

**Royal Economic Society Survey on the Gender and Ethnic  
balance of Academic Economics 2002**

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## **Executive Summary**

The fourth survey of gender balance in the economics departments of UK universities in 2002 suggests a reversal of the gradual increase in the participation of women and ethnic minorities. The under-representation of these groups is likely to represent under-utilisation of skill and may suggest inequality of opportunity.

Women make up about one third of graduate students and just under one fifth of academic economists: 24% of fixed term lecturers, 18% of full-time permanent lecturers, 13% of senior lecturers, 9% of readers and almost 6% of professors. Since 2000 the proportions of women in all academic grades has decreased and remains below the proportion of women employed by the university sector as a whole.

### **Academic Employment**

- Men in standard full-time academic jobs (i.e. excluding research-only posts) are 2.4 as likely to be professors than women. Despite the recent slowdown this compares favourably with 1998, when men were four times as likely to be professors.
- There are few standard academic jobs that are part-time and men hold over two thirds of these.
- Proportionately more women than men in academic economics are in non-standard (research only) jobs (44.5% compared with 13.5%). This gap has widened considerably since the 2000 survey.
- The grade with the largest proportion of women in 2000 was fixed-term lecturers, but in 2002 this had fallen back most markedly due mainly to an increased proportion of women among those leaving the grade and also to a drop in the proportion of recruits who were women.
- Departments with at least one female professor have a higher number of staff than those without a female professor, they also have a higher proportion of female staff below the level of professor.

### **Students**

- Overall, the proportion of postgraduates studying economics remained just over one third. The proportion of PhD students who were female has fallen slightly from 36% in 2000 down to 34%. By contrast, the proportion female among MA students has increased from 36% to 38%.
- 23.5% of PhD economics students are from the UK, 28% from the EU and 48.5% from the rest of the world.

### **Ethnicity**

- Academic economics remains dominated by white ethnic groups. Nearly nine out of every ten academic economists are white, 94% of professors are white. Among ethnic minorities Asians are over represented and Blacks under represented.

## **Response**

88 Departments of Economics, teaching Economics in Business or Management Schools or Academic Research Centres employing economists, responded to the 2002 survey. 51 of these departments had also responded in 2000. Among them, the pattern of change was similar to the contrast between the 2000 and 2002 cross-sections. Three quarters of the Economics Departments responded, but fewer of other types of institution.

# Royal Economic Society Survey on the Gender and Ethnic balance of academic economics 2002

## Introduction

Towards the end of 2002 the Royal Economic Society (RES) repeated the survey conducted in 1996, 1998 and 2000, which collected information to examine the gender balance of academic economics in Britain (Mumford 1997, Booth and Burton 2000, Burton, Joshi and Rowlatt, 2002). In 1998, the RES had also conducted a survey into the ethnic balance of academic economics (Blackaby and Frank, 2000). It was decided that these purposes should be combined for the 2000 survey and that this combination should be continued into the 2002 survey.

At the end of November 2002, the Gender and Ethnic Balance survey was sent out to around 192 institutions. These include all departments of economics (55), business schools (74), management centres (23) and research institutions (41). One interesting point to note was the decline in the proportion of departments surveyed describing themselves as departments of 'economics' and the growth of departments, centres or schools of 'business' and 'management'. Discounting research institutions, of which a larger number were surveyed this year, departments calling themselves Economics fell from two-thirds of the sample in 2000 (65%) to just over one-third (36%). The proportion of departments which were business schools increased from 30% to 49% and the proportion of management centres went from 5.5% to 15%. Often these were the same entities which were economics departments, but through institutional shake-up and mergers had re-styled themselves.

This survey aimed to collect information on the numbers of staff (full-time and part-time) at various levels in academic economics, the promotions and new hires in, academic economic employment, information about research staff, PhD students and Masters students. The information collected was very basic, the numbers in each department – broken down by gender and ethnic group. On advice from the RES the ethnic groups used in the 2002 questionnaire were reduced from the nine groups used in the 2000 questionnaire to six. White UK, White other European and White other were merged into "White", Black Caribbean and Black African were merged into "Black".

As of the end of June 2003, 88 completed questionnaires were returned. In 1998 we finished with a total of 82 completed questionnaires and in 2000 the total was 79. Although in 2002 we had more questionnaires returned we had also issued more. The 2002 returns equate to a response rate of around 45.8%, down from around 60% in 2000. We received the best response from economics departments (76%). The response from research institutes (39%) and business schools (35%) was low but not as low as for management centres (17%).

Institutions who received a higher RAE grade in the 2001 assessment were also slightly more likely to participate. Two-thirds of departments with a 5\* rating participated in the survey compared to just under half of those rated under 4. The difference between the highly-rated departments and those rated less highly was less pronounced than in 2000. In the previous survey, 65% of the non-responding departments were rated 1-3b, 35% rated 4 or higher. In 2002 these figures are almost equal with 49.4% of non-responding departments rated 1-3b (which constitute 47% of departments surveyed) and 50.6% rated 4 or higher (53% of departments surveyed).

The lower response rate from the more highly-rated departments in this survey means that its results are less likely to be skewed towards the higher-rated departments than in previous years.

From a comparison of the data from the 2000 survey there does not seem to be much difference in the size of the departments who responded in both the 2000 and the 2002 survey (the balanced panel). The average number of full-time staff in responding departments in 2000 was 14.6 compared to 15 in 2002. Two-thirds of the departments in the balanced panel were assessed in the “business and management” unit in the 2001 RAE compared to 57% of the sample as a whole. Whilst 57.7% of responding departments were graded 4 or higher in the 2001 RAE, 62.5% of those in the balanced sample were awarded this grade. This suggests that the balanced panel is biased towards the business and management schools and slightly biased towards those who achieved a higher grade in the RAE.

## **The findings**

These findings in this section are based on the returns from the 2002 survey,  $n = 88$ , with some reference to the balanced panel, those 51 departments who responded to the 2000 and the 2002 survey. When comparing across time the balanced panel makes more sense because the departments are the same. Otherwise, it would be difficult to disentangle the effect of change over time and the changing composition of the sample.

According to Table 1, below, as at November 30<sup>th</sup> 2002, there were the full-time equivalent of 1495.5 economists working in academia in the 88 departments who participated in the survey (compared to 1511 in 79 departments at 2000). Just under 19% of all these staff are women. This is just very slightly lower than in the 2000 survey where almost 20% were female, and breaks the gradual upward trend in the proportion female observed by these surveys since 1996.

In the balanced panel those departments who responded to both surveys report a decrease in staff numbers from 1081.5 in 2000 to 1044 in 2002. The proportion of staff in these departments who were female also dropped, from 20.2% to 18.9%.

As noted in the report to the 2000 survey, the representation of women in academic economics remains below the proportion in the University sector as a whole, reflecting the fact that it is not one of the subjects in which women are most likely to study. About one third (34.4%) of all full-time university academic staff are female and about 13.1% of professors (HESA figures for 2001/2002).

Table 1: Primary Employment Function – All Academic Staff in Economics Departments and Research Institutes – all sample.

Primary Employment Function	Female	Male	Total	% Female
All Staff : full time				
Professors	17	277	294	5.8
Readers	7	74.5	81.5	8.6
Senior Lecturers	35	230	265	13.2
Lecturers - permanent	69	317	386	17.9
Lecturers - fixed term	24	75	99	24.2
Senior Researchers	8	22	30	26.7
Researchers - permanent	4	7	11	36.4
Researchers - fixed term	73	91	164	44.5
<b>Totals</b>	<b>237</b>	<b>1093.5</b>	<b>1330.5</b>	<b>17.8</b>
All Staff : part time				
Professors	2	22	24	8.3
Readers	0	0	0	0
Senior Lecturers	3	9	12	25.0
Lecturers - permanent	9	15	24	37.5
Lecturers - fixed term	30	75	105	28.6
<b>Totals</b>	<b>44</b>	<b>121</b>	<b>165</b>	<b>26.7</b>
<b>Grand Total</b>	<b>281</b>	<b>1214.5</b>	<b>1495.5</b>	<b>18.8</b>

Between the 1996 and 2000 surveys there was an increase in the proportion of academic economists who worked full-time (from 84.3% to 92%). In November 2002 this proportion had fallen back down to 87.6%. On the balanced panel the decrease was from 90.4% to 87.2%. In the whole sample women make up just 13.5% of full-time standard academic workers (down from 19% in 2000), 41.5% of researchers (up from 38.3%) and almost 27% of part-time workers (virtually no change from 2000). For all full-time academics (standard and research) women hold 17.8% of posts (down from 19%).

On the balanced panel women made up 14% of full-time workers in departments in which they had made up 16% in 2000. The proportion of women in full-time positions fell from 27% in 2000 to 25% in 2002. Of all women in academic economics, 77.5% work full-time, as do 88.9% of men. In the balanced panel, females make up 6.3% of professors (down from 6.9% in 2000), 9.6% of readers (down from 12.6%), 14.3% of senior lecturers (down from 15.5%), 16.7% of permanent lecturers (down from 18.4%) and 28.6% of fixed-term lecturers (down from 45.8%).

The survey distinguishes between standard academic positions (professor, reader, senior lecturer, lecturer) and research-only positions. Most of the jobs in academic economics are of

the standard type, 92.5% (up from 87.5% in 2000, 86% in 1998 and 85.7% in 1996). In common with previous years, proportionately fewer women than men are in standard academic jobs (73.4% compared with 92.5%). This is a larger gap than in previous years. The balanced panel also shows that, within the same departments, proportionately fewer women than in 2000 were in academic positions.

### Full-time standard academic positions

A closer look at the positions of women in full-time academic economics shows that there has been a decrease in the proportion of women at all grades. Using the balanced panel – comparing like with like – in 2000 women made up just 6.9% of academics at the professorial rank. In 2002 this had fallen slightly to 6.3%. The proportion of women in the ranks of readers and senior lecturers also declined from 12.6% to 9.6% (readers) and 15.5% to 14.3% (senior lecturers). However, the largest decreases were at the level of lecturer. Women in 2000 made up 18.4% of permanent lecturers and 45.8% of fixed-term lecturers. By 2002 these proportions had decreased to 16.7% and 32.6%. This decrease in the proportion is due to both the fall in the actual numbers of women and the increase in the numbers of men reported in these posts. It is worth noting once more that the balanced panel is made up of departments who responded to both the 2000 and the 2002 surveys.

Figure 1 shows the change in the female proportion in the standard full-time standard academic grades between 2000 and 2002, for those departments in the balanced panel. As in previous years the female proportion decreases as the grade increases.

Figure 1: Academic grade by gender – full-time academic, balanced panel 2000-2002.

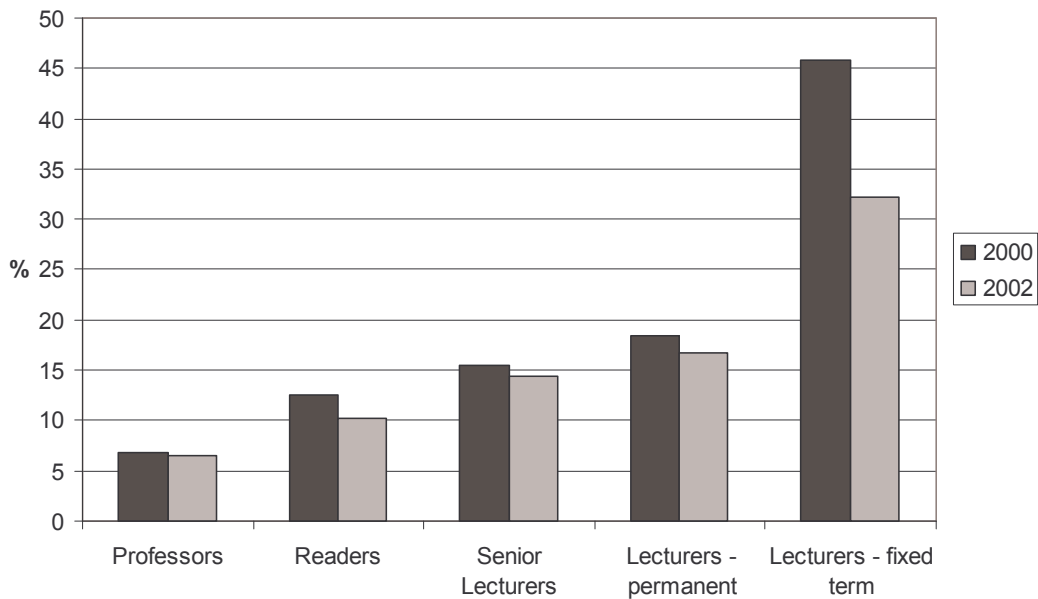


Figure 2, below, shows the grade distribution in the balanced panel for all women in full-time standard academic jobs. Some 13% of women in full-time standard academic positions are professors (up from 11% in 2000), 30% are readers or senior lecturers (up from 26%), 41% are permanent lecturers (down from 47%) and 16% are fixed-term lecturers (similar to 2000). This suggests whilst there are fewer women in the academic departments, those who are there are slightly more likely to be in higher grades than in 2000. However, this change in the structure of employment was even more marked for men.

Figure 2: Women by grade – full-time standard academic, balanced panel 2002.

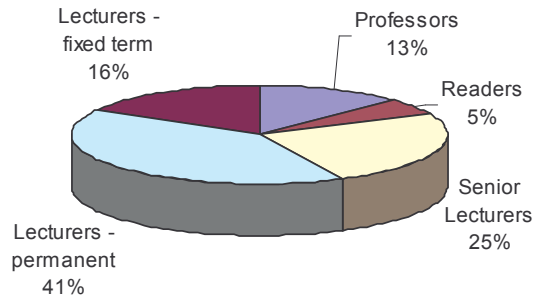
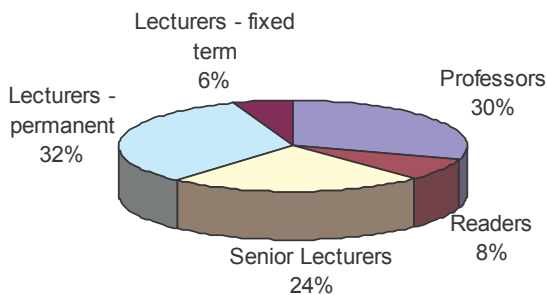


Figure 3, below, shows the same analysis for men. A much larger proportion of men in academic economics are professors, almost three in ten. A similar proportion of men are readers and senior lecturers, with 40% being permanent lecturers and just 4% as fixed-term lecturers. Compared to the 2000 results men have increased their proportions at the professorial grade and at the reader and permanent lecturer level, with slight decreases amongst the reader, senior lecturer and fixed-term lecturer grades. Men are therefore around 2.4 times more likely to be professors than women. This is less of a lead than previous surveys, in 1996 men were 3.7 times more likely to be professors, in 1998 they were 4 times more likely and in 2000 they were 2.5 times more likely. Men are also more 1.4 likely to be readers and almost as likely to be senior lecturers, this is a similar chance to that found in 1996 and 2000, but further from equality than in 1998 when men were only 1.2 times more likely to be readers or senior lecturers.

Figure 3: Men by grade – full-time standard academic.



## Model Departments

In Table 2, below, we investigate the possibility of a female role model effect. The hypothesis being that departments with female professors may encourage the recruitment and promotion of other women. Table 2, below, looks at the relationship between the presence of a female professor in a department, and the proportion of female readers, senior lecturers and lecturers. The first column of Table 2 shows the percentage of staff below the professorial grade who are female. The first column of figures are for those departments with at least one female professor, the second column is for those departments where there are no female professors. The table shows just under a quarter of all departments with a female professor have no female readers, senior lecturers or lecturers compared to almost half of those departments without a female professor. Just over three in ten of departments with at least one female professor have 30% or more of their grades below professor filled by women, compared to under 10% of those departments without a female professor. Though this might be compatible with an effect of a female role model it could also reflect the larger size of these departments which would also raise the chances of hiring ‘minority’ candidates.

A comparison of means suggests that departments with at least one female professor have a higher number of staff than those without a female professor (average of 13.9 members of staff compared to 8.7). The average proportion of female staff below the level of professor is also higher in departments where there is at least one female professor (25.7% female staff below professor compared to just 10.4%). A final interpretation is that these departments have more active Equal Opportunities practices<sup>1</sup>.

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<sup>1</sup> Note that the number of departments with at least one female professor (13) understates the total number of female professors in economics to the extent that two of the respondent departments had more than one female professor, and there are also female professors in non-responding departments. The Committee estimates that in October 2003 there were 27 female professors of economics throughout the UK, including those recruited or promoted since the time of the survey and those working outside economics departments.

## New Hires

If the new hires between 2000 and 2002 are compared with the new hires between 1998 and 2000 it appears that the proportion of women being hired has decreased slightly. Between 1998 and 2000, in the balanced panel just over 28% of new hires were female. Within the same departments between 2000 and 2002 this proportion had decreased to just over 24%.

The proportion of new hires who were women has increased since 1998-2000 only amongst senior researchers and permanent lecturers. Every other grade has seen a decrease in the proportion of female new hires since the last survey. Between 1996 and 1998 5.6% of newly hired professors were women, this increased between 1998 and 2000 to 9% of new professors. In the years 2000-2002 this proportion has fallen back to 6.5%.

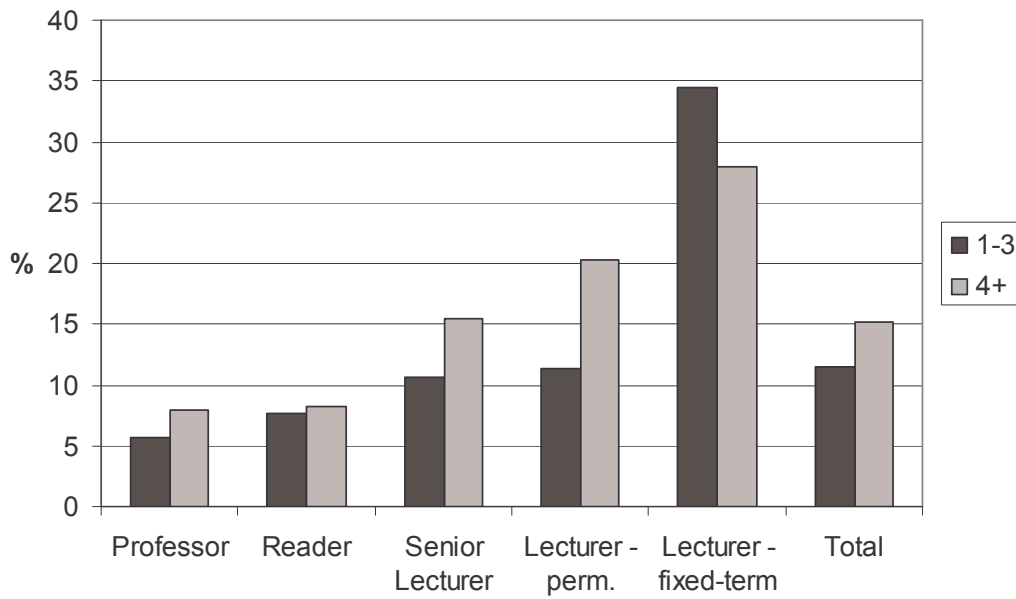
Table 2: Proportion of female academic staff below professor – whole 2002 sample

	Female professor	No female professor	<i>n</i>
0	23.1	49.3	40
1%-9%	7.7	6.7	6
10%-19%	7.7	17.3	14
20%-29%	30.8	17.3	17
30%+	30.8	9.3	11
average number of staff below professor	13.9	8.7	
average proportion of female staff below professor	25.7	10.4	
	<i>n</i> =13	<i>n</i> =75	88

## Analysis by RAE Grade

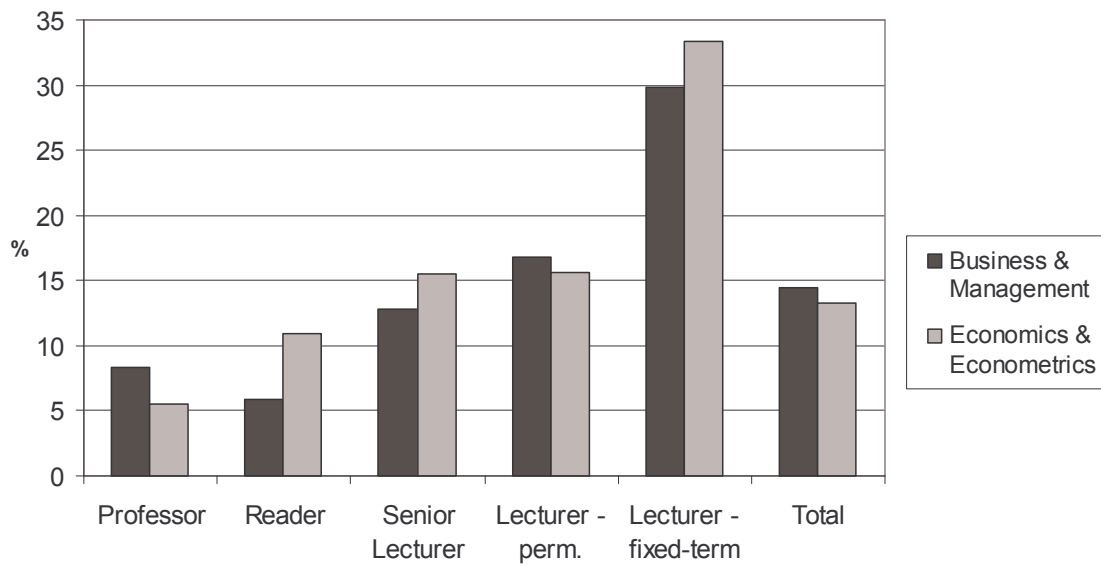
The data were analysed to see whether there was any difference between types of departments. If, for example, there were differences between those departments with a high RAE score and those with a lower score it may reflect some RAE-related hiring behaviour. Figure 4, below, shows the proportion of female staff (full-time academic) by the RAE grade of the department. The departments were divided into those who scored a 1, 2, 3a or 3b in the 2001 RAE and those who scored a 4, 5 or 5\* grade. There were 30 departments in the 1-3 category and 41 in the 4+ category. As the graph shows departments rated highly by the Research Assessment Exercise had a higher proportion of female staff in the higher grades: professor, reader, senior lecturer and permanent lecturer. It was only in the lowest grade, fixed-term lecturer, that there was a higher proportion of female staff in those departments with a lower RAE grade.

Figure 4: Proportion of female staff, by RAE 2001 grade of department



During the 2001 RAE departments could be rated under different units of assessment. The data were analysed to see if there were any differences between departments rated in the “economics and econometrics” unit and those rated in the “business and management” unit. Thirty of the departments that responded to the survey were assessed as “economics and econometric” departments and thirty-nine as “business and management” departments. There does seem to be a trend that older universities have tended to be assessed as economics departments whilst newer universities (and former polytechnics) have been assessed under the business unit. Figure 5, below, shows the proportion of female staff (full-time academic) under each unit of assessment. The results are mixed, with a higher proportion of female professors and permanent lecturers in “business” departments and higher proportions of female readers, senior lecturers and fixed-term lecturers in “economics” departments.

Figure 5: Proportion of female staff, by RAE unit of assessment



## Promotions

The survey also collected information on promotions. Looking at the balanced panel, of all promotions to professor 16.7% were for female economists. These economists were promoted into a grade where only 6.5% were female, and from a grade where 10.2% were female. So it seems that, for those promoted to professor, female academics were promoted at a higher rate than their proportion in the feeder grade would have suggested. However, this pattern does not hold for those in lower grades. Looking at promotions to the positions of reader, senior lecturer and permanent lecturer it can be seen that whilst the proportion of women promoted exceeds the proportion of women in the grade to which they are promoted, it is not as high as the proportion of women in the grade from which they have come. Table 3, below, shows the proportion of women promoted to each grade, with columns for the proportion of women in that grade and the proportion of women in the grade below.

Table 3: The proportion of promotions awarded to female economists: balanced panel, 2000-2002.

	% Female promotions	% in grade	% in grade below	Number of female promotions
Professor	16.67	6.45	10.17	4
Reader	13.64	10.17	14.44	3
Senior Lecturer	16.28	14.44	16.73	7
Permanent Lecturer	28.57	16.73	32.14	2

## **Part-time employment**

The 2002 survey suggests that there has been a slight increase in the proportion of academic economists who work part-time since the 2000 survey, from 9.6% to 12.8%. The proportion of women working part-time has also decreased, from 27% of the part-time workforce in 2000 to 25% in 2002.

In 1998, almost 27% of part-time permanent academics were women, by 2000 this has fallen to 19.4%, in 2002 it was almost the same (18.6%). The proportion of female part-time fixed-term academics has fallen to 28% from 37%, back to the 1998 level.

Men take up the majority of part-time jobs: 81.4% of permanent and 71.8% of fixed-term jobs are held by men. The numbers of part-time academics has increased since the last survey but it is still small with just 121 reported in the balanced panel up from 90 reported in the same departments in 2000.

## **Research grades**

In the 2002 survey balanced panel there were 122 research-only jobs, and this is a decrease on the 2000 survey where the same departments reported 140 research jobs. Women make up 44.3% of researchers (up from 41.9% in 2002) and just 15.4% of standard academic positions down from 17% in the same departments in 2002). As in previous surveys most research-only jobs are fixed-term: 80% of full-time research-only jobs are fixed-term in the 2002 survey, a slight decrease from 82% in 2000.

Of all women in research-only jobs, 8.8% are at the senior researcher level, with the almost all of the rest at the fixed-term researcher level (87.7%). For men, 15.4% of all those in research-only jobs are at the senior researcher level. This means that men are over 1¾ times more likely to be at a senior level than women.

To summarise the results for the primary employment function of all staff, it appears that the proportion of women in academic economics has decreased slightly at nearly every level over the last two years.

## **New staff**

Table 4, below, refers to new staff, these are staff who have been employed at the responding institutions since November 2000. The total number of new hires reported went down for most categories of full-time staff except senior lecturers and fixed-term lecturers. The proportion of women amongst new full-time staff decreased for each grade except senior lecturer (where there were no new female hires between 1998 and 2000 and three between 2000 and 2002). Amongst part-time staff there were more hires between 2000 and 2002 than between 1998 and 2000. During the earlier period there were just 5 new professors, 1 new reader and no senior lecturers (none of these posts were filled by women). Since 2000 there have been 6 new professors and 1 new reader (again no new senior lecturers). One of the new professors was female. Among the lower grades though there was more change. Between 1998 and 2000 there had been 2 new permanent lecturers (1 female) and 9 new fixed-term lecturers (4 female). Since 2000 there have been 2 new permanent lecturers (1 female) and 23

new fixed-term lecturers (9 female). Although the number of new part-time female staff has increased, the proportion of new staff who were female decreased.

Table 4: Primary Employment Function – New Staff – balanced panel 2000-2002.

New Staff	Female	Male	2002 Total	2002 % Female	2000 total	2000 % Female
full time						
Professors	2	26	28	7.14	36	8.33
Readers	0	5	5	0	8	37.50
Senior Lecturers	3	21	24	12.50	12	0
Lecturers – permanent	15	45	60	25.00	75	30.67
Lecturers - fixed term	15	26	41	36.59	32	53.13
<b>Totals</b>	<b>35</b>	<b>123</b>	<b>158</b>	<b>22.15</b>	<b>163</b>	<b>28.2</b>
part time						
Professors	1	5	6	16.67	5	0
Readers	0	1	1	0	1	0
Senior Lecturers	0	0	0	0	0	0
Lecturers – permanent	1	1	2	50.00	2	50.00
Lecturers - fixed term	9	14	23	39.13	9	44.44
<b>Totals</b>	<b>11</b>	<b>21</b>	<b>32</b>	<b>34.38</b>	<b>17</b>	<b>29.41</b>

Table 5, below, shows both the proportion of women in the balanced panel in each grade as at November 2002, and also the proportion of women who were new hires between 2000 and 2002. New hires are those who were appointed between 30 November 2000 and 30 November 2002. For all of the grades except senior lecturer and reader the proportion of women who were new hires was higher than the proportion of all staff.

One concern may be that fixed-term lecturers, the entry point for academic economists, has seen a decrease in the proportion of female new hires. Between 1998-2000 over half of the new hires into this grade were female (53%). This had been up from one-third (33%) between 1996 and 1998. In the latest survey however this proportion has fallen back to 37%, after recruitment of men to this grade, both full and part-time, doubled (20 to 40). Recruitment of female fixed term lecturers also rose (21 to 24) but by a lower percentage, while new recruits to all other grades showed falling numbers.

Table 5: Proportion of women in “new” staff, compared with all staff in current and feeder grades (balanced panel).

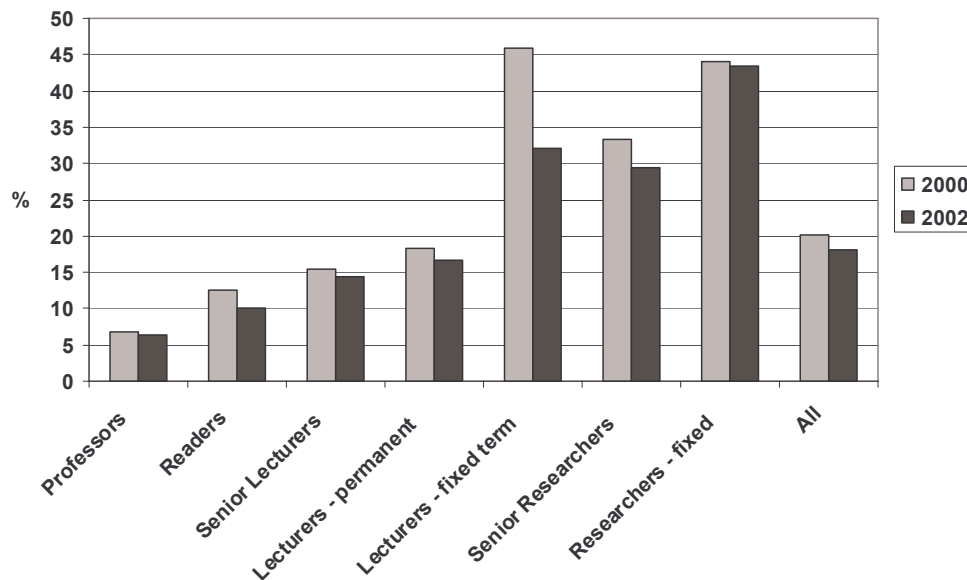
	All staff	new staff	‘feeder’ grade	Promotions into grade
Professors	6.5	7.1	10.2	16.7
Readers	10.2	0	14.4	13.6
Senior Lecturers	14.4	12.5	16.7	16.3
Lecturers – permanent	16.7	25.0	32.1	28.6
Lecturers - fixed term	32.1	36.6	--	--
Senior Researchers	29.4	60.0	66.7	
Researchers – permanent	66.7	0	43.5	
Researchers - fixed term	43.5	43.5	--	

We have also rearranged the data in column 4 to show it as the ‘feeder grade to the next one up, i.e., the proportion of women in the grade below the grade in question. Whilst, in the balanced panel, only 6.5% of professors are female, the proportion of new professors is higher – at 7.1% - but it is not as high as the proportion of women in the grade below, where 10.2% of readers are female. This suggests that while women are being appointed at a higher rate than their current stock, it is not as high as the proportion of women in the lower grade and it may be as high a rate as the outflow.

**Change over time: balanced panel**

Figure 6, below, shows the change in the figures between the two surveys for those 51 institutions for whom we have data for both 2000 and 2002. These figures are for the total number of full-time staff. As can be seen, the proportion of women at every level has decreased between 2000 and 2002.

Figure 6: Changing levels in proportion of full-time staff who were female: 2000-2002, Balanced Panel.



The falling proportion is not due to the ratio in the inflow being less than the stock, so it must be due to a higher proportion of women in the outflow, which is not explicitly surveyed.

When the comparison is done for the balanced panel we can infer outflows as well as inflows. In Table 6a, below, the change in the number of men and women at each grade across the two surveys are combined with the number of new staff in these grades plus the numbers of promoted staff to each grade. This gives us the inferred outflow required to bring these figures into balance. We cannot say whether the destinations of these outflows were promotions, retirements, other employment, or departures from the labour force, or departures from the UK. What does appear from Table 6a is that the proportion of women among both inflows and outflows is higher than in the stock. For the comparison of these departments over this period the falling percentage female in the stock can be accounted for by a greater proportion of women among those leaving academic jobs than among those entering. The excess is small except for the fixed term lecturers, where 12 of the 19 departing women have been replaced by newly hired men. No more than 2 of these departures could have been promotions.

Table 6a: The assumed outflows for each standard academic grade: balanced panel, 2000-2002.

Grade	Change in no's of men	Change in no's of women	New entrants male	New entrants female	% female in inflow	Outflow males	Outflow females	% female in outflow
Professor	13.5	-2	47	6	11.3	34	8	19.3
Reader	3	-1	28	3	9.7	25	4	13.8
Senior Lecturer	20	3	61	10	14.1	41	7	14.6
Permanent Lecturer	-44	-15	52	18	25.7	96	33	25.6
Fixed-term Lecturer	24	-2	29	16	35.6	5	18	78.3

Tables 6b and 6c, below, show the assumed outflows for each standard academic grade for those departments assessed as an “economics and econometrics” unit and those assessed as a “business and management” unit. Economics departments lost staff at the higher levels (professor and reader) and also at the permanent lecturer grade. In Business and Management departments there was an increase in the number of men at every level whilst the number of women stayed the same or fell. In Business departments the assumed outflow for men is actually negative at most grades, suggesting that new staff and promotions did not by themselves account for the increase in the numbers of men at that grade. Apart from possible under-reporting, reorganisations of departments could be the explanation for some of the change in numbers.

Table 6b: The assumed outflows for each standard academic grade in “Economics” departments: balanced panel, 2000-2002.

Grade	Change in no's of men	Change in no's of women	New entrants male	New entrants female	% female in inflow	Outflow males	Outflow females	% female in outflow
Professor	-1	-1	36	5	12.2	37	6	14.1
Reader	-2	-1	24	2	7.7	26	3	10.5
Senior Lecturer	14	3	42	8	16.0	28	5	15.2
Permanent Lecturer	-72	-12	36	14	28.0	108	26	19.4
Fixed-term Lecturer	15	3	22	11	33.3	7	8	53.3

Table 6c: The assumed outflows for each standard academic grade in “Business” departments: balanced panel, 2000-2002.

Grade	Change in no's of men	Change in no's of women	New entrants male	New entrants female	% female in inflow	Outflow males	Outflow females	% female in outflow
Professor	15	-2	10	1	9.1	-5	3	n/a
Reader	5	0	3	1	25.0	-2	1	n/a
Senior Lecturer	4	-1	16	2	11.1	12	3	20.0
Permanent Lecturer	31	-3	14	3	17.6	-17	6	n/a
Fixed-term Lecturer	10	-3	6	4	40.0	-4	7	n/a

The differences in proportion of female in the intake at each grade is not systematic between ‘Economics’ and ‘Business’ Departments. It is not possible to make a comparison of the identifiable outflow, but it does not seem that the change in the % of female in 2002 can be attributed to the rise of ‘Business’ Departments.

Table 6d, below, shows the outflows for the balanced panel of 1998/2000. Since the 1998 categories were different the 2000 categories have been collapsed to allow comparison. In the 2000 survey the reader and senior lecturer grades were combined to be equivalent to the 1998 senior staff grade. Although the membership of the two balanced panels is not necessarily the same, company tables 6d and 6a gives some idea of how the slowdown in the proportion of female occurred: for fixed term lecturers the ‘outflow’ became more female and the inflow less so, the proportion of female in the outflow of lecturers also went up through the proportion rose among the inflow (slightly). At higher levels only small numbers are involved and the proportions show less systematic patterns. Women being over-represented among the outflow from the lower two grades in both tables is likely to mean they are over-represented among drop-outs from academic employment.

**Comment:** Not sure what this means

Table 6d: The assumed outflows for each standard academic grade: balanced panel, 1998-2000.

Grade	Change in no's of men	Change in no's of women	New entrants male	New entrants female	% female in inflow	Outflow males	Outflow females	% female in outflow
Professor	0	5	48	3	5.9	48	-2	n/a
Senior Staff	12	6	61	15	19.7	49	9	15.4
Permanent Lecturer	-22	1	72	22	23.4	94	22	18.6
Fixed-term Lecturer	-14	-2	10	13	56.5	24	15	39.0

## Students

From the total returns to the 2002 survey there are 1157 PhD students and 2510 MA students enrolled in economics subjects. This gives a total of 3667 postgraduate students studying economics, an increase from the 2385 collected in the 2000 survey and closer to the 3720 found in the 1998 survey. In the balanced panel there was an increase from 1748 postgraduate students reported in 2000 to 2656 reported in the same departments in 2002. This may go some way to confirm the suspicion in 2000 that there was a problem among responding institutions with high burden in collecting student numbers. The information collected this year about students was a lot simpler. In 2000 we attempted to collect origin of student (UK, EU but not UK, non-EU) and ethnic group (9 categories) as well as male and female figures. In the 2002 we only asked for a gender breakdown and an origin breakdown. The forms were therefore a lot smaller and simpler to complete. It was thought that the information about ethnicity may be confidential and kept by the university rather than the department and this may have led to some under-reporting of ethnic group in 2000.

Of the students reported in the balanced panel 37.3% are female, this is a slight increase on the 36.3% reported in 2000. PhD students make up 26.5% of postgraduates, down from 33.9% in 2000.

In the 2000 survey 36% of all PhD students, full-time and part-time, were female. In 2002 this appears to have decreased to 32.2%. The proportion of MA students who are female has increased over the same period, from 36.4% (36% of full-time and 41.3% of part-time MA students) to 39% (40.3% of full-time and 31.4% of part-time MA students).

The survey also asked about geographical origin of the students. In the total survey return, females made up 34% of all full-time PhD students. They made up a higher proportion of those PhD students from the UK (38.3%) than the EU (36.6%) or the rest of the world (31%). Amongst MA students, however, it is slightly different. Whilst women made up 38.5% of full-time MA students in total, the proportion of UK MA students who were women was only 28.6%. Women were over two-fifths of EU (not UK) MA students (41.6%).

Looking at the balanced panel, the story is slightly different to that of the total survey return. Women made up 32% of full-time PhD students (down from 36% in the same departments in 2000). There were higher proportions of female PhD students amongst those from the EU (35.3%) and the rest of the world (31.3%) compared to the UK (28.8%). In 2000 female PhD students made up a higher proportion of UK (40.7%) and EU (40%) PhDs than the rest of the world (31.5%). The proportion from the rest of the world hasn't changed much over the two years, but there has been a decrease in the proportions of female PhD students from the UK and EU.

Turning to MA students, in 2000 under a third of UK MA students were female (31.3%). There was a slightly higher proportion of EU (37.2%) and the rest of the world (37%) MA students who were women. In the same departments two years later the proportion of UK and EU MA students who are women has fallen to 28.2% and 31.4% respectively. The proportion of MA students who are female from the rest of the world has increased to 47.3%.

Table 7: Primary Function – PhD Students – Total Sample 2002

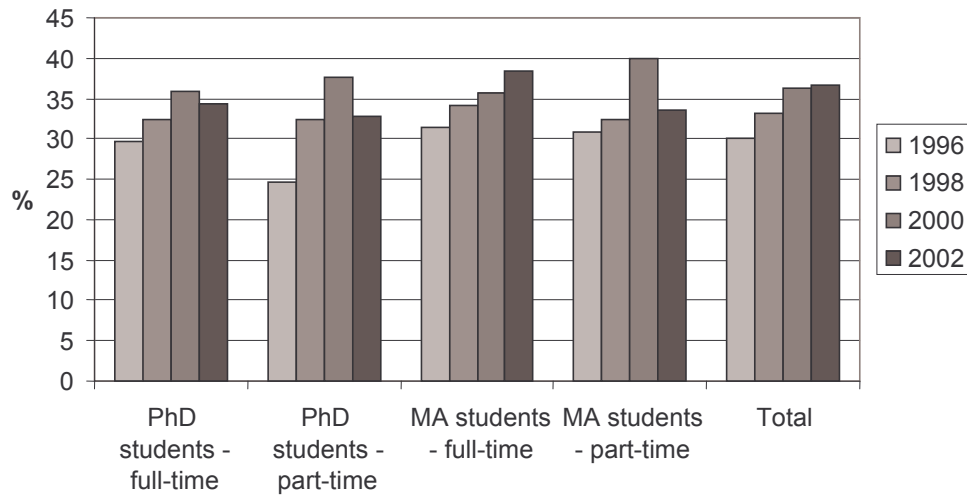
Research Students	Female	Male	Total	% Female
Full Time				
UK	82	132	214	38.3
Non-UK, EU	93	161	254	36.6
Non-EU	137	305	442	31.0
<b>Totals</b>	<b>312</b>	<b>598</b>	<b>910</b>	<b>34.3</b>
Part Time				
UK	22	55	77	28.6
Non-UK, EU	37	52	89	41.6
Non-EU	22	59	81	27.2
<b>Totals</b>	<b>81</b>	<b>166</b>	<b>247</b>	<b>32.8</b>

Table 8: Primary Function – Masters Students – Total Sample 2002

Masters Students	Female	Male	Total	% Female
Full Time				
UK	110	311	421	26.1
Non-UK, EU	160	347	507	31.6
Non-EU	593	723	1316	45.1
<b>Totals</b>	<b>863</b>	<b>1381</b>	<b>2244</b>	<b>38.5</b>
Part Time				
UK	51	85	136	37.5
Non-UK, EU	24	52	76	31.6
Non-EU	14	40	54	25.9
<b>Totals</b>	<b>89</b>	<b>177</b>	<b>266</b>	<b>33.5</b>

The figure below (Figure 7) shows the changes in the proportion of women in postgraduate economics based on the total return of the 1996, 1998, 2000 and 2002 surveys – i.e., this is not a balanced panel. Over the last two years there has been a slight decline in the proportion of women studying for an economics PhD. An increase in the proportion of women studying for a full-time MA however has meant that overall the proportion studying any postgraduate economics degree is similar to 2000.

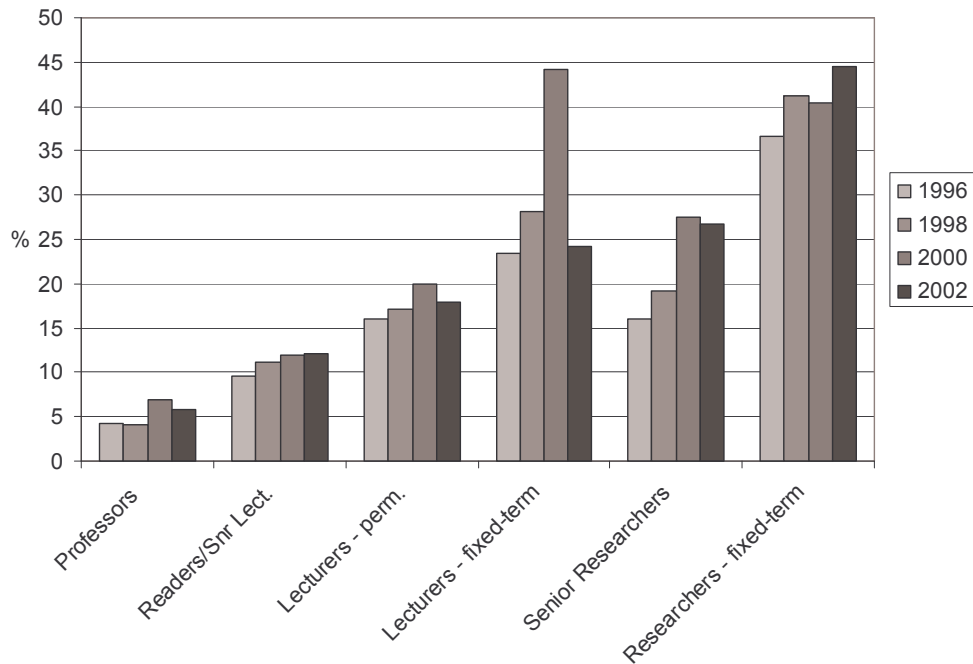
Figure 7: Changing levels in the proportion of women in postgraduate economics, 1996-2002



**A longer view: 1996-2000.**

This survey has been conducted four times; 1996, 1998, 2000 and 2002. The figure below (Figure 8) shows the changes in the proportion of women in academic economics based on the total return of the 1996, 1998, 2000 and 2002 surveys. These figures are for full-time academic positions. This figure shows that the total proportion of women in academic economics has increased over the years 1996-2000 and then there has been a slight fall between 2000 and 2002. The fact that this figure uses the total return for each survey means that we are not looking at the same sample of institutions in each year, since some institutions do not participate in one or more of the surveys.

Figure 8: Changing levels in the proportion of women in academic economics, 1996-2002  
(Cross-sectional surveys)



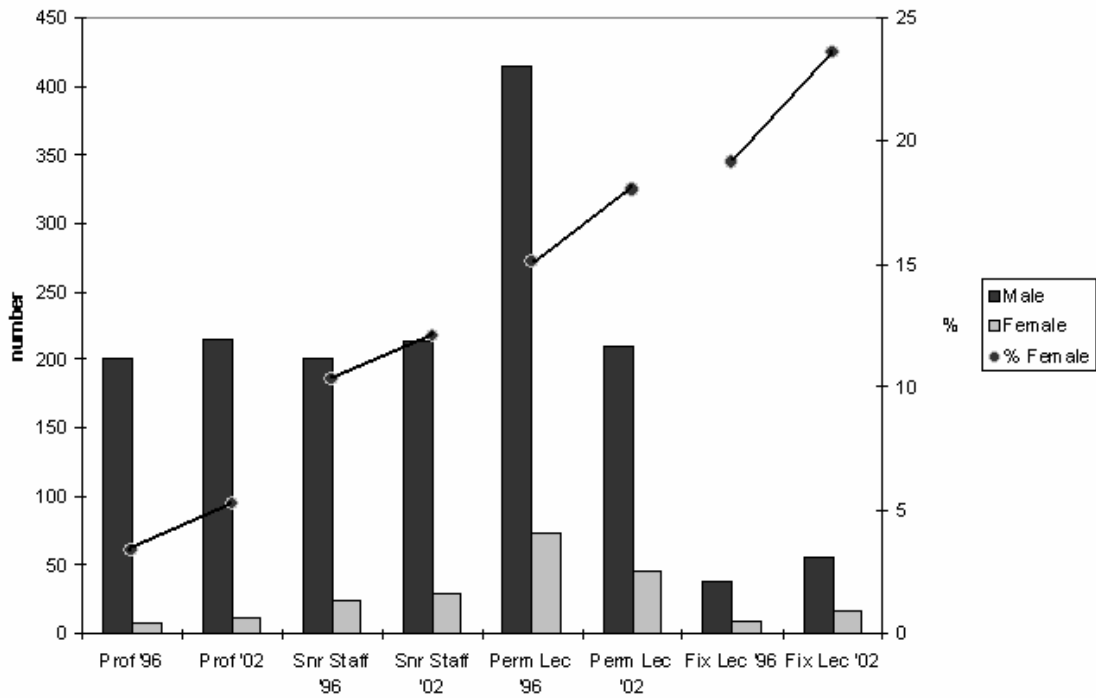
In the analyses below we use a balanced panel for just those departments which have taken place in the first (1996) and most recent (2002) surveys. This sample constitutes 56 departments, of these 30 have taken part in each survey, 16 in three of the four surveys and 10 in just the two surveys being compared. The departments in this 6 year balanced panel are not to be taken to be representative of all the economic departments in the country but are an illustration of the changes in particular departments over six years.

An examination of the raw numbers shows a decline in the numbers of staff over this period. However, this decline isn't true of all grades. The number of professors and senior staff have increased over the six years whilst it is the numbers of lecturers which have decreased. The proportion of women at all grades has increased over the six years. Figure 9, below, shows the numbers of men and women in each academic grade for 1996 and 2002 (the bars) and the percentage of women in each grade (the lines). As the lines show, the proportion of women in each grade has increased between 1996 and 2002. The proportion of women also increases the lower the academic grade. The increase would presumably have been somewhat greater if the trend had stopped in 2000 rather than 2002. Note the drop in numbers of permanent lecturers, both male and female, over this period (in these departments), partially compensated by a rise in fixed term lecturers. The influx of males to fixed term lecturer posts in 2002 has driven the proportion female in this part of the sector back close to its level in 1996.

A comparison over six years (1996-2002) shows that the proportion of female academics has increased in every grade. Figure 9 also shows that in terms of numbers of staff there has been

an increase in the numbers of professors and senior staff (readers, senior lecturers) over this period and women have increased their presence in these grades. The numbers of permanent lecturers has decreased over time whilst the numbers of fixed-term lecturers has increased, but not by the same number. Within the departments which responded to both the 1996 and 2002 surveys, the number of permanent lecturers had fallen from 489 to 256 – a loss of 233 posts whilst the number of fixed-term lecturers had only risen by 25, from 47 to 72 posts. This means that within the lecturer grade there are 208 fewer posts in 2002 than there were in 1996, a fall of 39%.

Figure 9: The change between 1996 and 2002 in a balanced panel.



## Ethnic Minorities

Table 9, below, shows the proportion of ethnic group within each academic grade. Overall, just under 90% of academic economics staff are white. There is a higher proportion of white academics at the higher levels – nearly 94% of professors are white. The proportions of academics who are white decreases as the grade decreases, but even at the entry-level of fixed-term staff almost eight in ten academics are white.

Table 9: Ethnic Group by Academic Grade – all full-time economists – full sample.

Full-time – All	Professor	Reader	Senior Lecturer	Lecturer - perm.	Lecturer - Fixed-term	Total	<i>n</i>
White	93.94	92.73	91.95	85.43	78.43	89.54	685
Indian	3.03	3.64	3.45	6.30	9.80	4.71	36
Chinese	--	--	1.72	1.97	1.96	1.18	9
Other Asian	1.73	3.64	2.30	3.15	5.88	2.75	21
Black	0.43	--	--	0.79	--	0.39	3
Other	0.87	--	0.57	2.36	3.92	1.44	11
<i>n</i>	231	55	174	254	51	765	765

Table 10, below, shows how the ethnic breakdown of full-time academic economists from the RES survey compares to other data sources. The 2001 Census gives the population estimates for each ethnic group in the UK (with the categories collapsed to match those in the RES survey). These are the figures for the entire population, so it includes those who are not in the labour market. The British Household Panel Survey (BHPS) has been used to compare the RES figures with the ethnic breakdown of those who are in paid employment.

The proportion of full-time economists who are white (89.5%) is lower than the proportion of those describing themselves as white on the 2001 census (92.1%). It is a lot lower than the proportion of people in work who classify themselves as white, according to the 2002 British Household Panel Survey (96.3%). There are some ethnic groups within academic economics which are better represented than in the general or working population; Indian, Chinese and Other Asian. There is, however, one group which is under-represented – black people make up just 0.4% of academic economists whilst they constitute 1.1% of those in paid employment and 2% of the general population.

Table 10: A comparison of the proportions of ethnic groups.

	2001 Census	2002 BHPS “in paid work”	2002 RES full- time economists
White	92.1	96.3	<b>89.5</b>
Indian	1.8	1.4	<b>4.7</b>
Chinese	0.4	0.1	<b>1.2</b>
Other Asian	2.2	0.4	<b>2.8</b>
Black	2.0	1.1	<b>0.4</b>
<b>Other</b>	<b>1.6</b>	<b>0.7</b>	<b>1.4</b>

Part-time academics are the subject of Table 11, below. Amongst part-time workers the majority ethnic group is white, making up over 81% of part-time academics. There are relatively few part-time academics (114, compared to 765 full-time academics) and few of these are from a non-white ethnic minority.

Table 11: Standard Academic Grade, by ethnic group – all part-time economists.

<b>Part-time – All</b>	<b>Professor</b>	<b>Reader</b>	<b>Senior Lecturer</b>	<b>Lecturer - perm.</b>	<b>Lecturer - Fixed-term</b>	<b>Total</b>	<i>n</i>
White	100.00	--	100.00	81.25	76.32	81.58	93
Indian	--	--	--	6.25	3.95	3.51	4
Chinese	--	--	--	--	1.32	0.88	1
Other Asian	--	--	--	12.50	2.63	3.51	4
Black	--	--	--	--	5.26	3.51	4
Other	--	--	--	--	10.53	7.02	8
<i>n</i>	14	0	8	16	76	114	114

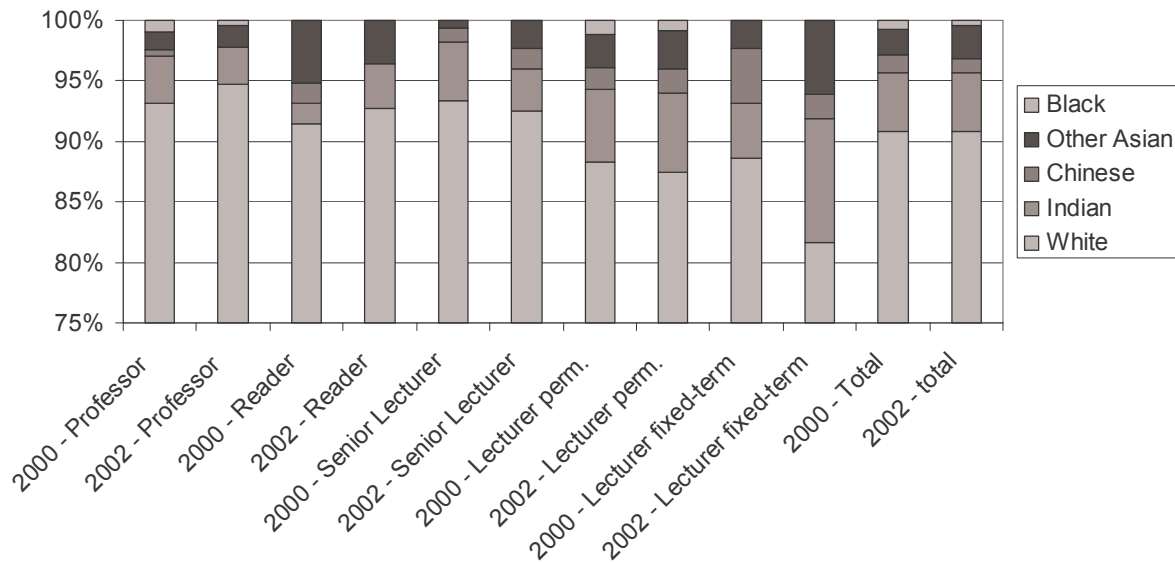
Table 12 below, looks at the research grades. White researchers make up over four-fifths of researchers – 95% of senior researchers and 82% of fixed-term researchers.

Table 12: Standard Academic Grade, by ethnic group – all researchers.

<b>Research – All</b>	<b>Senior Researcher</b>	<b>Researcher - Fixed-term</b>	<b>Total</b>	<i>n</i>
White	95.45	81.63	84.43	103
Indian	--	9.18	7.38	9
Chinese	--	1.02	0.82	1
Other Asian	--	5.10	4.10	5
Black	4.55	1.02	1.64	2
Other	--	2.04	1.64	2
<i>n</i>	22	98	122	122

Figure 10, below, is a graph of the change in proportion of ethnic minorities in academic economics, 2000-2002. This is from the balanced panel, with some of the 2000 categories collapsed to be consistent with the 2002 categories. The “other” category has also been removed. Because of the large majority of white economists the scale of the graph starts at 75%.

Figure 10: Change in the proportion of ethnic groups in grade of academic economics, balanced panel – 2000-2002.



Looking at the balanced panel, in the two highest grades (professor and reader) the proportion of white academics increased between 2000 and 2002, whilst the lower three grades – senior lecturer, permanent lecturer and fixed-term lecturer – saw a decrease in the proportion of white academics. The biggest decrease in the proportion of white academics was at the most junior level, 88.6% of fixed-term lecturers were white in 2000 and this fell to 81.6% in 2002. Most of the fall in the proportion of white fixed-term lecturers was made up by an increase in the proportion of Indian (4.5% of fixed-term lecturers in 2000, 10.2% in 2002) and other Asian (2.3% to 6.1%) economists.

Overall, however, the proportion of white economists stayed steady at 90.8%. There was not a great deal of change, overall, in the breakdown of ethnic groups. Indian economists made up 4.8% of academic economists in these departments for 2000 and 2002. There was a slight fall in the proportion of Chinese economists, from 1.5% in 2000 to 1.2% in 2002. Other Asian economists increased their profile from 2.1% of economists to 2.8% of economists. There was a lower proportion of black economists in 2002 (0.4%) than two years before (0.7%).

## Conclusion

The proportion of women in full-time academic employment has fallen slightly from 19% in 2000 to 17.8%. The new recruits to the academic staff were more likely to be female than those already in post, but the proportion female among new hires was not sufficiently high to counteract a higher proportion female among those leaving academic economics than among those staying in. Furthermore, the proportion of women in the new jobs was still lower than those in the 'feeder' grades if recruitment is drawn from within these departments taken together.

Not only does the advance of female economists into the upper grades of academic employment appear to have halted, so too does the proportion of women among graduate students of economics. The proportion of women among graduate students is around one third, a decline from the level in 2000.

The largest decrease in the proportion of female academics was in the fixed-term lecturer grade, which usually forms a part of entry to academic careers. In 2000, 44% of staff at this level were female. In 2002 this had fallen to 24%. Within the institutions in the balanced panel for these two surveys the decline was from 46% to 32%. This appears to be a dramatic decline, but it must be borne in mind that the actual numbers involved are relatively small. As these are staff in fixed-term contracts it would be expected that there would be quite a lot of churn over the years. Looking at total survey returns (not the balanced panel) in 1998 there were 128 people in the survey who were classed as fixed-term staff, just under 30% were female. By 2000 there had been a fall to just 68 fixed-term staff, of whom 44% were female. In 2002 the number had risen to 99 people, of whom just under a quarter – 24% – were female. In terms of the numbers involved, the number of men had increased from 38 to 75 and the number of women in these positions fell from 30 to 24.

The results of the 2002 survey also show that the proportion of academic economists who are white has increased over the past two years. In 2000 86.7% of professors were white, by 2002 this had increased to 93.9%. At every level except the lowest – fixed-term staff – the proportion of white academics had increased over the two years. However, this increase was mirrored by a fall in the proportion of staff classed as "other ethnic group/unknown". In 2000 6.9% of professors were coded as an "other" ethnic group, compared to just 0.9% in 2002. If these "other/unknown" are removed from the analysis the proportion of white professors has increased from 93.1% to 94.8% and the proportion of white academics (any grade) has remained stable at 90.8%. Amongst the other groups the "other Asian" group has slightly increased from 2.1% to 2.8% of academics and the Black group has fallen from 0.7% to 0.4%.

Although some trends may have halted or reversed between 2000 and 2002, looking back to 1996 reveals several trends. Although the trends in the proportions female at all grades of staff and postgraduate staff seem to have halted in their upward trend it is premature to say whether this is a pause or a reversal. Meanwhile the survey reveals several other contemporaneous trends in academic economics:

- A move towards economics departments becoming incorporated or repackaged in business schools
- A marked drop in the number of permanent lecturers, partially compensated by a rise in fixed-term lecturers, and a smaller increase in the numbers of senior academic staff.

The stalling of the trend does suggest that an improving gender balance in economics is not a smooth and inevitable progression, particularly as it affects the entry grade, which should be the first to show the one third female established in recent years among graduate students. Instead, fewer than one quarter of fixed term lecturers are women. It still remains open to investigation as to why relatively few women are getting into academic economics, why fewer than might be expected are 'getting on' to the upper grades of an academic career, and why relatively more female than male economists are 'getting out'. While it is beyond the scope of this monitoring exercise to answer these questions, it does suggest that they need to be asked.

## References

Booth, Alison L., and Jonathan Burton, "The Position of Women in UK Academic Economics", in *The Economic Journal*, June 2000, F312-F333.

Burton, Jonathan, with Amanda Rowlatt and Heather Joshi, "Royal Economic Society Survey on the Gender and Ethnic balance of academic economics 2000", ISER Working Paper, 2002-4.

Mumford, Karen, "The Gender Balance of Academic Economists in the UK", report to the Royal Economic Society Women's Committee, June 1997.