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Royal Economic Society Women's Committee Survey on the Gender and Ethnic Balance of Academic Economics 2008

By

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## **Executive Summary**

This report describes the data from the seventh, 2008, survey of gender and ethnic balance amongst academic economists in CHUDE membership departments in UK universities. The main results from the 2008 survey are:

- women constitute 22% of all academic staff in economics
- women are under-represented among Professors one in three men are Professors compared to one in six women
- the proportion of women is substantially higher in research jobs than in standard academic jobs
- the proportion of women is higher among part-timers than full-timers
- 17% of staff are from ethnic minorities, 11% of Professors are
- women are disproportionately represented amongst the ethnic minorities
- the response rate among departments is reasonable at 73%.

It is also of interest to compare the results from the 2008 survey with that from 2006. The low response rate in 2006 makes this balanced sample comparison difficult but the overall impression is:

- there has been a slight increase in the overall proportion of women among academic economists, especially amongst Professors
- female Professors are promoted rather than hired
- job separations are rare for senior females
- the changes that are observed over the two years are not generally significantly different from zero making it hard to make any definite statement about trends.

Comparing the 2008 results to those from the 1996 survey:

- In aggregate the workforce has grown over the twelve years, from 2346 to 2519 academic economists (a 7.4% growth rate). The number of women has increased by 35.4% whilst the number of males has essentially remained stable (increasing by 1.45%).
- the numbers of Professors has more than doubled over the time period (from 14% of all staff to 29%)
- in 1996 women made up 17.5% of the workforce, by 2008 this has risen to 22%
- women are twice as likely to be in the standard academic grades in 2008 than they were in 1996 (in 1996 women made up approximately 15% of the Lecturers, 10% of the Readers/Senior Lecturers and 5% of the Professors; in 2008 women make up some 30% of the Lecturers, 20% of the Readers/Senior Lecturers and 10% of the Professors)

## 1. Introduction to the 2008 survey.

This report covers the seventh survey of the gender and ethnic 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 (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). In 1998, the RES also undertook a survey into the ethnic composition of academic employment in economics (Blackaby and Frank, 2000), and since 2000 the two surveys have been combined.

The Gender and Ethnic Balance 2008 questionnaire was emailed out by Tim Worrall (CHUDE Secretary) on December 17, 2008, to around 97 institutions drawn, as in previous years, from the CHUDE mailing list.<sup>1</sup> The survey aimed to collect information as of November 30<sup>th</sup> 2008 on academic staff (full-time and part-time) by grade of employment, gender, ethnicity, and country of birth. It also collected information on promotions, new hires and job leavers (in the academic year 2007/2008).

By September the 10<sup>th</sup> 2009, 71 questionnaires had been returned (with one being unusable): a reasonable response rate of 73%.<sup>2</sup> Multiple attempts to obtain a return from each of the non-responding departments were made, nevertheless, there were a substantial number who did not participate perhaps reflecting a weakness in survey design or apathy on the part of departments (Georgiadis and Manning, 2007; page 3). A substantial decline in response rates coincided with the inclusion of the ethnicity component in the survey; it may also be that collection of this type of information is considered to be more onerous by departments. Section 2 of the report presents results for this emailed survey.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> There are major difficulties in covering economists working outside conventional economics or business departments. The failure to identify economists working in policy studies or inter-disciplinary settings in the surveys is of concern to the Royal Economics Society's Women's Committee.

 $<sup>^2</sup>$  This represents an increase from the 45 received in 2006 and a decline from the 79 received in 2004. However as fewer questionnaires were issued in 2006, the response-rate (at 47% of eligible institutions) was consistent with that achieved in 2004 (when it was also 47%), whilst the 2000 survey achieved a 60% response rate.

<sup>&</sup>lt;sup>3</sup> The excel files for the individual departmental survey returns were merged by Paul Hodgson.

For the 2006 survey, Franceso Marrioti and Karen Mumford surveyed a subsample of departmental web-sites for the non-respondents and coded, by gender, the staff listed on them (see Georgiadis and Manning, 2007; Appendix). For the 2008 survey, Gwen Postle and Karen Mumford carried out a similar exercise for all of the CHUDE departmental websites that the emailed surveys were sent to. These web based data are also included in the analysis below and results are discussed in section 3 of the report.

Comparisons are also made between alternative samples of responding institutions using 'balanced' panels from previous surveys. In particular, section 4 of the report compares findings from the original 1996 survey with those for the 2008 web-based survey.

## 2. Overview of the findings for the emailed survey, 2008.

The Gender and Ethnic Balance 2008 survey collected information as of November 30<sup>th</sup> 2008 on academic staff (full-time and part-time) by grade of employment, gender, and ethnicity. It also collects information on promotions, new hires and job leavers (in the academic year 2007/2008). The last usable response was returned on September the 10<sup>th</sup> 2009, at which time 71 completed questionnaires had been returned (with one being unusable): a response rate of 73%. Table 1 shows the numbers of economists employed in academia in the UK from the total email survey return. In aggregate, information is available for 1,597 people who work as economists in academic appointments in the UK, 354 (or 22.2%) of these are women.

The vast majority of these economists (88.4%) are working in standard academic appointments (ie., mixed teaching and research jobs as opposed to research-only appointments), this figure is slightly less for women than for men (86.2% and 89.1% respectively). The majority of academic economists are also working full-time (91.4%) and this figure is also lower for women (87%) than men (92.6%). If the research-only categories are excluded from the calculation, women make up 21.2.% of the standard full-time academic workforce (or 276 out of 1303 employees).

		2008 full ema	il based surve	у
Primary Employment Function	Female	Male	Total	% Fem
All Staff: full time				40.70
Professors	46	384	430	10.70
Readers	22	105	127	17.32
Senior Lecturers	65	237	302	21.52
Lecturers - permanent	129	328	457	28.23
Lecturers - fixed term	12	26	38	31.58
Senior Researchers	10	19	29	34.48
Researchers - permanent	1	9	10	10.0
Researchers - fixed term	23	43	66	34.85
Totals	308	1151	1459	21.11
All Staff: part time				
Professors	5	42	47	10.64
Readers	1	3	4	25.0
Senior Lecturers	5	7	12	41.67
Lecturers - permanent	8	13	21	38.10
Lecturers - fixed term	10	15	25	40.0
Senior Researchers	7	6	13	53.85
Researchers - permanent	0	0	0	0.0
Researchers - fixed term	10	6	16	62.50
Totals	46	92	138	33.33
Grand Total	354	1243	1597	22.17

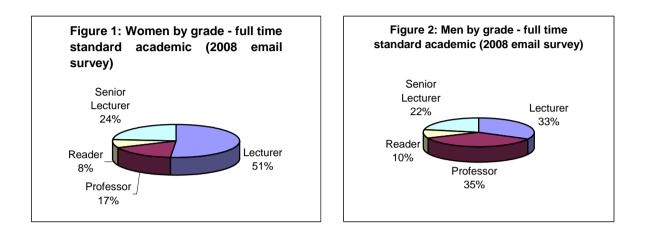
# Table 1. Primary employment function: All academic staff in economicsdepartments and research institutes (responding sample, 2008).

Source: RES Women's Committee Survey 2008, email based.

Women are substantially more likely to be employed at lower academic grade levels, as is clearly seen in the final column of Table 1. For example, amongst full-time staff, the proportion female decreased from 28.2% of the Permanent Lecturers, to 21.5% of the Senior Lecturers, 17.3% of the Readers and 10.7% of the Professors.

Of all the women employed full time in standard academic appointments (see Figure 1), 17% are Professors and a further 32% are Readers or Senior Lecturers. One in every two of the women is a Lecturer. Carrying out a similar exercise for the men (Figure 2) reveals that

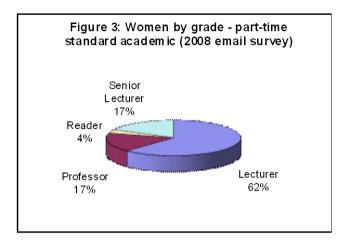
35% of the males are in the Professorial grade with another 32% in the Reader/Senior Lecturer grades. In other words, these males are roughly twice as likely to be Professors but only slightly more likely to be Senior Lecturers or Readers than are the women.

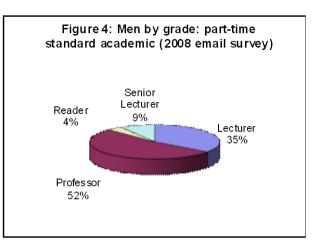


## Part time employment.

Concentrating on the part-time employees (see the lower panel of Table 1), the number of men working part-time is considerably larger than the number of women; however, their numbers relative to the total pool of male employees are smaller: 13% of female economists in academia are working part-time and 7.4% of male are. Of the female economists in standard academic jobs 9.5% work part-time whilst 7.2% of the males do. With the exception of the Professorial grade rank, there are relatively larger numbers of females in every academic grade among part-time employees than there are for full-time employees (comparing the higher and lower panels of Table 1).

Of the part-time women employed in standard academic appointments, 17% of these women are Professors and 63% are Lecturers (see Figure 3). Carrying out a similar exercise for the men (Figure 4) reveals that 52% of the part-time males are in the Professorial grade with 35% in the Lecturer grade. In other words, part-time males are roughly three times as likely to be Professors and almost half as likely to be Lecturers as are part-time women.





#### Temporary employment.

Temporary employment contracts are found to be rare for job ranks other than Lecturers and Researchers, indeed, there are no Readers of Senior Lecturers amongst the responding sample that are on fixed term contracts. 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 temporary employees who are also part-time.

Much of the information in Table 2 has already been presented above, for example, the fixed term and part-time status for 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: 29.4% of Lecturers, 22.3% of Senior Lecturers, 17.6% of Readers, and 10.7% of Professors (see panel 1 of Table 2).

Reading across the columns in panel 1 of Table 2 reveals that, in total, there are 477 Professors, 51 of whom (10.7%) are female. The Professors constitute 29.9% of all academic staff (column 4). Of these Professors, 22 are working on a fixed term contract (see panel 2), 2 of whom (or 9.1%) are female. Only 4.6% of the Professors are on a fixed term contract (column 5) whilst 11.6% of all the fixed term staff are Professors (column 6).

Primary employment function	Female	Male	Total	% Fem		% of fixed term staff in the rank
	(1)	(2)	(3)	(4)	(5)	(6)
All staff	( )	( )	(-)	( )		(-)
Professor	51	426	477	10.7%	29.9%	
Reader	23	108	131	17.6%	8.2%	
Senior Lecturer	70	244	314	22.3%	19.7%	
Lecturer	159	382	541	29.4%	33.9%	
Senior Researcher	17	25	42	40.5%	2.6%	
Researcher	34	58	92	37.0%	5.8%	
Total	354	1,243	1,597	22.2%	100.0%	
Fixed term staff						
Professor	2	20	22	9.1%	4.6%	11.6%
Reader	0	0	0	0.0%	-	
Senior Lecturer	0	0	0	0.0%	-	
Lecturer	22	41	63	34.9%	11.6%	33.3%
Senior Researcher	8	14	22	36.4%	52.4%	11.6%
Researcher	33	49	82	40.2%	89.1%	43.4%
Total	65	124	189	34.4%	11.8%	100.0%
Fixed term and part-time staff						
Professor	2	19	21	9.5%	4.4%	95.5%
Reader	0	0	0	0.0%	-	-
Senior Lecturer	0	0	0	0.0%	-	-
Lecturer	10	15	25	40.0%	4.6%	39.7%
Senior Researcher	2	5	7	28.6%	16.7%	31.8%
Researcher	10	6	16	62.5%	17.4%	19.5%
Total	24	45	69	34.8%	4.3%	36.5%

## Table 2. Primary employment function: All academic staff, fixed term staff, fixedterm and part-time staff (responding sample, 2008).

Source: RES Women's Committee Survey 2008, email based.

Panel 3 shows that the vast majority of the Professors working on a fixed term contract are also working part-time (95.5%, see column 6). Indeed, there is only one male Professor who is on a fixed term, full-time contract (reading down column 3). In contrast, more than a third (36.4%) of the relatively scarce Senior Researchers are employed on a fixed

term basis and almost a third of them (31.8%) are also working part-time. Researchers are particularly prone to be on a fixed term contract (89.1%) and more than four fifths of these academics are also working part-time. Researchers are also substantially more likely to be female; 63% of part-time Researchers on fixed term contracts are female.

#### 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 employed as economists) the proportion of Readers, Senior Lecturers and Lecturers who are female in departments with and without a female Professor. The first five 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, reading across the first row of Table, there are 12 departments where less than 10% of their non-professorial staff is female. Of these 12 departments, eight have a female Professor and four do not. Only seven departments (10% of the sample) had more than 30% of their Reader, Senior Lecturer or Lecturer posts taken by women: one has a female Professor and six do not. In general, these findings provide little indication that the presence of at least one Professorial woman in a department enhances the representation of women more generally in that department.

Considering the final rows of Table 3, in aggregate, departments with a female Professor had an average of 14.8% of female staff in non-professorial job ranks, in departments with no female professor this proportion was 20.6%. Additionally, departments with at least one female Professor are larger in size, as measured by the number of staff below Professor (16.35 relative to 12.48). Taken in combination, the evidence presented in Table 3 does not provide compelling support for the role model hypothesis (a similar conclusion was reached for the 2006 survey, see Georgiadis and Manning, 2007; page 9).

	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<=9%	8	4	12
9%< pr<=19%	13	19	32
20% <pr<=29%< td=""><td>7</td><td>12</td><td>19</td></pr<=29%<>	7	12	19
pr>29%+	1	6	7
Average number of staff below Professorial rank	16.35	12.48	
Average proportion of female staff below Professorial rank	14.8%	20.6%	
Number of departments	<i>n</i> =29	<i>n</i> =41	<i>n</i> =70

# Table 3: Proportion of female academic staff below Professor, (responding sample,2008 email survey)

Source: RES Women's Committee Survey 2008, email based.

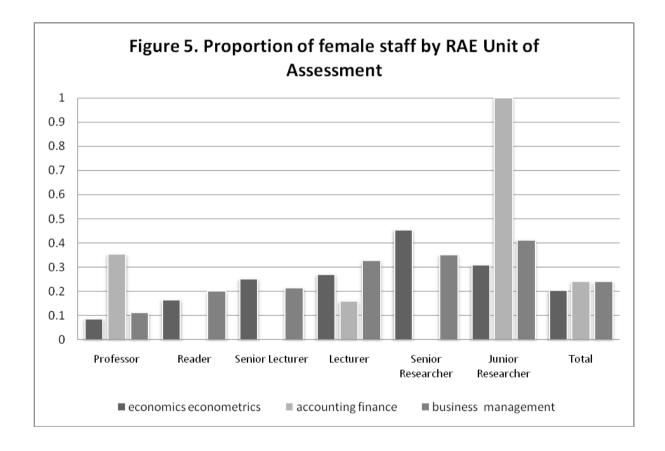
## Analysis by RAE results

It may be argued that there is a relationship between the presentation of women in a department and the department's success in the Research Assessment Exercise (RAE). This is another issue that has been explored in the previous surveys and reports, without convincing results supporting the hypothesis.

During the 2008 RAE, departments could be rated under different Units of Assessment (UoA). The data were analysed to see if there were any differences between departments rated in the "Economics and Econometrics" unit (UoA 34); the "Business and Management" unit (UoA 35); and the "Accounting and Finance" unit (UoA 36). Departments could submit to multiple units and many did (35 of the responding departments submitted to Economics and Econometrics; 9 to Accounting and Finance; and 61 to Business Management)<sup>4</sup>. For these responding departments, the average RAE score for each of the Units of Assessment were 3.06 for Economics and Econometrics; 2.41 for Accounting and Finance; and 2.56 for Business Management.

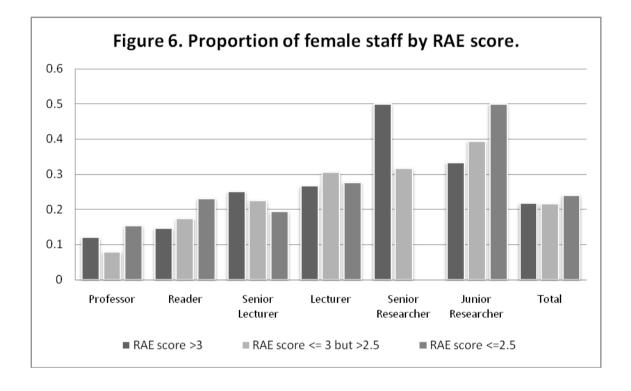
<sup>&</sup>lt;sup>4</sup> There were three departments who responded to the survey that were not included in either of these Units of Assessment (Staffordshire, University of Derby and the University of East London).

Figure 5 presents the proportion of female staff in each job rank by the three Units of Assessment. Accounting and Finance is clearly the outlier with large swings in the proportion female associated with small numbers in some ranks (such as Reader, Senior Lecturer or Senior Researcher). The proportion of total staff that is female is, however, actually the same in this unit as it is for Business and Management, and it is only slightly higher than for Economics and Econometrics. Concentrating on the other two units, the relative number of women in each rank is typically lower for Economics and Econometrics than it is for Business and Management, with the exception of the Senior Lecturer and Senior Researcher ranks.



The responses were also analysed to see whether there were differences between those departments with a higher score in the 2008 Research Assessment Exercise or not. Of those departments submitting to more than one Unit of Assessment, ranking priority for categorisation of the RAE score results was set at "Economics and Econometrics" > "Business and Management" > "Accounting and Finance". Figure 6 shows the proportion of

female staff in each grade rank by the RAE score of the department. The departments were divided into those who scored (i) below 2.5; (ii) 2.5 or above but below 3; and (iii) 3 or above. Of the 67 responding departments who submitted to these units of assessment, 12 departments scored above 3 (483 staff members), 28 departments scored above 2.5 but equal to or 3 (694 staff), and 27 departments scored 2.5 or below (403 staff); none of the departments scored below 1.



On average, departments scoring 2.5 or below in the 2008 RAE have relatively more posts held by women (23.8%) than those rated above 2.5 but below 3 (21.6%) or those rated greater 3 or above (21.7%), as can be seen in the totals column of Figure 5. The lower RAE scoring departments are more likely to have females amongst their Junior Researchers, Professors and Readers (however the numbers in the senior ranks in these departments are small; 82 Professors and 27 Readers). There is comparatively little difference in the relative numbers of women in each rank in the higher scoring departments, with the obvious exception of the Senior Researcher rank in those departments scoring above 3 (50% female) and those scoring above 2.5 but below 3 (31.6%). There are no female Senior Researchers amongst the lower scoring departments. This pattern might be partially explained by the

concentration of separate research clusters with Senior Researchers in those departments that are successful in the RAE, indeed of the 408 staff members present in the lower scoring departments, there is only one Senior Researcher.

#### 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 departments) can also be addressed. Table 4 presents information on new staff hired in the last year in the respondent department: columns 1 to 4 for the full 2008 email sample; columns 5 and 6 are the 2008 survey balanced sample results for those departments responding to both the 2008 and the 2006 surveys; and columns 7 and 8 are the full 2006 survey results. Comparing columns 5 and 7, hiring in 2008 can be seen to be considerably lower than it was in 2006 with no women hired in the standard academic grades above Lecturer in the balanced sample.

		2008 full e	mail survey			alanced nple	2006 email survey		
	Female	Male	Total	%Fem	Total	%Fem	Total	%Fem	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Professor	2	22	24	8.3%	13	0.0%	22	4.6%	
Reader	1	2	3	33.3%	1	0.0%	7	0.0%	
Senior Lecturer	1	7	8	12.5%	1	0.0%	8	37.5%	
Lecturer	36	64	100	36.0%	60	30.0%	55	29.1%	
Senior Researcher	2	5	7	28.6%	6	33.3%	-	-	
Researcher	14	23	37	37.8%	28	39.3%	-	-	
Total	56	123	179	31.3%	109	28.4%	92	21.7%	

#### Table 4. New hires.

Source: Balanced samples for 2006 and 2008: RES Women's Committee Survey 2006 (Georgiadis and Manning, 2007; page 4), RES Women's Committee Survey 2008, email based.

Moving on to the full 2008 email responses, whilst the numbers of the new hires are small, column 4 reveals a very small growth in the number of female Professors from this source (amongst those department who responded in 2008 but not in 2006). Nevertheless, this hiring rate actually lowered the proportion of females in the professorial grade (from 10.82% to 10.70%). In aggregate, women make up a larger proportion (31.3%) of the new hires than they do of the total pool of academic economists (21.2% - see Table 1), however, the

majority of these hires are concentrated in the lower academic grade ranks (especially Lecturer and Researcher).

The majority of inflows into the senior academic grades (Professorial, Reader or Senior Lecturer) may be due to promotion rather than new hires. Table 5 presents information on promotions and follows the same structure as Table 4: columns 1 to 4 are for the full 2008 email sample; columns 5 and 6 are the 2008 balanced sample survey results for those departments responding to both the 2008 and the 2006 surveys; and columns 7 and 8 are the 2006 survey results.

		2008 full e	mail survey			alanced nple	2006 em	ail survey
	Female	Male	Total	%Fem	Total	%Fem	Total	%Fem
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Professor	6	19	25	24.0%	13	23.1%	14	14.3%
Reader	6	14	20	30.0%	13	23.1%	16	31.3%
Senior Lecturer	12	27	39	30.8%	24	25.0%	32	37.5%
Lecturer	1	6	7	14.3%	3	33.3%	6	16.7%
Total	25	66	91	27.5%	53	24.5%	68	27.4%

Source: Balanced samples for 2006 and 2008: RES Women's Committee Survey 2006 (Georgiadis and Manning, 2007; page 4), RES Women's Committee Survey 2008, email based.

These numbers of promotions are obviously small so we should again be cautious about how valid the implications of these flows for changes in relative employment actually are. Nevertheless, women gaining 6 of the 25 professorial promotions in 2008 is associated with a 0.81 percentage point increase in the relative stock of female Professors (from 9.88% to 10.69%). If this trend in promotions continued, ceteris paribus, it would take another 9 years or so to bring the relative stock of female Professors to the proportion of females in the Reader grade (which is 17.6%). Similar analysis can be carried out for the other academic grades (see Table 6). The apparent increase in the relative employment of female Readers and Senior Lecturers does suggest some catch up in the short to medium term related to promotions. However, the size of the inflows relative to the stocks is very small; suggesting that relative numbers of women in the higher grades will adjust slowly from this source.

	Female	Male	Total	%Fem	%Fem in grade	%Fem in grade below
	(1)	(2)	(3)	(4)	(5)	(6)
Professor	6	19	25	24.0%	10.7%	17.6%
Reader	6	14	20	30.0%	17.6%	22.3%
Senior Lecturer	12	27	39	30.8%	22.3%	29.4%
Lecturer	1	6	7	14.3%	29.4%	
Total	25	66	91	27.5%	20.7%	

Table 6. : The proportion of promotions awarded to female economists (responding sample, 2008)

Source: RES Women's Committee Survey 2008, email based.

The third flow affecting the stock of academic economists is, of course, leavers (see Table 7). In aggregate, women make up a slightly lower proportion (20.5%) of these separations than they do of the total pool of academic economists (22.2%) and such separations are rare for the most senior women (Professors and Readers).

		2008 full e	mail survey			alanced nple	2006 email surve		
	Female	Male	Total	%Fem	Total	%Fem	Total	%Fem	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Professor	1	32	33	3.0%	22	4.5%	13	0.0%	
Reader	0	7	7	0.0%	3	0.0%	4	0.0%	
Senior Lecturer	4	25	29	13.8%	13	15.4%	18	16.7%	
Lecturer	13	31	44	29.5%	31	16.1%	44	27.3%	
Senior Researcher	3	4	7	42.9%	6	50.0%	7	14.3%	
Researcher	10	21	31	32.3%	26	34.6%	26	26.9%	
Total	31	120	151	20.5%	101	19.8%	112	20.5%	

#### Table 7. Separations.

Source: Balanced samples for 2006 and 2008: RES Women's Committee Survey 2006 (Georgiadis and Manning, 2007; page 4), RES Women's Committee Survey 2008, email based.

Information on the sector of the job leaver's destination job, and its geographical location, was also gathered (see Table 8). The most common destination employment for the job leavers was another academic appointment (67.6%) implying considerable churning within the sector, followed by non-employment (20.5% which does, of course, include

retirement). The proportion of female economists in these categories is very similar to their share of the workforce.

	Leav	vers sect	or destin	ation		Leavers	s geogra	phic dest	ination
	Female	Male	Total	%Fem		Female	Male	Total	%Fem
Sector	(1)	(2)	(3)	(4)	21.6% European Union 5 9.4% Other 8	(5)	(6)	(7)	(8)
Academic	22	80	102	21.6%	European Union	5	14	19	26.3%
Non-employment GES or Bank of	6	25	31	19.4%	Other	8	28	36	22.2%
England Other Gov/NGO (not including GES or Bank of	0	0	0	0.0%	Unknown	1	13	14	7.1%
England)	2	4	6	33.3%	United Kingdom	17	59	76	22.4%
Private sector	1	4	5	20.0%					
Unknown job	0	1	1	100%					
Total	31	120	151	20.5%	Total	31	120	151	20.5%

Table & Jab leaver's destinations

Source: RES Women's Committee Survey 2008, email based.

The majority of job leavers remain in the UK (50.3%), however, a further 36.4% travel to other countries. Of the 102 academic job placements, 16 went to the EU (of which 4 were women); 50 remained in the UK (11 women); 31 to other countries (6 women); and there were 5 whose destination was unknown. These findings suggest an international marketplace exists for academic economists, both male and female.

Drawing together the information on inflows, separations and promotions allows us to consider the major sources of the aggregate employment shifts in the sector. Table 9 provides balanced sample aggregate comparisons for the 2008 and 2006 surveys (the results are directly comparable to the values for the full 2008 email survey return presented in Table 1).

In total, Table 9 reveals very little change in the balanced samples over the 2006 to 2008 time period: there is some evidence of a slight decline in the total number of staff in the balanced sample (more so for males than females); with slightly stronger growth rates for full-time Professors and part-time Lecturers. The proportion of females amongst the Professors has also continued to show a slight growth.

# Table 9. Primary employment function: Academic staff in economics departments and<br/>research institutes (balanced samples for the 2006 and 2008 responding samples).

	2008 em	ail surve	y balance	d sample	2006 ema	ail survey		
Primary Employment Function	Female	Male	Total	% Fem	Female	Male	Total	% Fem
All Staff: full time								
Professors	27	247	274	9.85	22	232	254	8.66
Readers	12	63	75	16.00	14	54	68	20.59
Senior Lecturers	40	143	183	21.86	39	166	205	19.02
Lecturers - permanent	86	219	305	28.20	78	246	324	24.07
Lecturers - fixed term	2	10	12	16.67	2	13	15	13.33
Senior Researchers	8	16	24	33.33	4	16	20	20.00
Researchers - permanent	1	2	3	33.33	10	13	23	43.48
Researchers – fixed term	18	35	53	33.96	16	25	41	39.02
Totals	194	735	929	20.88	185	765	950	19.47
All Staff: part time		00	00	42.04		00		0.00
Professors	3	20	23	13.04	2	20	22	9.09
Readers	0	2	2	0	0 4	1	1	0.0
Senior Lecturers	2	2 10	4	50.0 37.50	3	6	<u>11</u> 9	36.36 33.33
Lecturers - permanent Lecturers - fixed term	7	10	10	36.84	5	3	8	62.5
Senior Researchers	3	6	9	33.33	4	2	6	66.67
Researchers - permanent	0	0	0	0.0	4	3	4	25.0
Researchers – fixed term	9	6	15	60.0	7	4	4	63.64
Totals	30	58	88	34.09	26	56	82	36.11
Grand Total	224	793	1017	22.03	211	821	1032	20.44

Source: Balanced samples for 2006 and 2008: RES Women's Committee Survey 2006 (Georgiadis and Manning, 2007; page 4), RES Women's Committee Survey 2008, email based.

## Ethnicity

Table 10 reports the findings from the 2008 survey on the composition of academic employment by gender, grade and ethnic group. Overall, amongst the responding sample, 82.9% of academic economists are considered to be white: representing a slight decline from 2006 when 84.2% of academic economists were white, and 2004 when 86% were white (Georgiadis and Manning, 2007; pages 16-18).

Considering the ethnic groupings on a separate basis, the numbers are very small, nevertheless the relative representation of South Asian academics amongst the workforce continued to decline over time (from 8.4% in 2004, to 7.0% in 2006, and to 6.5% in 2008); the numbers of Chinese academics showed some recent increase from (2.4% in 2004, to 1.7% in 2006, and 3.4% in 2008); there was a further rise in the representation of black academics (from 1.2% in 2004, to 1.96% in 2006, and to 2.4% in 2008); and the representation of all other ethnic minorities levelled off somewhat (from 2% in 2004, to 5.1% in 2006, and to 4.8% in 2008).

Within academic rank grades (see Panel 3 of Table 10 and Georgiadis and Manning, 2007; pages 16-18), the proportion of whites amongst the more senior grade ranks typically displayed a slight trend downwards, including Professor (91.38% in 2004, 90.76% in 2006, 88.5% in 2008); Reader (90.5% in 2004, 84.9% in 2006, and 84.6% in 2008); and Senior Lecturer (84.9% in 2004, 85.8% in 2006, and 85.4 in 2008).

Table 10 reveals that female academic economists are more likely to be non-white than are males: using the full 2008 email sample returns, of the 1567 academics for whom ethnicity data is available for, 76.7% of the females are considered to be white whereas 84.7% of the males are (see panels 2 and 3 of Table 10). Women make up 22.1% of the total workforce presented in the Table but they constitute 43.4% of the Chinese academic economists, 32% of other ethnic minorities, and 29.4% of the South East Asians. It is only amongst the black ethnic minority grouping that females occur in disproportionately low numbers.

The correlation between gender and ethnicity occurs predominantly via non-white women being more common at the Researcher and Lecturer (permanent) levels, whilst nonwhite males are more likely to hold fixed-term lectureships.

## Table 10: Rank, gender and ethnicity.

	South Asian	Black	Chinese	Other	White	Total	%White
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Females							
Professor	5	0	0	2	43	50	86.0%
Reader	2	0	0	3	18	23	78.3%
Senior Lecturer	5	1	3	3	57	69	82.6%
Lecturers - permanent	14	3	12	10	95	134	70.9%
Lecturers - fixed term	1	0	0	3	16	20	80.0%
Senior Researcher	0	0	2	1	14	17	82.4%
Researcher - permanent	0	0	0	0	1	1	100.0%
Researcher - fixed term	3	0	6	2	22	33	66.7%
Total	30	4	23	24	266	347	76.7%
Males							
Professor	22	7	4	14	373	420	88.8%
Reader	6	1	4	4	92	107	86.0%
Senior Lecturer	13	4	9	7	206	239	86.2%
Lecturers - permanent	25	16	9	18	264	332	79.5%
Lecturers - fixed term	5	3	0	5	27	40	67.5%
Senior Researcher	0	0	1	0	24	25	96.0%
Researcher - permanent	0	1	0	0	7	8	87.5%
Researcher - fixed term	1	2	3	3	40	49	81.6%
Total	72	34	30	51	1033	1220	84.7%
All academics							
Professor	27	7	4	16	416	470	88.5%
Reader	8	1	4	7	110	130	84.6%
Senior Lecturer	18	5	12	10	263	308	85.4%
Lecturers - permanent	39	19	21	28	359	466	77.0%
Lecturers – fixed term	6	3	0	8	43	60	71.7%
Senior Researcher	0	0	3	1	38	42	90.5%
Researcher - permanent	0	1	0	0	8	9	88.9%
Researcher – fixed term	4	2	9	5	62	82	75.6%
Total	102	38	53	75	1299	1567	82.9%
%Fem	29.4%	10.5%	43.4%	32.0%	20.5%	22.1%	

Source: RES Women's Committee Survey 2008, email based

### 4. Overview of the findings for the web-based survey, 2008.

For the 2008 survey, Gwen Postle and Karen Mumford surveyed all of the CHUDE departmental websites and coded, by gender, the staff listed on them. There is limited information that can be reliably collected from web pages. For example, full-time or part-time status, permanent or temporary employment contracts and/or ethnicity are generally not available. In most cases, departments were contacted with minor and/or specific queries only to do with job rank or gender. The aim was to generate the information from web pages rather than to mimic the emailed survey with a telephone survey and so queries were kept to a minimum. Table 11 provides the results from the 2008 web-based survey<sup>5</sup> compared to the 2008 emailed survey.

A striking difference in the results from the web-based survey and the email survey for 2008 is the number of extra senior staff members listed on the web pages but not included in the email responses, this is especially true for Professors and Senior Researchers. Comparing the total staff by rank in the balanced samples (column 7 with column 3 of Table 11) reveals 657 Professors in the balanced web sample and only 477 in the email survey (more than a third extra in the web sample), and 140 Senior Researchers relative to 42 in the email survey (more than three times as many). There is also a greater concentration of males amongst these senior ranks on the web pages (comparing columns 4 and 8). It may be that these extra staff members are actually in Emeritus, Visiting or Honorary positions not considered to be "salaried members of academic and research staff" as required for inclusion in the email survey of departments. The preponderance of males amongst this group is also predictable if membership is associated with older cohorts of academic economists. Nevertheless, it suggests a greater presence of senior male economists in prestigious appointments in the departments.

The second major finding from comparing the 2008 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 2008 email survey were less likely to contain women (this is consistent with the 2006 findings of Georgiadis and Manning, 2007; page 3).

<sup>&</sup>lt;sup>5</sup> Web based survey; data collected by Gwen Postle and Karen Mumford, analysed by Mumford.

Primary Employment Function		2008 ema	ail survey		2008 web		sample to r ail survey	natch the	2008 full web survey			
	Female	Male	Total	% Fem	Female	Male	Total	% Fem	Female	Male	Total	% Fem
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
All Staff												
Professors	51	426	477	10.69	59	598	657	8.98	67	656	723	9.27
Readers	23	108	131	17.56	34	134	168	20.24	36	140	176	20.46
Senior Lecturers	70	244	314	22.29	85	283	368	23.10	111	362	473	23.47
Lecturers	159	382	541	29.41	162	430	592	27.37	200	510	710	28.12
Senior Researchers	17	25	42	40.48	45	95	140	32.14	50	107	157	31.85
Researchers	34	58	92	36.96	22	32	54	40.74	22	33	55	40.00
Other	-	-	-	-	59	142	201	29.35	69	156	225	30.67
<b>T</b> -4-1	254	4040	4507	00.47	400	4744	0400	04.00		4004	0540	00.00
Total	354	1243	1597	22.17	466	1714	2180	21.38	555	1964	2519	20.03
Number of Departments	70				70				93			

 Table 11. Primary employment function: Academic staff in economics departments and research institutes (balanced and unbalanced samples from the 2008 email and web based surveys).

Sources: RES Women's Committee Survey 2008, web based; RES Women's Committee Survey 2008, email based

## 5. Compared to the first survey, 1996.

A fundamental role for the newly established Royal Economic Society Women's Committee<sup>6</sup> 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 Chair (Denise Osborn) sent a questionnaire to all Heads of Departments listed as members of CHUDE in December 1996. The questionnaire sought information about staff appointments and students enrolments as of November 30<sup>th</sup>, 1996. The survey response rate was high (some 92% of the CHUDE list (see appendix B of Mumford (1997)). In addition, Departments were asked to nominate other groups of academic economists who were working in their Institution, this led to the questionnaire being sent to another 22 clusters of economists. The survey did not provide full coverage of all academic economists in the UK<sup>7</sup> but it was a good representation of those academic economists employed in Universities with CHUDE membership at that time.

Constructing a genuinely balanced sample for the 1996 survey with that for 2008 is not trivial: some of the institutions present in 1996 have merged into new structures by 2008. Many of the research clusters present in the 1996 survey have also merged and/or disappeared (this is especially the case within institutions). Furthermore, many institutions presented a single return in the 2008 emailed survey which appeared to include economists working in different research clusters within their institution. The web-based survey also revealed that many of individuals who are associated with research centres are also often departmental members within institutions; this is especially true for more senior ranked economists. In which case, the best comparison across the time periods may be to consider the full samples.

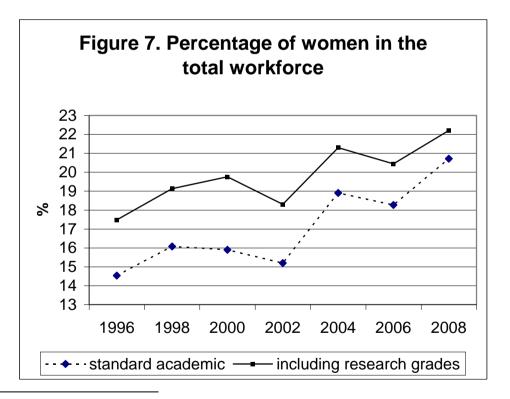
The 1996 survey asked for total department (or research cluster total returns) information, rather than for information on each individual within the department, implying that the individual based analyses presented in sections 2 and 3 above cannot be fully

<sup>&</sup>lt;sup>6</sup>At 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.

<sup>&</sup>lt;sup>7</sup>The 1996 survey was sent to some 90 departments.

replicated. Furthermore, the definitions are not completely consistent in the two surveys. For example, a senior (but non Professorial) academic in 1996 was classified as Senior Lecturer and/or Reader, whereas in 2008 numbers of Readers were collected separately to Senior Lecturers. In 1996, those working part-time on standard academic contracts (as opposed to Researchers or Senior Researchers) did not have grade ranks recorded; these part-time employees have been included in the 'other' category.<sup>8</sup> Nevertheless, Table 12 provides comparable totals for the two time periods.

In aggregate the workforce has grown over time, from 2346 to 2519 academic economists (a 7.4% growth rate). The number of women has increased by 35.4% whilst the number of males has essentially remained stable (increasing by 1.45%). Figure 7 plots the percentage of women amongst the total academic economics workforce (including research grades) and amongst the standard academic workforce for each of the RES Women's Committee surveys.<sup>9</sup>



<sup>&</sup>lt;sup>8</sup> The 1996 survey also asked for details on post-graduate students which were not collected in the 2008 email or web based surveys.

<sup>&</sup>lt;sup>9</sup> The 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).

The overall growth in the percentage of women in the workforce can clearly be seen in the figure (with or without the inclusion of the research grades).

The grade rank composition of the workforce has also changed over time (comparing columns 5 and 7 of Table 12): the proportion of Professors has doubled (from 14.2% to 28.7%); Readers and Senior Lecturers are a bit under 10 percentage points more common; Lecturers are a bit over 10 percentage points less common; and strikingly there are less than a fifth as many Researchers in 2008 relative to 1996. It may be that employees on fixed term contracts (as is commonly the case for Researchers) are less likely to be recorded on departmental web pages and are therefore under represented in the 2008 web survey. Analysis of the balanced sample 2008 email and web based surveys presented in Table 11 suggests that this may be happening. Nevertheless, the extent of the decline in Researchers also present in the email surveys indicates a substantial reduction has occurred for this grade rank between 1996 and 2008.

Of all the women included in the 2008 web based survey, 12.07% are Professors and a further 26.49% are Readers or Senior Lecturers (column 13). Carrying out a similar exercise for the men reveals that 33.4% of the males are in the Professorial grade with another 25.56% in the Reader/Senior Lecturer grade. In other words, males are more than twice as likely to be Professors but are slightly less likely to be Senior Lecturers or Readers than are women in the web survey. These results are quite different than that found in 1996 postal survey when men were more than four times as likely to be Professors and twice as likely to be a Senior Lecturer or Reader (comparing columns 6 and 7).

Perhaps the most striking finding revealed in Table 12 is that women have essentially doubled their relative representation across the grade ranks, with the exception of Researcher, between 1996 and 2008. In 1996, 17.5% of academic economists were female: 16.8% of Lecturers, 9.6% of Senior Lecturers and Readers, and 4.2% of Professors. In the 2008 web based survey 20% of the workforce was female and the percentage of women in these grade ranks were 28.1%, 22.7% and 9.3%, respectively.

Primary Employment Function			199	96 postal su	irvey			2008 web based survey						
	Female	Male	Total	% Fem	% Total Staff	% of all Females	% of all Males	Female	Male	Total	% Fem	% Total Staff	% of all Females	% of all Males
All Staff	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Professors	14	320	334	4.19	14.24	3.41	16.53	67	656	723	9.27	28.7	12.07	33.4
Readers and Senior Lecturers	37	350	387	9.56	16.5	9.02	18.08	147	502	649	22.65	25.76	26.49	25.56
Lecturers	157	779	936	16.77	39.9	38.29	40.24	200	510	710	28.12	28.19	36.04	25.97
Senior Researchers	11	47	58	18.97	2.47	2.68	2.43	50	107	157	31.85	6.23	9.0	5.45
Researchers	107	171	278	38.49	11.85	26.1	8.83	22	33	55	40.00	2.18	3.96	1.68
Other	84	269	353	25.21	15.05	20.49	13.9	69	156	225	30.67	8.93	12.43	7.94
Total	410	1936	2346	17.48				555	1964	2519	20.03			
Total	410	1950	2340	17.40					1304	2019	20.03			
Number of Departments	83							93						
Response rate	92%							n/a						

 Table 12. Primary employment function: Academic staff in economics departments and research institutes (1996 postal and 2008 web site surveys).

Sources: RES Women's Committee Survey 1996 (Mumford, 1997; page 3); RES Women's Committee Survey 2008, web based.

### 5. Conclusion

Much of the conclusion has been presented in brief in the executive summary above. At the risk of being repetitive, the major findings generated from analysis of the survey data are 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. Using evidence from the 2008 email survey, women make up 22.2% of the academic economics workforce in the CHUDE departments: 29.4% of Lecturers, 22.3% of Senior Lecturers, 17.6% of Readers, and 10.7% of Professors.

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 via balanced sample comparisons across the 2008 and 2006 surveys. The findings indicate that, in contrast to males, female Professors are promoted rather than hired and that job separations are rare for senior females.

Female academic economists are found to be more likely to be non-white than are males, 76.7% of the females are considered to be white whereas 84.7% of the males are. Women make up 22.1% of the total workforce but they constitute 43.4% of the Chinese academic economists, 32% of other ethnic minorities, and 29.4% of the South East Asians. It is only amongst the black ethnic minority grouping that females occur in disproportionately low numbers. The correlation between gender and ethnicity occurs predominantly via non-white women being more common at the Researcher and Lecturer (permanent) levels, whilst non-white males are more likely to hold fixed-term lectureships.

Comparing the results from the first of the Women's Committee's surveys (a postal survey for 1996) with a survey of the web pages of all the CHUDE member departments for 2008 suggests that, in aggregate, the workforce has grown over time by 7.4%. The number of women has increased substantially (by 35.4%) whilst the number of males has essentially remained stable (increasing by 1.45%). The grade rank composition of the workforce has also changed over the 12 year period: the proportion of Professors has doubled (from 14.2% to 28.7%); the proportion of Readers and Senior Lecturers has increased by a little under 10 percentage points; whilst Lecturers are a little more than 10 percentage points less common. Strikingly, there are considerably less Researchers in 2008 relative to 1996.

In 1996, 17.5% of academic economists were female: 16.8% of Lecturers, 9.6% of Senior Lecturers and Readers, and 4.2% of Professors. Women have essentially doubled their relative representation across the grade ranks, with the exception of Researcher, between 1996 and 2008.

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