

## Appendix I

### Earnings in Other Professional Occupations

#### Introduction

The 'professional occupations' major group category within the Standard Occupational Classification (SOC) includes 'HE teaching professionals'. Since HE teaching professionals account for roughly half of the employees within the HE industry they are dealt with in a separate section (Appendix H). The major group also covers researchers (who are not included in the teaching professional category), registrars and bursars and librarians. Unfortunately, for the latter two groups the samples within the Annual Survey of Hours and Earnings (ASHE) are not large enough to support analysis. Therefore the focus here is on researchers, and on the whole professional occupations major group (which, as noted, is dominated by the HE teaching professionals examined in detail elsewhere). We examine figures for those employed within the HE sector and those in the remainder of the economy. All of the statistics used in this section are taken from ASHE. They are derived from specially ordered tables which differentiated between those within and outside the HE sector.

ASHE statisticians provide information about the confidence intervals around estimates. We judge that these intervals for researchers within the HE sector are too large to support analysis of earnings by gender or of quartiles, and for the same reason we provide only limited information on part-timer researchers. Elsewhere, if samples are small but we judge them usable with caution, we follow the practice of the ASHE statisticians by shading the relevant estimates and any indices derived from them. We do not present any analysis of quartiles, or by gender for HE sector employees at the Professional Occupations major group level. Such analyses are carried out for HE teaching professionals, the major component of the professional group, in the relevant section.

#### Section 1: HE sector professional occupations in 2008

##### Full-time employees

In 2008 median gross annual earnings for those in professional occupations in the HE sector were £37,989, and mean gross annual earnings were £40,862 (see Table 1.1). Average basic earnings were only a little lower, the difference being negligible at the median and just under £250 at the mean.

**Table 1.1 Annual earnings of full-time staff in elementary occupations, April 2008**

	Gross £	Basic £
Mean		
Professional occupations	40,862	40,622
- researchers	31,232	31,112
Median		
Professional occupations	37,989	37,989
- researchers	29,115	29,115

Source: ASHE

Researchers in the HE sector recorded gross median earnings of £29,115 and gross mean earnings of £31,232. Again, there was little difference between gross and basic earnings.

Table 1.2 shows gross hourly earnings figures for the group (ASHE also provides hourly estimates net of overtime, but these are little different to the hourly gross figures). Taken as a whole, those in professional occupations in the HE sector averaged £20.21 per hour at the median and £21.74 at the mean. Researchers earned £15.54 per hour on average according to the median and £16.52 per hour according to the mean.

**Table 1.2 Gross hourly earnings of full-time staff: professional occupations, April 2008**

	<b>Median £</b>	<b>Mean £</b>
Professional occupations	20.21	21.74
- researchers	15.54	16.52

Source: ASHE

### Part-time employees

Hourly earnings provide the only meaningful information for part-time employees, since annual figures will be influenced by the number of hours per year that the part-timer works. Table 1.3 provides the information on gross hourly earnings. At the median, part-time gross hourly earnings for the professional occupations group were £20.97, little different from the mean estimate of £21.03 per hour. At the median, the figures are almost identical to the hourly rate for full-time staff in the same group (see Table 1.2), though the mean is somewhat lower. For researchers, figures should be treated with caution on account of the small sample. They indicate average earnings very close to those for full-time researchers.

**Table 1.3 Gross hourly earnings of part-time staff: professional occupations, April 2008**

	<b>Median £</b>	<b>Mean £</b>
Professional occupations	20.97	21.03
- researchers	15.60	16.56

Source: ASHE

## Section 2: 2008-based comparisons

### Full-time employees

The figures already discussed for the HE sector are compared here with those for other groups. Table 2.1 sets out median and mean gross annual earnings for employees in the HE sector and in the rest of the economy, and then indexes the latter against the estimates for the corresponding HE group. The table shows a close correspondence in gross earnings inside and outside the sector. The HE sector is slightly ahead for professional occupations in general (clearly the occupational composition can differ between the HE sector and the rest of the economy), and slightly behind for researchers.

**Table 2.1 Average annual gross earnings of full-time staff, professional occupations: HE sector and comparators, April 2008**

	Median		Mean	
	£pa	HE sector=100	£pa	Index HE sector=100
HE sector				
- professional occupations	37,989	100	40,862	100
- researchers	29,115	100	31,232	100
Rest of economy				
- professional occupations	35,325	93.0	40,028	98.0
- researchers	30,022	103.1	31,539	101.0

Source: ASHE

Table 2.2 sets out similar information but for basic earnings. On this basis HE sector researchers have marginally higher average earnings than their comparators, and there is a slightly larger gap between the sector and the rest of the economy for all professional occupations.

**Table 2.2 Average annual basic earnings of full-time staff, professional occupations: HE sector and comparators, April 2008**

	Median		Mean	
	£pa	Index HE Sector=100	£pa	Index HE Sector=100
HE sector				
- professional occupations	37,989	100	40,622	100
- researchers	29,115	100	31,112	100
Rest of economy				
- professional occupations	34,402	90.6	38,375	94.5
- researchers	28,651	98.4	30,940	99.4

Source: ASHE

Table 2.3 provides similar information but on the basis of hourly earnings. As with Table 2.2, the HE sector is slightly ahead for both researchers (by around 3 percentage points) and for all professional occupations (a difference of 6 percentage points at the median and 3 at the

mean). Taken together, Tables 2.1-2.3 indicate that researchers outside the sector work, on average, longer hours to achieve annual earnings marginally ahead of those paid within the HE sector.

**Table 2.3 Average hourly gross earnings of full-time staff, professional occupations: HE sector and comparators, April 2008**

	Median		Mean	
	£pa	HE sector=100	£pa	Index HE sector=100
HE sector				
- professional occupations	20.21	100	21.74	100
- researchers	15.54	100	16.52	100
Rest of economy				
- professional occupations	18.97	93.9	20.99	96.6
- researchers	15.13	97.4	16.08	97.3

Source: ASHE

### Part-time employees

Table 2.4 replicates the statistics given in Table 2.3, but for part-time rather than full-time employees. It shows that the estimates for researchers need to be treated with caution for those in the rest of the economy as well as those within the HE sector. They show higher earnings within HE. For professional occupations as a whole, part-time earnings are higher outside the sector at the mean, but lower at the median.

**Table 2.4 Average hourly gross earnings of part-time staff, elementary occupations: HE sector and comparators, Apr 2008**

	Median		Mean	
	£ph	HE sector=100	£ph	HE sector=100
HE sector				
- professional occupations	20.97	100	21.03	100
- researchers	15.60	100	16.56	100
Rest of economy				
- professional occupations	20.28	96.7	22.31	106.1
- researchers	13.07	83.8	15.88	95.9

Source: ASHE

Table 2.5 compares the earnings of part-time staff with their full-time comparators

**Table 2.5 Comparison of median hourly gross earnings of part-time staff and full-time staff: Professional occupations, April 2008**

	Part-time £ph	Full-time £ph	Part-time as % of Full-time
HE sector			
- professional occupations	20.97	20.21	103.8
- researchers	15.60	15.54	100.4
Rest of economy			
- professional occupations	20.28	18.97	106.9
- researchers	13.07	15.13	86.4

Source: ASHE

The figures indicate that, in HE and the broader economy, part-time staff in professional occupations average higher hourly rates than full-time staff.

### Section 3: Change in HE sector professionals' earnings over time

#### Full-time employees

**Table 3.1 HE sector professional occupations and researchers: median gross annual earnings, 2001- 2008**

	Professional occupations			Researchers			RPI	
	£pa	Index 1	Index 2	£pa	Index 1	Index 2	Index 1	Index 2
2001	29,460	28.9					23.6	
2002	31,199	21.8	5.9	23,615	23.3		21.8	1.5
2003	31,152	21.9	5.7	24,484	18.9	3.7	18.1	4.7
2004	31,708	19.8	7.6	25,421	14.5	7.6	15.2	7.3
2005	33,128	14.7	12.4	25,650	13.5	8.6	11.7	10.7
2006	34,423	10.4	16.8	27,957	4.1	18.4	8.9	13.5
2007	36,884	3.0	25.2	29,115	0.0	23.3	4.2	18.7
2008	37,989		28.9	29,115		23.3		23.6

Source: ASHE

Index 1: Percentage increase from year shown to 2008.

Index 2: Percentage increase from 2001 (2002 for researchers).

RPI: Retail Prices Index.

Table 3.1 shows the movement in gross median earnings for employees in professional occupations and for researchers, within the HE sector. Price movements (as measured by the Retail Prices Index) are shown for comparison. For professional occupations as a whole, earnings rose from £29460 in 2001 to £37989 in 2008, a 28.9% increase. For researchers, earnings rose by 23.3% from £23615 in 2002 to £29115 in 2008. The pace of change was relatively even, save for a small decline for the group as a whole between 2002 and 2003 and a small increase for researchers between 2004 and 2005, and no change 2007-8. Note

that a change in occupational classification between 2001 and 2002 means that we have no researcher figures for 2001.

**Table 3.2 HE sector professional occupations and researchers mean gross annual earnings, 2001- 2008**

	Professional occupations			Researchers			RPI	
	£pa	Index 1	Index 2	£pa	Index 1	Index 2	Index 1	Index 2
2001	31,231	30.8					23.6	
2002	32,880	24.3	5.3	27,014	15.6		21.8	1.5
2003	33,492	22.0	7.2	27,003	15.7	0.0	18.1	4.7
2004	34,089	19.9	9.1	27,623	13.1	2.3	15.2	7.3
2005	35,942	13.7	15.1	28,061	11.3	3.9	11.7	10.7
2006	37,452	9.1	19.9	29,459	6.0	9.1	8.9	13.5
2007	39,835	2.6	27.5	30,643	1.9	13.4	4.2	18.7
2008	40,862		30.8	31,232		15.6		23.6

**Source: ASHE**

Index 1: Percentage increase from year shown to 2008.

Index 2: Percentage increase from 2001 (2002 for researchers).

RPI: Retail Prices Index.

Table 3.2 uses the mean measure rather than the median. It records a slightly greater increase for the major group as a whole – 30.8% over the period from 2001-8 rather than the 28.9% at the median. On the other hand, the figures for researchers indicate a much slower growth – of 15.6% rather than the 23.3% recorded at the median between 2002 and 2008. At the mean recorded earnings growth between 2002 and 2005 was just 4%.

Tables 3.3 and 3.4 show median and mean growth in basic earnings. They are provided for the sake of completeness, since the trends closely mirror those for gross earnings.

**Table 3.3 HE sector professional occupations and researchers median basic annual earnings, 2001- 2008**

	Professional occupations			Researchers			RPI	
	£pa	Index 1	Index 2	£pa	Index 1	Index 2	Index 1	Index 2
2001	29,472	28.9					23.6	
2002	30,557	24.3	3.7	23,569	23.5		21.8	1.5
2003	30,825	23.2	4.6	24,255	20.0	2.9	18.1	4.7
2004	31,699	19.8	7.6	25,372	14.8	7.6	15.2	7.3
2005	33,079	14.8	12.2	25,674	13.4	8.9	11.7	10.7
2006	34,381	10.5	16.7	27,942	4.2	18.6	8.9	13.5
2007	36,884	3.0	25.2	29,115	0.0	23.5	4.2	18.7
2008	37,989		28.9	29,115		23.5		23.6

**Source: ASHE**

Index 1: Percentage increase from year shown to 2008

Index 2: Percentage increase from 2001 (2002 for researchers)

RPI: Retail Prices Index

**Table 3.4 HE sector professional occupations and researchers mean basic annual earnings, 2001-2008**

	Professional occupations			Researchers			RPI	
	£pa	Index 1	Index 2	£pa	Index 1	Index 2	Index 1	Index 2
2001	31,018	31.0					23.6	
2002	32,523	24.9	4.9	26,771	16.2		21.8	1.5
2003	33,170	22.5	6.9	26,817	16.0	0.2	18.1	4.7
2004	33,614	20.8	8.4	27,305	13.9	2.0	15.2	7.3
2005	35,650	13.9	14.9	27,952	11.3	4.4	11.7	10.7
2006	37,191	9.2	19.9	29,313	6.1	9.5	8.9	13.5
2007	39,637	2.5	27.8	30,575	1.8	14.2	4.2	18.7
2008	40,622		31.0	31,112		16.2		23.6

**Source: ASHE**

Index 1: Percentage increase from year shown to 2008.

Index 2: Percentage increase from 2001 (2002 for researchers).

RPI: Retail Prices Index.

**Table 3.5 HE sector professional occupations and researchers median gross hourly earnings, 2001-2008: full-time staff**

	Professional occupations			Researchers			RPI	
	£pa	Index 1	Index 2	£pa	Index 1	Index 2	Index 1	Index 2
2001	15.72	28.5					23.6	
2002	16.66	21.3	6.0	12.45	24.8		21.8	1.5
2003	16.64	21.4	5.8	12.96	19.9	4.1	18.1	4.7
2004	17.02	18.8	8.2	13.45	15.5	8.0	15.2	7.3
2005	17.94	12.6	14.1	13.52	14.9	8.6	11.7	10.7
2006	18.51	9.2	17.7	14.78	5.1	18.7	8.9	13.5
2007	19.98	1.2	27.1	15.63	-0.6	25.5	4.2	18.7
2008	20.21		28.5	15.54		24.8		23.6

**Source: ASHE**

Index 1: Percentage increase from year shown to 2008.

Index 2: Percentage increase from 2001 (2002 for researchers).

RPI: Retail Prices Index.

Table 3.5 shows a change in median gross hourly earnings for professional occupations as a whole at 28.5%, from £15.72 per hour to £20.21 per hour. For researchers, the increase between 2002 and 2008 was 24.8%, from £12.45 per hour to £15.54 per hour. Again, the growth recorded at the mean for researchers was considerably lower (Table 3.6), at 16.6%, with very little growth recorded before 2005. No figures are provided for change in hourly earnings for part-time researchers, since the small sample produced unstable fluctuations over time.

**Table 3.6 HE sector professional occupations and researchers mean gross hourly earnings, 2001-2008**

	Professional occupations			Researchers			RPI	
	£pa	Index 1	Index 2	£pa	Index 1	Index 2	Index 1	Index 2
2001	16.87	28.9					23.6	
2002	17.63	23.3	4.5	14.17	16.6		21.8	1.5
2003	17.84	21.8	5.8	14.29	15.6	0.8	18.1	4.7
2004	18.16	19.7	7.7	14.64	12.8	3.3	15.2	7.3
2005	19.27	12.8	14.2	14.52	13.8	2.4	11.7	10.7
2006	19.91	9.2	18.0	15.50	6.6	9.4	8.9	13.5
2007	21.22	2.5	25.8	16.32	1.2	15.1	4.2	18.7
2008	21.74		28.9	16.52		16.6		23.6

**Source: ASHE**

Index 1: Percentage increase from year shown to 2008.

Index 2: Percentage increase from 2001 (2002 for researchers).

RPI: Retail Prices Index.

## **Section 4: Comparisons of change for professional occupational groups, 2001-2008**

[Note that the tables for this section are necessarily large, and so each is printed on a separate page: no figures are provided for part-time staff, since the samples for researchers were small and therefore unstable]

The comparisons made in this part of the paper are based on what has been referred to in previous tables as 'Index 1', whereby percentage change in earnings is shown for each year to 2008. This reflects the fact that the occupational classification changed between 2001 and 2002, and so we consider change over the period 2002-8 as well as 2001-8 in the following commentary. Since no statistics are available for researchers for 2001, analyses for this group relate to the period 2002-8.

Looking first at researchers, it is apparent that the modest increase recorded at the mean for HE sector researchers is also evident for researchers elsewhere in the economy. In addition, broader economy researchers exhibited the same pattern of earnings growth over time as HE researchers, with very little increase recorded between 2002 and 2004. On the gross annual earnings mean measure, both HE researchers and wider economy researchers recorded earnings growth of under 16% 2002-8. Looking at basic annual earnings, HE researchers recorded growth of 16.2% compared with 17.7% in the wider economy, while the gross hourly earnings figures show an increase of 16.6% for HE researchers and 15.2% in the wider economy. All of these figures are lower than the increase in the Retail Prices Index.

Turning to median measures, a different pattern emerges. HE researchers record consistently larger increases than they did at the mean – and consistently larger increases than researchers in the wider economy. For gross annual, basic annual and gross hourly earnings respectively, HE researchers recorded increases 2002-7 of 23.3%, 23.5% and 24.8%. Researchers in the wider economy recorded increases of 16.0%, 14.1% and 16.6% respectively.

For the professional occupations major group as a whole there were not such marked discrepancies in the estimates of growth on mean and median measures as there were for HE researchers. The HE sector recorded slightly faster growth at both the mean and the median on all bases. Looking at the whole period from 2001 to 2008, and using the mean measure, the HE sector professionals recorded growth of 30.8%, 31.0% and 28.9% on gross annual, basic annual and gross hourly bases respectively. Corresponding figures for professionals in the rest of the economy were 28.5%, 27.6% and 26.3%. The same pattern of a narrow HE sector lead is evident for the period 2002-8 (there was some change in the composition of the major group between 2001 and 2002, so the 2002-8 figures might be considered more reliable).

Turning to the median, and again looking at the 2001-8 period first, the HE sector recorded increases of 28.9%, 28.9% and 28.5% on gross annual, basic annual and gross hourly measures. Corresponding figures for the wider economy were 27.0%, 27.2% and 22.7%. The same pattern of quite narrow leads for the HE sector was evident for the shorter 2002-8 period.