200	0.316
Liverpool John Moores University		0.000	
London Business School	0.200		0.500
London School of Economics and Political Science	0.079	0.364	0.158
Manchester Business School	0.212	0.176	0.385
Manchester Metropolitan University	0.000	0.286	0.500
Middlesex University	0.000	0.286	1.000
Newcastle University	0.125	0.250	0.313
Nottingham Trent University	0.000	0.238	0.417
Oxford Brookes University	0.000	0.750	
Queen Mary University of London	0.050	0.333	0.375
Queens University Belfast	0.000	0.500	0.000
Royal Holloway University of London	0.083	0.125	0.400
School of Oriental and African Studies (SOAS)	0.143	0.333	0.750
Swansea University	0.000	0.333	0.375
University of Aberdeen	0.143	0.200	0.429
University of Bangor	0.077	0.667	0.125
University of Birmingham	0.214	0.100	0.455
University of Bristol	0.222	0.364	0.125
University of Buckingham	0.286	0.000	0.333
University of Cambridge	0.083	0.167	0.368
University of Derby		0.800	0.000
University of Dundee	0.000	0.000	0.250
University of Edinburgh	0.125	0.333	0.286
University of Essex	0.313	0.083	0.222
University of Exeter	0.143	0.333	0.333
University of Hertfordshire		0.143	0.000
University of Huddersfield	1.000	0.000	
University of Hull	0.000	0.400	0.000
University of Kent	0.125	0.333	0.313
University of Leeds	0.143	0.143	0.500
University of Leicester	0.000	0.200	0.250
University of Liverpool	0.154	0.222	0.467
University of London Birkbeck	0.400	0.200	0.167
University of Manchester	0.214	0.000	0.148
University of Nottingham	0.065	0.353	0.333
University of Oxford	0.074	0.125	
University of Portsmouth	0.167	0.143	0.222
University of Reading	0.167	0.300	0.900
University of Sheffield	0.333	0.125	0.385
University of Southampton	0.143	0.077	0.333
University of St Andrews	0.286	0.250	0.263
University of Stirling	0.000	0.500	0.429

**Table A11 continued. Share of female economists in UK universities, by rank
(responding sample, 2016).**

Institution	2016 respondent's survey		
	Share of Female Professor	Share of Female Reader- Associate	Share of Female Lecturer
University of Surrey	0.286	0.125	0.538
University of Sussex	0.000	0.250	0.222
University of Ulster	0.000	0.000	0.667
University of Warwick	0.129	0.368	0.389
University of Westminster	0.333	0.500	0.462
University of York	0.263	0.091	0.412
University of the West of England Bristol	0.333	0.391	1.000
New College of the Humanities		1.000	0.143

Source: RES Women's Committee Survey 2016.