A COMPARISON OF FUNDING IN WALES AND ENGLAND

INTRODUCTION

1. On 25 July 2005, the Welsh Assembly Government (WAG) wrote to HEFCW seeking advice on how the funding of the Higher Education sector in Wales compares with the funding received by comparable institutions in the rest of the UK. The WAG is keen to establish the extent of any funding gap which may to exist both historically and currently. Although the WAG is primarily interested in differences between Wales and England, it suggested that comparisons with Scotland should be made if possible.

2. This is a much more complex problem than may at first glance appear. An interim briefing paper has already been submitted to the Assembly, laying out why this is a complex problem, and rehearsing a number of conceptual and methodological issues that it is essential to take into account. That paper outlines a range of approaches to the problem and summarises the conclusions that emerge from them. It is important to read the present paper in conjunction with the interim briefing paper.

3. The present paper provides the detailed analysis and calculations that underpin the conclusions. It aims to provide a robust estimate of the shortfall in funding that is believed to exist for Wales, in comparison with England. Some comparisons with Scotland have also been made but time constraints led to a concentration primarily on the comparisons of Wales with England. The estimates are mainly based on the assumption that there is a gap in funding if the level of grant per fundable student is different in the two countries unless the differences can be attributed to factors such as different subject mixes. Data developed in the course of this analysis are also used in the interim briefing paper to address issues arising from the fact that Wales has a higher student population relative to the overall population than England.

SOURCES, DEFINITIONS AND CAVEATS

4. The method section (paragraphs 10 - 18) includes some information on data sources, definitions and some caveats. Further information about the Higher Education Statistics Agency data is given in Annex A.

5. It is important to note that:
   - The majority of the analysis relates to one year only – 2003/04. There are variations in the flow of funding both between years and between countries, particularly for capital.
   - The performance of institutions against a number of funding drivers such as the RAE and the various factors which give rise to premiums (eg for widening access) differ. The level of funding for such factors is different in the three countries.
   - The data underpinning parts of the analysis are known to include errors. Some of the analysis involves taking the differences between estimates where the resulting difference is small. This tends to lead to large margins of error in the resulting values. However, for the calculation of the funding gap, the paper includes calculations on two different bases and seeks to reconcile differences in outcomes to enable a firmer view of the funding gap to be formed.
   - Although some parts of the analysis depend on calculations at an institutional level, the accuracy of the data and subjective nature of the selection of comparator institutions mean that no inferences can be drawn about the level of under or over funding of individual institutions. To reduce the likelihood of unsound conclusions being drawn, the names of the Welsh institutions have been replaced by letters (Institution A etc).

SUMMARY OF FINDINGS

6. This summary should be read with reference to the definitions and caveats in paragraphs 5, 10 - 18 and Annex A and the tables and paragraphs indicated against each summary finding.

- The Welsh higher education sector received lower levels of grant per fundable FTE than both England and Scotland and the gap increased over the period 2000/01 to 2003/04 (Table 2)

- HE institutions in Wales also had lower levels of grant plus fees and overall income than England or Scotland in 2003/04 (Table 3)

- Within comparable groups of institutions, the level of grant (shown in the HESA Finance Record) per fundable FTE was generally lower in Wales with any instances of higher grant being attributable to different subject mixes. (Tables 5, 6 and 7).

- The HESA-based estimates suggest shortfalls in the range £7.1 million to £14.7 million but these estimates are affected by the treatment of capital and, to a lesser extent, by other funding not included in the HESA record. (Tables 8 and paragraphs 52-55)

- The best estimate of the funding gap was within the range £16 million - £26 million (Tables 8, 9 and paragraph 68)

- The funding gap with Scotland is estimated to be around £75 million (Paragraph 50)

- The shortfall in funding when comparing funded students in Wales with fundable students in England was £21.2 million (Paragraphs 63 to 66)

- The cost of GIA plus SRIF per head of population was estimated to be around £124 compared with £119 in England implying an excess of expenditure in Wales of around £14.7 million (Paragraph 67).

APPROACH

7. A number of approaches to the calculation of the funding gap are possible. One approach to is to start with the amounts of grant-in-aid made available to the Funding Councils by their sponsoring bodies. However, making comparisons between the countries on this basis could lead to unsound conclusions unless appropriate adjustments are made because:

- There are differences in the funding included within the grant-in-aid figures both between countries and year on year
    - For example, the way in which Access funding is made available.
- The definitions of a fundable student differ and there are differences in how these are converted to FTEs
    - For example, England and Wales make adjustments for 'drop outs' when calculating fundable numbers but Scotland counts all students who have enrolled or are predicted to enrol; Scotland and England use FTEs for funding but Wales uses credit values which have been converted to FTEs for this exercise.

- The composition of the sector is different in Wales, England and Scotland.
    - For example, most HE in FE colleges is funded through franchise arrangements in Wales but there are large amounts of directly funded HE in FE colleges (FECs) in England; SHEFC funds all provision, both FE and HE, in HEIs with SFEFC funding HE in FE colleges.

8. An alternative basis for making comparisons is the consideration of differences between groups of similar institutions in the different countries with the starting point being the amounts of funding made available to institutions by the funding councils. There are, however, drawbacks to this approach. It excludes all top-sliced funding and all HE in FE colleges (unless delivered on a franchised basis). It also relies on Higher Education Statistics Agency (HESA) data as reported by institutions. These data are known to include some errors and omissions in fields that are not used extensively (eg for funding or performance indicators). Nonetheless, the use of HESA data has the benefit of having data collected using common definitions. The bottom up approach also allows comparisons between small groupings that are broadly comparable in terms of characteristics.

9. A third approach is to calculate the amount of funding that an institution in one country would receive under the funding methodology of another country. The data needed to do this accurately are not available and the complexity of the funding models makes it difficult to replicate the methodologies using alternative data sources. Any calculations done on this basis would necessarily be subject to a number of assumptions and caveats. Alternatively, it might be possible to set up a regression model using fields (taken from HESA data) which measure the main attributes of the funding model and use this to predict how much funding would be received by institutions. Any results would be subject to substantial margins of error. This approach would also be limited to teaching funding, and possibly research, rather than the totality of funding.

10. The present analysis tackles the comparisons using only the first two approaches. The main part of the paper uses these approaches to estimate funding per fundable FTE using the available data and provides.

METHOD

Total Grant-in-Aid

11. The total grant-in-aid (GIA) income, excluding running costs, from the sponsoring bodies in Wales, England and Scotland was compared with the total number of fundable FTEs for the four years from 2000/01 to 2003/04. The grant-in-aid is the amount shown in the published financial statements but converted to an academic year basis. This approach ensures that all income allocated, including any that is announced after the Grant Letter, is taken into account, provided it is shown in the Council's accounts. Fundable FTEs, as defined by each council for its early statistics return, were used as the denominator in the first set of comparisons. Although it might have been preferable to use end year figures, these are not collected separately by HEFCE. Fundable, rather than funded FTEs, were used because, while all fundable students are classified as funded in England, there are fees only students (ie fundable students above the available number of funded places) in both Scotland and Wales.

12. A second set of comparisons based on GIA was made with certain sources of variation adjusted to a common basis for all countries. The important factors were the different treatments of sources of income such as the Science Research Investment Fund (SRIF) and Hardship and Access funds and the policies relating to the inclusion of students as fundable in each country. All students who met the criteria for funding in their own country were included if they were enrolled on the census date or predicted to enrol before the end of the year. The rules here are broadly similar in the three countries. Differences between how drop-outs are treated for funding purposes meant that adjustments could not be made for students who failed to complete the year of the course; any such adjustments would have led to comparisons which were influenced by the policy decisions on those students who could be counted as fundable by the councils. This leads to a slightly higher number of FTEs being included in the analysis than would be counted as fundable in either England or Wales.

Aggregation of Individual Institutions

13. The second method of analysis starts with the grant received by each institution as shown in the HESA Finance Record for 2003/04, which reflects the figures shown in the institutional financial statements. The HESA Finance Record excludes any funding top-sliced by the funding council before allocation to institutions, treats capital in terms of the release of deferred capital grants and excludes HE at Further Education colleges, unless delivered on a franchised basis, so does not sum to the total grant-in-aid used in the first set of comparisons. HESA's instructions for the classification of grant are given at Annex A. The analysis is based on HE students and funding only. Any FE funding is excluded from the calculations.

14. HESA student data for 2003/04 were used for the calculation of home and EU fundable FTEs and descriptive statistics about the groups of institutions. The HESA record assigns a student as fundable according to funding council definitions. The FTE of the student includes all activity during the year but not all activities may be fundable. For example, repeat modules are not fundable in Wales but are included within the FTE of an otherwise fundable student. More significantly students who drop-out part way through the year will be included within the HESA FTE for the part of the year for which they were studying. In England, anyone who drops out is excluded from the numbers which count for funding; in Wales, those who complete one semester are counted for funding purposes though those who do not complete all required assessment activities are excluded. Counting the HESA fundable FTEs provides a common basis for comparisons but it does not reflect exactly the definitions adopted in England or Wales. A further issue relates to the probable differences in accuracy of the figures. HEFCE uses the HESA data to monitor funding and has worked hard to ensure that the data are accurately recorded. Wales has not undertaken a similar exercise and a greater degree of inaccuracy in the figures is to be expected.

15. The initial analysis compared Wales, England and Scotland at a sector level. Several different statistics were calculated to enable comparisons of teaching grant, all grant plus fees and all income as well as the total grant that is used in the later analysis. The later comparisons were based on various groupings of similar institutions and compared each Welsh institution with a small group of English institutions which, taken together, had a very similar subject mix and proportion of research funding.

16. The institutions were grouped as follows:

- Low research institutions (% Grant from research: 0%-9%) - sub divided by size for some analyses:
    - Small - Fewer than 5000 home HE FTEs
    - Medium - 5000 - 9999 home HE FTEs
    - Large - 10,000 and above home HE FTEs

- Conservatoires (treated separately and not included in the low research group)
- Moderate research institutions (% Grant from research: 10%-29%)
- High research institutions (% Grant from research: 30% - 49%)
- Very high research institutions (% Grant from research: 50% +)
- Open University (treated separately and not included in the low research group)

The central functions of the University of Wales and the University of London were excluded from all analyses.

17. Wales does not have institutions in all the groups. The detailed comparisons are, therefore, shown only for the groups that include Welsh HEIs. These analyses exclude English very high research institutions. For a later stage of the analysis, the conservatoires, the Open University, stand-alone medical schools and a number of specialist institutions (eg the Institute of Education, Royal College of Nursing Institute, Wimbledon School of Art) were excluded. This analysis looked at the impact on the level of grant of some characteristics of the institutions (eg subject mix). This showed the need to compare each Welsh institution with a group of English institutions with similar characteristics.

18. Before moving on to the comparisons, it is worth repeating that the FTEs used are the FTEs of the higher education students, including postgraduate research students, which are fundable for mainstream activities. The funding council concerned may not count part or all of the activity of these students as fundable. For example, if the student drops-out during the year without completing all assessment processes, he/she would be shown as fundable in the HESA data but non-fundable in the English funding data; he/she might be shown as fundable for part of the year in the Welsh funding data if a semester had been completed. The volume as measured by these FTEs does not correspond exactly with the definitions used by either funding council but provides a common basis for calculating the funding per fundable FTE. It follows that the values of funding per fundable FTE are not good estimates of the true amount that can be attributed to each student for which funding is allocated by each council.

FINDINGS: TOTAL GRANT-IN-AID

19. The first analysis was based on the grant-in-aid from sponsoring bodies less running costs without any further adjustment to reflect the different composition of this grant-in-aid or the different bases for calculating FTEs. The amounts shown in the financial statements were, however, converted to an academic year basis. Table 1 shows the resulting grant in aid per fundable FTE. It should be noted, however, that these unadjusted figures provide a very poor basis for comparisons for the reasons set out in paragraphs 21 and 22 below. In summary these are:

    - The different treatment of access funds and SRIF
    - The exclusion of initial teacher training in England
    - Different definitions and levels of accuracy of fundable FTEs

Table 1: Grant-in-Aid per Fundable FTE

	2000/01	2001/02	2002/03	2003/04
HEFCW	£4,520	£4,795	£4,791	£4,933
HEFCE	£4,717	£5,027	£5,410	£5,826
SHEFC	£5,220	£5,403	£5,637	£5,957

20. It is not possible to draw conclusions about the relative funding of the sectors from these figures but it can be seen that, before adjustment, SHEFC's Grant-in-Aid per fundable FTE is higher than that for HEFCW and HEFCE over the whole period. HEFCE's figures start quite close to the HEFCW rates but move to being much closer to SHEFC's by 2003/04. To a large extent, these changes are due to the inclusion of additional elements within the HEFCE grant-in-aid in the more recent years.

21. The second analysis includes a number of adjustments to bring the figures to a more comparable basis. Access funds are removed from HEFCE's figures and SRIF is added to HEFCW's. This is necessary because of the different ways in which these funds are made available in the two countries. Following these adjustments, the basis for the numerators is more comparable but HEFCE's grant includes an element of capital funding relating to initial teacher training. The grant to HEIs directly from the TDA was added (for QTS only). The FTEs were also adjusted. The TDA FTEs were added to HEFCE's and the FTEs for both HEFCE and HEFCW were adjusted to the same basis as SHEFC and the TDA by counting all those enrolled in the autumn term plus those predicted to enrol, without deducting early leavers (drop outs).

22. Changes were made to the fundable FTEs in order to improve the accuracy of the figures. For Wales and Scotland end year, finalised figures were used instead of the early statistics. England has been improving the accuracy of its HESES figures over the period. HEFCE statisticians have indicated that they regard HESES as highly accurate and treat them as finalised figures. No adjustments were made to reflect possible over or under estimation.

Table 2: Grant-in-Aid (with Adjustments) per Fundable FTE

	2000/01	2001/02	2002/03	2003/04
HEFCW	£4,307	£4,649	£4,687	£4,942
HEFCE +TDA	£4,334	£4,609	£4,917	£5,296
SHEFC	£5,087	£5,401	£5,643	£5,946

23. The adjustments make a considerable difference to the rates of funding and provide a much sounder basis for comparisons than those shown in Table 1. The Table 2 figures will form the basis for the remainder of this paper. Although the combined HEFCE/TDA figure is close to the HEFCW figure in 2000/01, GIA per FTE increases more rapidly in England and Scotland than in Wales.

FINDINGS: AGGREGATIONS OF INDIVIDUAL INSTITUTIONS

Sector Comparisons

24. Four sector-wide comparisons including all institutions are shown in Table 3. These are:

i) HE grant per fundable HE FTE (ie excluding FE)
ii) HE teaching grant per fundable taught HE FTE (ie excluding FE and PGR)
iii) All grant and fee income per FTE (no exclusions)
iv) Total income of institutions from all sources (public and private) per FTE (no exclusions)

For Scotland FE funding and students were included in all the statistics because the grant is not allocated separately; the Open University in Scotland is included within the English figures.

Table 3: Grant and Income per FTE by Country 2003/04

	HE Grant per fundable HE FTE	HE Teaching Grant per fundable taught HE FTE	All Grant and Fees per FTE	All Income per FTE
Wales	£4,671	£3,367	£6,028	£9,262
England	£4,796	£3,385	£6,345	£10,101
Scotland	£5,919	£4,374	£7,119	£11,595

25. The figures across the three countries show differences in terms of grant, teaching grant, grant plus fees and income:

- For all comparisons, Scotland's figures were considerably higher than those for England and Wales.
- In terms of grant per fundable FTE, Wales was the lowest at £4,671, considerably below Scotland and £125 below England.
- In terms of teaching grant per fundable taught FTE, there were only minor differences between Wales and England but Scotland was again considerably higher. However, since Welsh Institutions receive a higher proportion of their grant for teaching (70% compared with England's 68%) it might have been expected that the Welsh teaching grant per fundable FTE would have been higher than England's.
- Wales was behind England as well as Scotland in terms of grant and fees per FTE. At least, in part, this reflects the lower proportions of overseas students in Wales who pay higher fees.
- Welsh HEIs had the lowest income (from all sources) per FTE with Welsh HEIs receiving considerably less than Scotland and England.

26. The figures for grant per fundable FTE in column 1 of Table 3 cannot be compared directly with those in Table 2. The following factors lead to different rates of grant per FTE in Table 3 than in Table 2:

- Table 2 is based on grant-in-aid income to each HE funding council from its sponsoring body while Table 3 column 1 includes grant income for HE to Higher Education Institutions (HEIs) – not all grant-in-aid is allocated directly to institutions-

    - HEFCW and HEFCE also allocate funds for HE in FE colleges (FECs). In 2003/04 HEFCW allocated £3.6m for teaching to FE Colleges; HEFCE allocated £135m. In addition, HEFCE allocates other funding, including capital, to FE colleges.

    - All funding councils top-slice funding for UK wide activities such as the JISC and sector wide activities within the relevant country.

- The Open University in Scotland is included within the figures for Scotland in Table 2 but within the English figures in Table 3.

- Capital is treated differently in the accounts of the funding councils and the HEIs. While the total capital sum allocated is reflected in the grant-in-aid figures in Table 2, Table 3 figures include the release of deferred capital grant.

- There are differences in the definitions are fundable FTE as set out in paragraphs 11 and 12 (for Table 2) and paragraphs 14 and 18 (for Table 3).

27. Comparing Tables 2 and 3 shows a much greater drop in the English grant per fundable FTE than that for Wales and Scotland. This is a reflection of the different effects of the factors listed above. The exclusion of funding to FECs has a greater effect in England than Wales (not excluded for Scotland). However, the Scottish rate reflects the removal of the Open University which, in 2003/04, was in a transitional stage with a lower grant per FTE than most Scottish institutions.

28. In addition, a significant cause of the differences is the treatment of capital. Capital allocations in England have been increasing in recent years while those for Wales have fluctuated but have been broadly static. The full effect of the increasing capital is reflected in Table 2 but is not yet fully apparent in statistics used in Table 3.

29. However, a much higher proportion of the capital is reflected in the figures for release of capital grant for Wales (36 per cent) than for England (21 per cent). This suggests a different pattern of capital expenditure in the two countries. The impact of treatment of capital funding is explored later in paragraphs 53 and 54.

Comparisons within the Main Groups

30. The rest of the analysis is carried out as comparisons between Wales and England for groups of institutions rather than for the whole sector. Before considering these analyses, it is important to understand the different profile of the two sectors. Table 4 shows the percentages of the total sector grant and fundable FTEs in each grouping (using the definition of the groups given in paragraph 16).

Table 4: Percentages of Grant and FTEs by Institution type – Wales and England 2003/04

	WALES		ENGLAND	
	Grant (%)	Fundable FTEs (%)	Grant (%)	Fundable FTEs (%)
Low Research	35.9	45.4	41.4	51.7
Moderate Research	38.8	33.6	19.4	17.9
High Research	23.8	20.3	23.0	18.6
Very High Research	0.0	0.0	12.2	5.2
Conservatoires	1.5	0.7	0.5	0.2
Open University	----	----	3.4	6.3

31. Although the most obvious difference is the lack of any grant or FTEs in very high research (the golden triangle) group in Wales, there are other significant differences. There are proportionately more fundable FTEs in the low research sector (essentially the old polytechnics and colleges) in England than in Wales and a much higher proportion attending the moderate research institutions in Wales. In the sector wide comparisons, the low research institutions had a much larger effect in England than in Wales. Because they receive lower grant per FTE than the other types of institution, the average for the English sector is reduced though this is balanced by the additional funding allocated to the very high research institutions. This part of the paper compares institutions within types in order to make like with like comparisons regardless of the numbers of institutions of each type within the two countries.

32. It is worth noting that policy decisions in England and Wales have an effect on the levels of grant for the different groupings of institutions. In particular, HEFCE has concentrated its research funding mainly on research judged by the Research Assessment Exercise to be of the highest quality (5 and 5*) while Wales has taken the view that a wider distribution of research funding is necessary to meet its policy objective of improving the research base.

33. Table 5 provides a comparison between the various types of institutions.

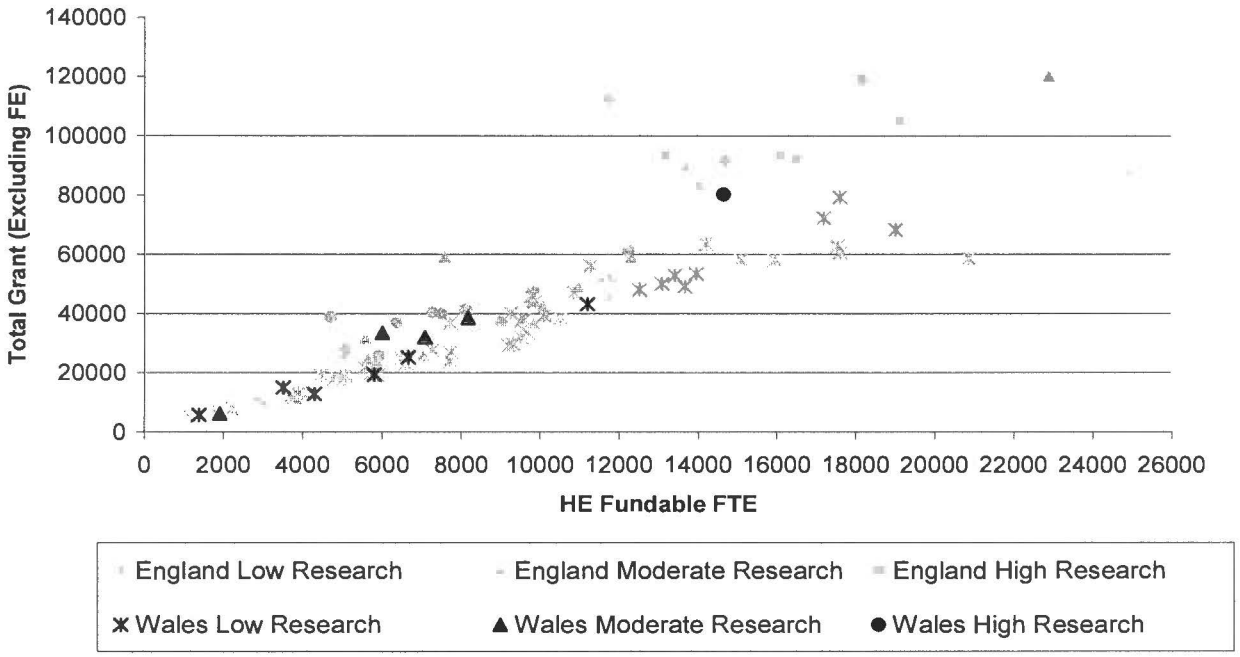
Table 5: Comparison of Welsh and English Grant per FTE by Level of Research: 2003/04

	Wales (£)	England (£)	Difference (£) (Wales –England)
Low Research	3,687	3,845	-158
Moderate Research	5,393	5,183	210
High Research	5,488	5,942	-454
Very High Research	-	11,257	
Conservatoires	10,137	10,873	-736
Open University	-	2,558	

34. With the exception of the moderate research group, the grant per fundable FTE is considerably lower in Wales than in England. The moderate research group value is inflated by the inclusion of the Institution L. In 2003/04, the pre-clinical teaching took place in Institution D so the grant per fundable FTE for Institution L reflects the higher clinical rates. In the next section, specialist institutions are excluded and Table 6 (which excludes Institution L) shows a lower level of grant per fundable FTE for the remaining moderate research institutions in Wales.

35. Figure 1 shows the relationship between grant and fundable FTEs for England and Wales for each of the groupings. The majority of the Welsh HEIs can be seen to be towards the lower end of the range of comparable English HEIs by type and size. Specialist institutions and very high research institutions have been excluded.

Figure 1: Total Grant By Fundable FTE 2003/04



Characteristics of the Welsh and English Groups

36. In order to explain further the difference in grant per fundable FTE, an analysis using more closely matched groups was undertaken. All specialist institutions were excluded from this analysis. The analysis sought to identify whether the characteristics of the various groups were sufficiently similar to allow reasonable comparisons within the groupings.

37. Table 6 compares three factors that affect the level of grant and shows the grant per fundable FTE. The differences for percentage of grant for research were minimal but there were more significant differences in the percentages of students on science, engineering and technology (SET) courses and the percentages of undergraduates.

38. The numbers of science, engineering and technology students influence the level of grant because these subjects are generally funded at a higher level than other subjects (except medicine and dentistry). Overall, Welsh low research institutions have significantly higher proportions of SET students than most of their counterparts in England. Conversely, the Welsh moderate research institutions have a lower proportion of SET students than the comparative English group (although this is mainly a result of the lack of SET students at Institution M).

39. The percentage of undergraduates was consistently higher in Wales across all groups. Since teaching grant for undergraduates is higher than for postgraduates (reflecting the funding allocation methods in England and Wales being based on a unit of resource with currently higher fees for postgraduates), a higher proportion of undergraduates tends to lead to a higher level of grant. However, to some extent, this is offset for postgraduate taught students who attract more funding if they are studying for a full year with 180 credits instead of 120.

40. The only group with appreciably higher grant per fundable FTE in Wales than in England was the grouping consisting of small institutions (fewer than 5000 home and EU FTEs) with low research funding. Two of the three Welsh institutions in this group had much higher proportions of SET students and all had higher proportions of undergraduates; and there were some issues surrounding the accuracy of the FTEs for two institutions in the group (see Annex C).

41. The differences in the subject mix, in particular, are likely to have affected the overall grant per fundable FTE for each group except the high research group where the proportions were the same.

Comparison of Welsh Institutions with Closely Matched Groups

42. In order to reduce the effects of the different subject mixes and other factors within groups, a group of English institutions was selected as a comparator group for each Welsh HEI. The main basis for selection was the aim of producing a comparator group with, ideally, no more than one percentage point difference between the Welsh HEI and the comparator group in the proportion of

    - Grant for research
    - Students studying medicine
    - Students studying education
    - Students studying science, engineering and technology
    - Undergraduates

    In addition, the size and type of institution were taken into account where possible.

Table 6: Characteristics of Welsh and English Groups (excluding specialist institutions) 2003/04

	% SET (Science, Engineering & Technology	% Grant from Research	% UG	HE Grant per fundable HE FTE (£)
English low research - small	**17%**	**1%**	**76%**	**3,504**
Welsh low research - small	**27%**	**1%**	**90%**	**3,646**
Institution H	36%	1%	91%	4,274
Institution I	24%	0%	88%	2,984*
Institution J	8%	0%	89%	4,111**
English low research - medium	**17%**	**2%**	**80%**	**3,571**
Welsh low research - medium	**24%**	**4%**	**81%**	**3,565**
Institution G	14%	3%	80%	3,331*
Institution F	35%	5%	82%	3,769**
English low research - large	**23%**	**3%**	**81%**	**3,852**
Welsh low research - large	**29%**	**4%**	**84%**	**3,856**
Institution A	29%	4%	84%	3,856
English moderate research	**27%**	**23%**	**72%**	**4,975**
Welsh moderate research	**19%**	**22%**	**81%**	**4,747**
Institution B	24%	20%	78%	4,517
Institution C	28%	23%	82%	5,580
Institution M	1%	19%	85%	3,130*
Institution E	25%	23%	81%	4,710
English high research	**27%**	**35%**	**70%**	**5,921**
Welsh high research	**27%**	**34%**	**76%**	**5,488**
Institution D	27%	34%	76%	5,488

* Probably an underestimate of around £250.
** Probably an overestimate of around £250 (Institution F), £350 (Institution J). (see Annex C)

Table 7: Comparison of Welsh HEIs with English Comparators 2003/04

	No. of HEIs	% Research	% Medicine	% Education	% SET	% UG	HE Grant per fundable HE FTE (£)
Institution A		4	0	1	29	84	3,856
Comparator Group	13	3	0	9	28	80	3,954
Welsh HEI - English comparator group		1	0	-8	1	4	-98
Institution B		20	0	19	24	78	4,517
Comparator Group	5	20	1	9	23	76	4,851
Welsh HEI - English comparator group		0	-1	10	1	2	-333
Institution C		23	0	19	28	82	5,580
Comparator Group	7	23	0	6	29	68	4,916
Welsh HEI - English comparator group		0	0	13	-1	14	664
Combined Institution D and Institution L		33	11	2	23	74	6,431
Comparator Group	4	34	11	6	24	68	6,914
Welsh HEI - English comparator group		-1	0	-4	-1	6	-483
Institution E		23	0	4	25	81	4,710
Comparator Group	6	22	0	7	24	73	4,946
Welsh HEI - English comparator group		1	0	-3	1	8	-236
Institution F		5	0	11	35	82	3,769**
Comparator Group	7	3	0	12	31	81	4,142
Welsh HEI - English comparator group		2	0	-1	4	1	-374
Institution G		3	0	34	14	80	3,331*
Comparator Group	5	2	0	34	14	78	3,415
Welsh HEI - English comparator group		1	0	0	0	2	-84
Institution H		1	0	11	36	91	4,274
Comparator Group	1	1	0	16	36	81	4,306
Welsh HEI - English comparator group		0	0	-5	0	10	-32
Institution I		0	0	20	24	88	2,984*
Comparator Group	6	1	0	18	22	81	3,650
Welsh HEI - English comparator group		-1	0	2	2	7	-666
Institution J		0	0	39	8	89	4,111**
Comparator Group	6	1	0	39	8	67	3,649
Welsh HEI - English comparator group		-1	0	0	0	22	462
Institution K		0	0	0	0	74	10,137
Comparator Group	5	2	0	0	0	70	10,873
Welsh HEI - English comparator group		-2	0	0	0	4	-736

* Probably an underestimate of around £250
** Probably an overestimate of around £250 (Institution F), £350 (Institution J) (see Annex C)

43. In practice, it proved difficult to find a good match for some institutions and, with the generally higher level of undergraduates in Wales, it was not possible to align the proportions of undergraduates for most institutions. There were also difficulties with the proportions of education students for several institutions but this probably has less influence on the costs than medicine and SET. The possible matches for the Institution M and the Institution L were very poor. This was overcome for Institution L by combining it with Institution D and providing a comparator group for the combined institution. Institution M has been excluded from this analysis. There were also difficulties finding suitable comparators for Institution F within the medium sized low research group; institutions from the small and large groups had to be selected to give the correct proportions of SET and, as closely as possible, research. The resulting comparisons are set out in Table 7. The English HEIs within each comparator group are shown in Annex B.

44. The level of grant per fundable FTE for each comparator group clearly depended upon the comparator institutions selected and could have been different if different English institutions had been used, given the wide range of English values within groups. However, there was little room for making biased choices because of the need to get as close as possible to the proportions of the factors set out (in paragraph 42) above. The choices were made before the calculation of grant per fundable FTE was undertaken to avoid the temptation to choose one institution rather than another. Nonetheless, it would be unwise to place too much emphasis on individual differences arising from this analysis. The issue of inaccurate recording of data becomes particularly acute when considering individual institutions. Differences, or lack of differences, may be the result of different interpretations of the HESA coding rules by individual institutions. This issue is explored further in Annex C. This annex presents some evidence which suggests that the estimates of grant per FTE are too low for Institution I and Institution G and too high for Institution J and Institution F.

45. This analysis suggests that three Welsh HEIs were funded marginally below similar English institutions but, as the differences were less than £100, there were not regarded as significantly less well funded; two were funded at a higher level; and six funded at significantly lower levels. This suggests that, when making comparisons on a like-for-like basis, Welsh institutions tend to be funded at lower levels, appreciably so in some cases, than those in England.

THE FUNDING GAP

46. The differences between the grant per fundable FTE for Wales and England for 2003/04 have been calculated and presented in the earlier sections of this paper. These figures provide the basis for the estimation of the funding gap between the two countries. These estimates are based on the assumption that there is a gap in funding if the level of grant per fundable student is different in the two countries unless the differences can be attributed to factors such as different subject mixes. The method involves taking the value for Wales from the value for England and multiplying the outcome by the number of fundable FTEs in Wales. There is some degree of uncertainty in relation to the accuracy of the figures and this is compounded by taken differences.

Accuracy of the Data

47. While the funding data are consistent with the audited accounts, there are minor issues surrounding the conversion of the Grant-in-Aid from financial to academic years and some rounding of the HESA figures. However, it is thought that these factors are unlikely to have introduced significant uncertainty into the calculations.

48. More serious uncertainties surround the fundable student numbers and their conversion to full-time equivalents (FTEs).

Cont'd....

- For the calculations in Table 2, the measure of activity is based on finalised figures for Wales and Scotland; the Welsh figures can be assumed to be reasonably accurate because they have been audited. The English figures are based on the Higher Education Student Early Statistics (HESES) return. This involves making predictions with the finalised figures generally being slightly lower than the predictions. However, HEFCE statisticians have indicated that the figures at a sector level provide good estimates. Further uncertainty is introduced by the need to convert Welsh credit values to FTEs and to exclude the FTEs of dropouts.

- For the like-with-like comparisons (Tables 3,5,6,7), HESA data are used. These are recorded at the year end on an individual student basis using common definitions. However, it must be anticipated that the figures include errors particularly for the Welsh students as, unlike HEFCE, HEFCW has not placed particular emphasis on improving the accuracy of these figures. There may be quite large errors for individual institutions but the impact will be less when groups of institutions are under consideration (see Annex C).

49. Quite small errors in the FTEs can have a large impact on the estimates of the shortfall in funding. For each one per cent change in the FTEs, the estimate of the grant per FTE changes by about £50. Multiplied by all Welsh students (around 73,000 FTEs) this would give a difference in the estimates of shortfall in funding of around £3.65million.

Gaps in Funding and Income in Comparison with Other UK Countries

50. Before moving on to the calculation of the funding gap between Wales and England, it is worth considering other gaps in funding, grant plus fees and total income. Although the main purpose of the paper is to estimate the funding gap in relation to England, the information sought by the WAG includes comparisons with Scotland and also other income received by Welsh, English and Scottish higher education institutions. Table 2 allows the funding gap to be estimated between England and Scotland and Table 3 provides the rates from which the other income gaps can be calculated. The Table 2 estimate of grant per fundable FTE is used rather than the Table 3 estimate because the former is based on total GIA and includes the Open University in Scotland. The resultant gaps for 2003/04 (without any correction for capital for the gaps in grant plus fees and total income) are estimated as follows (shown to the nearest £5 million):

- Funding gap between Wales and Scotland: £75 million

- Gap in grant plus fees between Wales and England: £25 million
- Gap in grant plus fees between Wales and Scotland: £95 million

- Income gap between Wales and England: £70 million
- Income gap between Wales and Scotland: £200 million

Further work is needed to provide more robust estimates of the differences between Wales and Scotland. In particular the effects of much of the sub-degree provision being delivered by FE colleges needs to be assessed.

The Funding Gap Between England and Wales

51. Table 8 below shows the estimated shortfall for Wales based on the estimates of grant (as shown in the HESA Finance Record) per fundable FTE set out in Tables 2, 3, 5, 6 and 7. Where the estimates have been based on groupings of institutions, the total shown is the sum of the shortfalls for each grouping. Individual institution shortfalls are not shown because of the large margins of error in these figures.

Table 8: Calculation of the Funding Gap

Basis of Estimate	Difference in Grant per FTE (£)	Number of FTEs	Funding shortfall in Wales (£)
All GIA from Table 2	**354**	**73,984**	**26,125,277**
All grant shown in HESA from Table 3	**125**	**72,299**	**9,037,375**
All grant shown in HESA from Table 5			
Low Research	158	32,842	5,189,036
Moderate Research	-210	24,298	-5,102,580
High Research	454	14,649	6,650,646
Conservatoires	736	510	375,360
Total		**72,299**	**7,112,462**
Grant excluding specialist institutions shown in HESA from Table 6			
Low research - small	-142	9,183	-1,303,986
Low research - medium	6	12,464	74,784
Low research -large	-4	11,196	-44,784
Moderate research	228	24,298	5,539,944
High research	433	14,649	6,343,017
Total		**71,790**	**10,608,975**
Grant excluding Institution M shown in HESA from Table 7			
Total		**70,389**	**14,693,304**

Explanation of the Different Estimates of the Funding Gap

52. The main differences are between the estimate based on Grant in Aid (GIA) and those based on HESA data. The GIA includes all funding (except running costs) while the grant reported by institutions in the HESA Finance Record includes only that which is allocated directly for HE in higher education institutions. The amounts shown in HESA exclude HE in FE colleges and all top-sliced funding. Capital is shown as the release of deferred capital grant rather than the full amount allocated.

53. The different treatment of capital has a large effect on the estimates. This is shown in Table 9.

Table 9: The Effects of the Different Treatment of Capital : 2003/04

	Wales	England	Shortfall
Fundable FTEs (EYM/HESES)	73,984	1,123,858	
	(£)	**(£)**	**(£)**
Release of Deferred Capital Grant shown in HESA	11,849,000	128,250,000	
Release of Deferred Capital Grant per FTE	160	114	-3,406,254
Capital Allocated (inc all SRIF) for 2003/04	34,805,000	617,833,000	
Capital Grant per FTE	474	552	5,867,182
Capital Grant not shown in HESA	22,956,000	489,583,000	
Capital Grant not included in HESA per FTE	310	436	9,273,435

54. A higher proportion of the capital grant allocated is reflected as the release of deferred capital grant in Wales than in England with £160 per FTE against £114 in England. This suggests Wales is over funded by £3.4 million though, in reality, the level of funding for capital is much lower in Wales. The actual shortfall in capital in Wales is £5.7 million. £9.3 million needs to be added to the shortfall based on Table 3 (shown in Table 8) to reflect the total shortfall in both recurrent and capital funding. This gives a total shortfall of £18.3 million rather than the £9.0 million shown in Table 8. Similar adjustments need to be made for all the estimates based on HESA data to bring them to the same basis (in respect of capital) as the estimate based on Grant in Aid. These adjustments increase the funding gaps shown in Table 8 for the lines using the data from Tables 5, 6 and 7 to around £16 million, £20 million and £24 million respectively.

55. The effect of the exclusion of HE in FE colleges (which is not delivered under a franchise arrangement) is estimated to be small. There will also be differences due to top-sliced funding.

Reconciliation of the Estimates

56. Table 2 and Table 3, with adjustments for capital, both provide estimates of the shortfall for the whole sector. After adjustments to bring the estimates of shortfall to a common basis, the whole sector estimate, based on Table 3, is £18.3 million while the GIA-based estimate, in Table 2, is £26.1 million. There is an unexplained difference of the order of £7.8 million. In part, this may be due to differences in top-sliced funding and/or the grant for HE in FE Colleges though the effects of the latter are thought to be negligible. The remainder could be explained by an error in the FTEs of around 2 per cent and/or and some error in the grant adjustments. Errors of this magnitude are to be expected given the data sources and the need to convert the GIA to an academic year basis.

57. Higher levels of under-recording were anticipated in the Welsh fundable FTEs drawn from the HESA Record than in the English (see paragraph 14 and Annex C). Any errors in the Welsh HESA based FTEs are likely to have led to an overestimation of the grant per FTE in Wales in Table 3 and a consequential underestimation of the funding gap. If this hypothesis is correct, the shortfall is due to underestimation in Table 3 and the actual shortfall would be closer to £26 million than the £18.3 million calculated in paragraph 54. Alternatively, the HEFCE FTEs based on HESES may have been overestimates (rather than the expected slight underestimates). This would reduce the funding gap giving an estimate based on Table 2 that is closer to £18.3 million. These are only two of a range of possible reasons for the comparatively large difference between the estimates.

58. The differences between the shortfalls based on Tables 3, 5, 6 and 7 are less likely to be due to the errors in the data because, in the main, they use the same datasets though some institutions are excluded from Tables 6 and 7. The differences relate more to the different segmentations of the sector.

59. It was clear from Table 6 that there were significant differences in the proportions taking expensive subjects and if a true like-with-like comparison is required, each Welsh institution should be compared with similar ones in England as is done in Table 7. However, considerable variations could have occurred in the level of the funding gap if different comparators had been selected. The estimate of £14.7 million (around £24 million if adjusted for capital) cannot be regarded as precise. Nonetheless it does provide an indication of the additional funding needed to take subject mix into account.

60. Table 5 provides the lowest estimate. It is interesting to note the differences in the apparent under funding of the low research institutions in the estimates based on Table 5 and the over funding of the same institutions in Table 6. The removal of specialist institutions may have had an effect, removing 8 per cent of the FTEs, but the main cause is the different structures of the sectors. Over 75 per cent of English FTEs in the low research group are in the large institutions but, in Wales, the FTEs are spread fairly evenly across the three sub-groups of low research institutions. When the sub-groups are combined, the large English institutions, which receive higher levels of funding, have a strong influence on the overall value. This is then compared with the Welsh overall value for the low research institutions. In fact, it is the small Welsh institutions that have the highest level of funding within the low research group (because of the large numbers of science, engineering and technology students). The effect of this is masked when the low research institutions are considered as a single group but becomes clear when the group is split by size.

61. A similar factor comes into play when comparing the moderate research institutions. A large over funding is seen in Table 5 but a shortfall is shown when the specialist institutions are removed. In this case, the removal of some very expensive institutions, which have more impact on the overall figures in one sector than the other, has had a large influence on the outcomes - the conservatoires and stand-alone medical schools are instrumental in producing the large change.

62. The fairly large differences in the calculated shortfall, which can occur when the sector is divided up in different ways, lead to the need to be very clear about which groups should be compared and whether specialist institutions should be treated separately. The range of the shortfall (before adjusting for capital) for the estimates based on groupings is £7.1 million to £14.7 million. To a large extent the differences are due to the choice of groups for comparison.

An Alternative Approach to Calculating the Funding Gap

63. In the analysis set out above, as far as possible, the calculations have been done in ways that avoid the effects of differences in funding methods, policy decisions, the composition of the sectors and subject mixes offered by institutions. Although the outcomes may be statistically sound, the definitions used do not align exactly with any funding method and it may be considered preferable to adopt a simpler analysis based on actual funded numbers. An alternative approach which compares grant-in-aid per funded FTE in England and Wales is set out below. There are, however, differences in the way in which funded numbers are allocated in the two countries.

64. HEFCE normally funds all fundable FTEs recorded at HESES; that is all eligible students enrolled or predicted to enrol minus those predicted to drop-out (HESES column 4) are funded. Institutions are allowed to recruit above their target numbers provided that their unit of resource per fundable FTE does not fall below an acceptable level. There are no fees only students. Instead the institutional unit of resource is allowed to vary within a 5% tolerance band.

65. HEFCW funds a fixed number of students based on Assembly target numbers and the HESES enrolments - enrolled, predicted minus dropout (HESES column 4) as in England but the definition of drop-out is different with HEFCW funding full-time students who complete only one semester while any student who fails to complete the full year is considered to be a drop-out in England. Any enrolments above the funded numbers are classified as unfunded, fees only, students in Wales.

66. The calculation of the funding gap based on funded numbers in England and Wales uses the adjusted grant-in-aid underpinning Table 2. This is divided, for England, by the English HESES column 4 fundable numbers plus additional PGR numbers plus the TDA numbers to give a value of the GIA per FTE of £5,667. In Wales, the grant in aid is divided by the HEFCW funded numbers, which already include PGR and teacher training, giving a value of £5,356. Multiplying the difference by the HEFCW funded numbers (in FTEs) gives a shortfall of £21.2 million.

Comparison of Costs of Higher Education

67. The analysis so far has considered the funding gap from the perspective of institutions but it is also worth considering the relative costs in the two countries. In order to provide a simple estimate of the relative costs, the adjusted GIA underpinning Table 2 has been divided by the 2003 mid year population estimates for each country to give an amount of adjusted GIA per head of population. This analysis gave an English figure of £119 per head that was slightly below the Welsh figure of £124 per head. This suggests that the overall additional cost in Wales was around £14.7 million in 2003/04. The additional expenditure is required even though Welsh institutions are funded at a lower level per FTE than those in England because of two factors: the net inflow of non-Welsh home and EU students; and higher participation rates (of those domiciled in Wales).

CONCLUSIONS

68. Leaving aside the issue of the HE population relativities, the analysis in this paper confirms that there is a funding gap between England and Wales with the Welsh sector receiving proportionately a significantly lower amount of grant in aid. It has not been possible to provide a single estimate of the amount of the funding gap. The estimates based on the grant shown in institutions' accounts and reflected in the HESA Finance Record show amounts varying between £7.1 million and £14.7 million. However, these estimates do not show the full picture: they exclude grant to FE Colleges for HE provision and top-sliced funding and the treatment of capital has different effects on the estimates for the two countries. After correction of the HESA-based estimates for the method of treatment of capital (assuming the effects of the other

factors are relatively small), the various estimates produced suggest the gap is somewhere in the range £16 million to £26 million. The actual value may be closer to the top of the range than the bottom given the types of error in the underlying data. However, without firm evidence, it might be prudent to assume that the value lies somewhere in the middle of the range.

69. Even with a funding gap in terms of funding per FTE between Wales and England, the overall costs to Wales are relatively higher than to England because of the proportionately higher numbers of fundable and funded students in Welsh higher education institutions. A comparison of the estimates of grant in aid per head of population suggests an extra expenditure of £14.7 million in Wales in 2003/04.

Annex A

HESA's Instructions for the Completion Fields Relating to Council Grants

General guidance on Table 5b

1. Table 5b provides a further analysis of the five main income headings in Table 1. The totals for each of the main income headings must be the same as those in the financial statements.

Head 1: Funding Council grants

2. Teacher Training Agency (TTA) grants should be included under this Head.

3. ITT Training Bursaries should not be included (see paragraph 4 below).

4. Student support funding; Access to Learning Fund and transitional fee waiver should not be included in the income and expenditure account. Funding Council grant to reimburse the salary payments to PGCE (Post compulsory education) students and ITT Training Bursaries should also be treated as student support.

Sub-head 1a: Grants for HE provision (SHEFC grants for all provision)
Sub-head 1ai (Recurrent - Teaching)

5. Should contain the total grant (or main and associated grants) for teaching, including widening participation and tuition fee compensation, as shown in the annual grant letter or additional grant letter from the Funding Councils.

Sub-head 1aii (Recurrent - Research)

6. Should contain the total grant (or main and associated grants) for research as shown in the annual grant letter or additional grant letter from the Funding Councils. No distinction between the different components of research funding is required.

Sub-head 1aiii (Recurrent - Other including special funding)

7. Should include all other recurrent grants and grants to support special initiatives as stated in the annual grant letter or additional letters from the Funding Councils. Income relating to non- capitalised expenditure, for example Project Capital Allocation (PCA) or SRIF, should be included here.

Sub-head 1aiv (Release of deferred capital grants - Buildings)

8. Should include the release of deferred capital grants where capital funding (project or formula) has been applied to the purchase of an asset that has been capitalised. This should include grants from the SRIF and Strategic Development Fund (SDF). (The depreciation associated with these grants should be returned on Table 6 under Premises Sub-head 4b).

Sub-head 1av (Release of deferred capital grants - Equipment)

9. Should include the release of deferred capital grants where Equipment grant (including grants from the SRIF, SDF, PCA and Centres for Excellence in Teaching and Learning) has been applied to the purchase of furniture or other assets that have been capitalised.

Sub-head 1b (Grants for Further Education provision)

10. Should include all Funding Council grants for the provision of Further Education (FE). Grants from HEFCs and FEFCs should be added together. This Sub-head does not apply to SHEFC funded institutions as they do not receive separately identified grants for non-advanced/FE provision.

HESA Coding instructions for Fundability

Description
This field indicates whether the student is counted as 'fundable', i.e. 'eligible for funding' for the programme of study by the appropriate Funding Council or DELNI. The definition therefore may vary between England, Scotland, Northern Ireland and Wales, in line with their funding methods.

Valid Entries

1 Fundable by Funding Council (for institutions in England and N.I. there is the additional clause 'and funds sought')

2 Not fundable by Funding Council.

3 Not eligible for funding (as defined for the SHEFC 'Early Statistics') but is a Continuing Professional Development course (as defined by SHEFC)

4 Fundable by Funding Council but funds not sought (institutions in England and N.I. only).

5 Funded by the Department of Health (institutions in England and N.I. only).

7 Fundable by Teacher Training Agency.

Notes
This field must be coded at the individual student level.

Fundable means eligible for funding by the appropriate Funding Council/body, as defined by that Council/body.

This field should be consistent with the year's early student statistics returns to the Funding Councils.

Eligible students on courses funded by an FE Funding Council should be coded 1 'Fundable by Funding Council'.

For institutions in England and Northern Ireland fundable postgraduate research students in the second (third for part-time) and subsequent years of programme of study are treated as non-fundable in relation to the teaching model on HESES. Such students should have field 65 returned as 1 'Fundable by Funding Council' for all years of programme of study irrespective of how they are returned on HESES. Code 4 should not be used for such students.

Please refer any queries about whether or not students on a particular course/study programme, or students of a particular type, are eligible for funding to the appropriate Funding Council/body rather than to HESA.

To be consistent with the year's early statistics, field 65, Fundability code , applies to 'eligible for core funding' (in the HESES returns for England, Wales and Northern Ireland) or to 'eligible for funding' (in SHEFC's 'Early Statistics' return). It has been confirmed by the Funding Councils that it is possible for students coded 01-04 in field 64, Major source of funding , to be returned as 2 'Not fundable by Funding Council'. An example of where this is applicable is programmes of study funded through special funding initiatives.

The guidance for coding non-fundable students on funded courses should be to code to the appropriate funding council in field 64, Major source of funding , and code as 2 'Not fundable by Funding Council' in field 65.

Code 3 is for use by institutions in Scotland only. Where code 3 is applicable it should be used in preference to code 2.

Code 7 'Fundable by Teacher Training Agency' is not available for Welsh institutions.

Institutions funded by SHEFC should note that a particular funding cell may have 100 'fundable' students, but the Funding Council may provide funding for only 80 student places in that cell. Provided that they satisfy the conditions for being counted in the 'Early Statistics' figures, all 100 students should be identified as eligible for funding: one cannot say which of them were 'fees only' students, as the funding relates to the cell as a whole.

For institutions in England, where the major source of funding for the course is HEFCE, but there is another source funding a certain number of places then this number of places must be shown as non-fundable in field 65. In most cases, it is expected that it will be clear from payment of tuition fees which individual student places are being funded from another source and so are not fundable by HEFCE. For the small number of cases where this is not so, institutions shall have the discretion as to which individual students to return as fundable, and which as not fundable, provided that the total student numbers conform to the split between fundable and non-fundable places.

Example
A non-EC overseas student is an example of a particular student who is **not** eligible for funding, even though the course/programme of study that they are following has funding for student places.

This should be consistent with the HESES and Early Statistics Returns.

Students in Higher Education Institutions 2003/04
Definitions
Coverage

Higher education (HE) students are those students on programmes of study for which the level of instruction is above that of level 3 of the National Qualifications Framework, i.e. courses leading to the Advanced Level of the General Certificate of Education (GCE A-levels), the Advanced Level of the Vocational Certificate of Education (VCE A-levels) or the Advanced Higher Grade and Higher Grade of the Scottish Qualifications Authority (SQA) Advanced Highers/Highers).
The HESA Student Record contains information about individual enrolments, which, because a student can be enrolled on more than one programme of study, will exceed the number of students. Postdoctoral students are not included in the HESA Student Record.

The **HESA standard registration population** has been derived from the HESA Student Record and ensures that similar activity is counted in a similar way irrespective of when it occurs. The population splits the student experience into 'years of programme of study'; the first year of which is deemed to start on the commencement date of the programme with second, and subsequent years, starting on, or near, the anniversary of that date. Registrations are counted once for each 'year of programme of study'. Short course registrations are counted in the standard registration population regardless of whether they are active on the 1 December of the reporting period. However students who leave within 2 weeks of their start date, or anniversary of their start date, and are on a course of more than two weeks duration, are not included in the standard registration population. Dormant students, incoming visiting and exchange students from overseas and students studying for the whole of their programme of study outside of the UK are also excluded from this population.

Full-time equivalent
Student **full-time equivalent (FTE)** data represents the institution's assessment of the full-time equivalence of the student during the reporting year 1 August 2003 to 31 July 2004. FTE data is based on the HESA session population.

Further education
Further education (FE) students are those students on programmes of study for which the level of instruction is equal to or below that of level 3 of the National Qualifications Framework, i.e. courses leading to the Advanced Level of the General Certificate of Education (GCE A-levels), the Advanced Level of the Vocational Certificate of Education (VCE A-levels) or the Advanced Higher Grade and Higher Grade of the Scottish Qualifications Authority (SQA Advanced Highers/Highers).

Level of study
The level of study is taken from the qualification aim of the student.
Postgraduate programmes of study are those leading to higher degrees, diplomas and certificates (including Postgraduate Certificate of Education (PGCE) and professional qualifications) and usually require that entrants are already qualified to degree level (i.e. already qualified at level 3 of the National Qualifications Framework).
Higher degrees include doctorates, masters degrees and higher bachelors degrees.
In analyses where postgraduate level of study is disaggregated into **postgraduate research** and **postgraduate taught**, the following groupings are used:
Postgraduate research where the qualification aim is a research-based higher degree. These programmes of study include doctorates, masters, postgraduate bachelors degrees and postgraduate diplomas or certificates (not PGCE) studied mainly by research.
Postgraduate taught where the qualification aim is a taught higher degree. These programmes of study include doctorates, masters, postgraduate bachelors degrees and postgraduate diplomas or certificates studied not mainly by research including PGCE and professional qualifications.
Other postgraduate includes postgraduate diplomas, certificates and professional qualifications, Postgraduate Certificate in Education (PGCE), institutional postgraduate credits and no formal postgraduate qualifications.
Undergraduate programmes of study are first degrees with or without eligibility to register to practice with a Health or Social Care or Veterinary statutory regulatory body, first degrees with qualified teacher status (QTS)/registration with the General Teaching Council (GTC), enhanced first degrees, first degrees obtained concurrently with a diploma and intercalated first degrees, Foundation Degrees, diplomas in HE with eligibility to register to practice with a Health or Social Care regulatory body, Higher National Diploma (HND), Higher National Certificate (HNC), Diploma of Higher Education (DipHE), Certificate of Higher Education (CertHE), foundation courses at HE level, NVQ/SVQ levels 4 and 5, post-degree diplomas and certificates at undergraduate level, professional qualifications at undergraduate level and other undergraduate diplomas and

certificates including post-registration health and social care courses. Entrants to these programmes of study do not usually require an HE qualification.
First degree includes first degrees with or without eligibility to register to practice with a Health or Social Care or Veterinary statutory regulatory body, first degrees with qualified teacher status (QTS)/registration with the General Teaching Council (GTC), enhanced first degrees, first degrees obtained concurrently with a diploma and intercalated first degrees.
Other undergraduate includes qualification aims below degree level such as Foundation Degrees, diplomas in HE with eligibility to register to practice with a Health or Social Care regulatory body, Higher National Diploma (HND), Higher National Certificate (HNC), Diploma of Higher Education (DipHE), Certificate of Higher Education (CertHE), foundation courses at HE level, NVQ/SVQ levels 4 and 5, post-degree diplomas and certificates at undergraduate level, professional qualifications at undergraduate level, other undergraduate diplomas and certificates including post registration health and social care courses, other formal HE qualifications of less than degree standard, institutional undergraduate credit and no formal undergraduate qualifications.

Domicile

Domicile data is supplied to HESA in the form of postcodes (UK domiciled students) or country codes. Postcodes are mapped to counties, unitary authorities and UK nations following consultation with Geoplan Postcode Marketing. Countries are mapped to geographical regions following consultation with the Department for Education and Skills. Where no data is supplied about the student's domicile, fee eligibility is used to determine whether domicile is European Union, including the UK, or not.
UK domiciled students are those whose normal residence is in the UK, including the Channel Islands and Isle of Man.

Of those students who are not UK domiciled, **other EU** students are those whose normal residence is in countries which were European Union (EU) members as at 1 December of the reporting period. **Non-EU** students are those whose normal residence prior to commencing their programme of study was outside the EU.

Subject of study and JACS codes

Background

The subject coding systems HESACODE and SCAS originally used respectively by HESA and by the Universities and Colleges Admissions Service (UCAS), although broadly similar, were far from identical. Towards the end of the 1990s work was put in hand by the two Agencies to produce a common scheme, the Joint Academic Coding System (JACS). This came into use for the 2002 entry to HE through UCAS, and for the 2002/03 data collection by HESA. JACS and HESACODE, and the subject areas defined in terms of them, are similar in appearance and have much in common, but they are by no means identical. For this reason, and also because of the introduction of apportionment (see below), subject-based information published for years up to and including 2001/02 cannot easily be compared with that published for 2002/03 and, in the current volume, for 2003/04.

Specification of JACS

All JACS subject codes consist of a letter followed by three digits, the first of them non-zero (except the generic codes described below). The initial letter identifies the subject group, for example F for Physical Sciences. The initial letter and immediately following digit identify the principal subject, for example F5 Astronomy. F500 is a valid JACS code used where there is no need for a higher level of precision, but subjects can be identified more precisely using a second non-zero digit, for example F520 Space and Planetary Sciences, and, with even more precision, F521 Space Science and F522 Planetary Science. Often it is necessary to consider together all the codes, or all the student numbers, falling within a principal subject, and this is done by referring to it using just the first two characters, so F5 refers to all of Astronomy and to total numbers in it, by no means all of which will have code F500. Similarly, F52 refers to the whole of Space and Planetary Sciences. Full details of JACS can be found at www.hesa.ac.uk/jacs.

Programme codes

Student programmes often involve combinations of subjects, and so cannot be described by a single JACS code. Within the HESA student data collection, there are two mechanisms for dealing with this. First, JACS has been slightly extended to allow codes to be assigned to highly integrated programmes which cut across principal subjects. Where such a broadly-based programme falls within a single subject group, it can be coded as the group letter followed by three zeroes, for example F000 would code such a programme in Physical Sciences. This is known as a generic code, and is an extension of JACS for the purpose of coding complete student programmes; generic codes may not be used in any other way, for example for coding modules. Programmes which cut across subject groups are given the generic code Y000, which is equivalent to continuing to recognise the need for a 'Combined' subject group. The second mechanism is designed to describe less integrated programmes of the kind often known as Joint Honours. The HESA record contains

three qualification aim fields and a balance field which together make it possible to report the subject coverage of two subject balanced, two subject major/minor, and three subject balanced programmes.

Apportionment

Additionally, a new procedure of apportionment has been introduced. Under apportionment, each headcount is, where necessary, divided in a way that in broad-brush terms reflects the pattern of a split programme. This is analogous to the use of FTE calculations, but should not be confused with them, since the splits used for apportionment are conventional rather than data-based.
For split programmes not involving an initial teacher training (ITT) component, the apportionment algorithm is as follows:

- 50%:50% for a balanced two-way split;
- 66.667%:33.333% for a major/minor two-way split;
- 33.333%:33.333%:33.333% for a balanced three-way split.

ITT students at undergraduate level who also have a specialism subject recorded (typically, secondary ITT students) are apportioned 50% to the 'Education' subject area and the remaining 50% is further apportioned according to the algorithm for non-ITT students. Where no subject other than education is recorded, or where the student is on a PGCE course, apportionment is 100% to the 'Education' subject area.

Subject areas

HESA has defined nineteen subject areas in terms of JACS codes for reporting information broken down by subject. The subject areas give a useful broad-brush picture, and are as consistent as is practicable with those previously defined in terms of HESACODE. The subject areas do not overlap, and cover the entire range of JACS Principal Subjects. Apart from the need to separate the 'Mathematical sciences' and 'Computer science' elements of Principal Subject G9, they are expressed entirely in terms of JACS Principal Subjects, and in many cases correspond closely to one or more JACS Subject Groups.
In response to requests from users of HESA data, the printed tables also show information for four supplementary subjects, three of which fall within single subject areas, and one, 'Geography & environmental science', cuts across two areas.
Finally, there is an interest in having information about teachers in training. Since this is best presented on a headcount basis rather than an apportioned basis, the figures are not directly comparable with the apportioned figures in the 'Education' subject area, and are tabulated separately to reduce the risk of misinterpretation.

Subject areas	JACS code
Medicine & dentistry	A
Subjects allied to medicine*	B
Biological sciences*	C
Veterinary science*	D1/2
Agriculture & related subjects*	D0/3/4/5/6/7/9
Physical sciences*	F
Mathematical sciences*	G0/1/2/3/90/91/99
Computer science*	G4/5/6/7/92
Engineering & technology*	H, J
Architecture, building & planning	K
Social studies	L
Law	M
Business & administrative studies	N
Mass communications & documentation	P
Languages	Q, R, T
Historical & philosophical studies	V
Creative arts & design	W
Education	X
Combined	Y

Supplementary subjects	
Psychology	C8
Geography & environmental science	F8, L7
Economics & politics	L1/2
English	Q3

Apportionment at principal subject level

Although subject areas provide the usual broad-brush framework for presenting information, a more detailed breakdown to the 159 JACS principal subjects is used in some tables. Again, a process of apportionment is necessary, and the procedure is consistent with that used for subject areas, as follows.
For split programmes not involving an initial teacher training (ITT) component, the apportionment algorithm is as follows:

- 50%:50% for a balanced two-way split;
- 66.667%:33.333% for a major/minor two-way split;
- 33.333%:33.333%:33.333% for a balanced three-way split.

ITT students at undergraduate level who also have a specialism subject recorded (typically, secondary ITT students) are apportioned 50% to the 'X1 Training Teachers' principal subject and the remaining 50% is further apportioned according to the algorithm for non-ITT students. Where no subject other than education is recorded, or where the student is on a PGCE course, apportionment is 100% to the 'X1 Training Teachers' principal subject.

The groupings of subjects for this paper are:

Medicine: JACS code A
Education: JACS code X
SET: Codes marked * in the table above

Further information is available from the HESA website

http://www.hesa.ac.uk/datacoll/home.htm

Annex B

COMPARATOR GROUPS FOR WELSH HEIs

Comparators for Institution B
The University of Exeter
Goldsmiths College
The University of Hull
The University of Kent
Queen Mary and Westfield College

Comparators for Institution C
Brunel University
Aston University
City University
University of Durham
The University of Exeter
Goldsmiths College
Queen Mary and Westfield College

Comparators for Institution E
The University of Hull
The University of Keele
Aston University
Goldsmiths College
The University of Exeter
Queen Mary and Westfield College

Comparators for Institution M
None

Comparators for Combined Institution D and Institution L

University of Manchester
The University of Birmingham
The University of Bristol
King's College London

Comparators for Institution K
Conservatoire for Dance and Drama
Royal Academy of Music
Royal College of Music
Royal Northern College of Music
Trinity College of Music

Comparators for Institution J

Bishop Grosseteste College
University College Winchester
St Martin's College
Edge Hill College of Higher Education
Bath Spa University College
College of St Mark and St John

Comparators for Institution I

University College Chichester
St Mary's College
Trinity and All Saints College
University College Chester
York St John College
Bolton Institute of Higher Education

Comparator for Institution H

Bolton Institute of Higher Education

Comparators for Institution G

Liverpool Hope University College
Canterbury Christ Church University College
University College Worcester
Bath Spa University College
Roehampton University

Comparators for Institution A

Staffordshire University
The University of East London
The University of Teesside
London South Bank University
Coventry University
De Montfort University
University of Hertfordshire
Kingston University
Liverpool John Moores University
The University of Portsmouth
University of the West of England, Bristol
Sheffield Hallam University
The Manchester Metropolitan University

Comparators for Institution F

The University of Plymouth
Bolton Institute of Higher Education
The University of Greenwich
The University of Portsmouth
University of Hertfordshire
Coventry University
The University of Teesside

ANNEX C

RECONCILIATION OF END OF YEAR MONITORING NUMBERS AND HESA FULL-TIME EQUIVALENTS

1. The full-time equivalents (FTEs) used in this paper are drawn from two separate sources: the HEFCW End of Year Monitoring (EYM) survey; and the HESA Student Record.

2. The EYM figures used are the numbers enrolled in November plus those who enrol later in the year (column 1 + column 2 of EYM). The numbers are not adjusted for drop-out (column 3 of EYM) because of the different rules used in Wales and England. The actual fundable numbers are shown in column 4 (=column 1+column 2 – column 3) of EYM. These are actually shown as credit values in EYM but have been converted to FTEs for this exercise.

3. The HESA FTEs are based on HESA field 74 (Student FTE). The FTE includes all students who are eligible for core funding and includes all activity undertaken by the student. The Fundability Code (field 65) in HESA is coded at the student level so any student that undertakes both fundable and non-fundable activities has a fundable FTE that includes some activities that are not fundable. Moreover, a student that drops out part way through the year continues to be classified as fundable in the HESA record with all activity completed prior to leaving being included within the FTE. This provides a good measure of student activity but does not align with the funding rules.

4. More activity is recorded in HESA than is classified as fundable by HEFCW (in EYM column 4) if the coding rules for the HESA Student FTE field have been applied correctly. However, the rules are complex and allow some degree of flexibility (see HESA Student Record Coding Manual Annex 10). It is thought that some institutions may have used different practices. For example, some institutions may not have reduced the FTE to reflect activity actually undertaken by the student.

5. The FTEs recorded in HESA should be at or slightly above the FTEs recorded in EYM column 4. This reflects the inclusion, in HESA but not EYM, of students who drop out part way through or at the end of the year without meeting the rules that allow them to be funded as one semester completers and those who undertake non-fundable activities (eg repeat modules) alongside fundable activities.

6. In practice, the HESA figures will be further inflated where an institution has not adjusted the Student FTE in HESA to reflect the actual activity of students who leave early. The HESA FTE may be under-recorded if an institution has not classified as fundable students who leave part way through the year. In other cases, the wrong percentage has been included for the FTE in the HESA student record.

7. The table below shows the relationship, for individual institutions and the sector, between the HESA FTEs and those in EYM column 4. For the sector, as a whole, the difference is 2038 FTEs which is reasonably consistent with expectations though perhaps on the low side (a difference of around 3000 FTEs had been anticipated). However, there is considerable variation for individual institutions. The differences for Institution I, Institution G and Institution M look rather high. This suggests that the estimates of grant per FTE shown in Tables 6 and 7 may be too low. All the HESA FTEs that fall below the EYM FTEs are subject to some degree of error leading to estimates of grant per FTE which are too high; this is most serious for Institution J whose HESA FTEs had already been adjusted for an obvious recording error.

8. The estimates in the footnotes to Tables 6 and 7 are based on the assumption that the actual FTEs, using the HESA definitions, should have been around the EYM FTEs x 1.03.

9. Any inaccuracies in recording FTEs are less significant when the institutions are grouped because these groupings tend to include a balance of over and under estimation. However, the overall difference between EYM and HESA FTEs is thought to be on the low side. This would indicate a general underestimation of HESA FTEs (assuming the EYM FTEs to be correct) of between about 1% and 2%.

Home and EU fundable FTEs - EYM and HESA
2003/04

Institution	EYM fundable FTE	HESA fundable FTE	% difference
Institution A	11,151	11,196	0.4%
Institution B	6,891	7,088	2.9%
Institution C	5,840	6,014	3.0%
Institution D	14,180	14,649	3.3%
Institution M	1,737	1,909	9.9%
Institution E	7,809	8,171	4.6%
Institution L	1,166	1,115	-4.4%
Institution F	6,917	6,662	-3.7%
Institution G	5,229	5,801	10.9%
Institution H	3,507	3,504	-0.1%
Institution I	3,848	4,294	11.6%
Institution J	1,472	1,385	-5.9%
Institution K	515	510	-0.9%
Total	70,261	72,299	2.9%

Source: HEFCW end of year monitoring survey 2003/04, HESA student record 2003/04