

Phase
Higher Education Review

3

The
Competitiveness of Higher Education
in Scotland



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Joint Foreword

There is a widespread consensus across Scotland of the importance to this country of our higher education system. A flourishing and competitive system of higher education is critical to the country's economic success and to the well being of its people.

The remit of the 3rd Phase Scottish Higher Education Review has been to establish a robust basis of evidence in relation to the competitiveness of higher education in Scotland. By providing a far more extensive shared evidence base than has been available previously, the final report offers a common starting point for Ministers and decision makers in considering the future policy options available to them. The Steering Group is content to present this joint report in that spirit.

The success of the sector has been, and will continue to be based, significantly, on a partnership between autonomous Higher and Further Education Institutions, their staff and students, employers and Government. Phase 3 has adopted an inclusive approach, and has relied on the input and collaboration of professionals from the broadest spectrum of organisations across higher, and further, education in Scotland.

This report reflects the valued contribution of all those organisations listed below, and has relied on their support and commitment. Not every organisation will place the same emphasis on every part, or agree with every detail, of the Review report and in the time available inevitably there have been limits to the scope of the exercise. In recognition of the benefits of the collaborative approach which has characterised Phase 3, and of the dynamic nature of the pressures and challenges that confront the higher education system in Scotland, the steering group set up to oversee Phase 3 has agreed to continue to meet periodically to provide a forum where information can be shared, and where the implications for higher education in Scotland of developments elsewhere can be discussed.

The emphasis of this work has been on gathering and analysing evidence. It has not been the purpose of this exercise to produce recommendations. However, in some places consideration of the data did lead those involved to conclude that it would be helpful to highlight to those with an interest in higher education potential future courses of action. But it is important to be clear that none of these points have the status of being policy positions which have been adopted by any of the individual organisations represented in the review.

What is the higher education sector?

The term higher education is used as a shorthand in this report to refer as far as possible to all HE provision, regardless of the type of institution in which it is provided. However, much of the detailed analysis concentrates on provision in the Higher Education Institutions (HEIs) funded by the Scottish Higher Education Funding Council. This reflects choices made in the individual subgroups. The group agrees that a comprehensive survey would extend the analysis across all HE provision, including that offered in FE colleges (see section 1.10 below). Where the report does not do so, it recommends further work is done to complete the picture.

STEERING GROUP MEMBERSHIP

Tony Axon	Association of University Teachers
David Caldwell	Universities Scotland
John Coggins	Scottish Science Advisory Committee
Will Garton	Coalition of Higher Education Students in Scotland
Marian Healy	Educational Institute of Scotland
Alastair Hunter	Association of University Teachers
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Tom Kelly	Association of Scottish Colleges
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Other organisations involved in sub-groups

British Universities Finance Directors Group
Education UK Scotland
Scottish Heads of Personnel (SHOP)
Scottish Association of University of Estates
UCAS Scotland
UNISON



Introduction

1.1 REMIT

Phase 3 has, from the outset, been a collaborative venture. The remit for this Review was drawn up and jointly agreed by the members of the Steering Group, and approved by the Rt. Hon. Jim Wallace, MSP, Deputy First Minister and Minister for Enterprise and Lifelong Learning, in June 2003, as follows:

Building on the strategies set out in the Lifelong Learning Strategy ('Life through Learning; Learning through Life') and the Framework for Higher Education in Scotland, stakeholders in the sector will work together to create a robust base of information on higher education in Scotland in key areas relevant to our understanding of the competitiveness of Scottish higher education in a UK and wider context. This will involve using existing information, and commissioning specific research where required, to develop a common understanding of the current position. This commonly agreed evidence base will then be used:

- as a robust analytical evidence base to better understand the current baseline of the sector
- to understand fully the potential implications of the DfES White Paper, and to inform responses in Scotland to any new funding system implemented by DfES in England
- to inform the 2004 spending review process
- to improve the quality of advice and information available to all interested parties on the sector.

1.2 PROCESS

A high level Steering Group, comprising representatives from key stakeholder organisations had oversight of the process. Four technical sub-groups met between September 2003 and January 2004 to discuss and scope information on issues affecting competitiveness in relation to:

STAFFING

(Chair – Jamie Hume, Scottish Executive)

CAPITAL FUNDING

(Chair – Tom McDonnell, President, Association of University Teachers Scotland)

STUDENTS

(Chair – Rami Okasha, President, National Union of Students Scotland)

SOURCES AND USES OF INCOME

(Chair – Professor Bill Stevely, Convener, Universities Scotland)

The review has brought together a range of new and existing data and looked at existing data in new ways. Those involved in the review emphasise that the HE landscape in Scotland is complex, and more complex than it has often been possible to do justice to within the limitations of this exercise. Many of the figures here are capable of further analysis or qualification, or more than one interpretation. While the group believes that this report provides a useful overall picture, it cautions readers against placing too much weight on individual figures in isolation.

1.3 COMPETITIVE ENVIRONMENT

Against a backdrop of a world-wide increase in spending and participation in higher education, the Review has focused on seeking to understand better the key issues in relation to Scotland. Although the Phase 3 Review process was prompted by the immediate competitive pressure of tuition fee proposals (contained within the DfES White Paper on Higher Education, published January 2003), there has been a strong recognition of the need independently to assess Scotland's strengths and vulnerabilities. The external environment elsewhere in the UK must be examined and understood, but that should not be the sole basis for analysis and decision making at home. This Review has deliberately focused on understanding where the competitive vulnerabilities of the Scottish system are most likely to lie in future, and identifying where in the system funding pressures are likely to be most acute. This analysis does not depend on specific cross-border funding comparisons, now or in future, but looks first and foremost at Scottish higher education in its own right in terms of changes already taking place and pressures likely to be felt in some key aspects of the system. The Review Steering Group was clear that funding comparisons with England are one relevant issue, but also recognised – in adopting the approach it did – that simple comparisons of figures do not of themselves provide a basis for making the right decisions about the future.

1.5 THE CHANGES IN ENGLAND

The key perceived competitive threat to Scotland is legislation to change the system of university funding, contained in the UK Government's Higher Education Bill. It is appropriate to summarise the key elements of that Bill at this early stage:

Impact on students

- TUITION FEES – currently a flat, up-front, means-tested annual rate of £1,200 (2006/07 prices) would become variable in English HEIs from 2006, from £0 to a maximum £3,000. Universities will have the freedom to set fee levels for each course and each year of intake.
- PAYMENT – English domiciled students at English HEIs would have fees paid on their behalf by the Government under a fee loan scheme, part of the wider student loan scheme, recoverable after graduation above an income threshold of £15,000. Any debt not repaid 25 years after graduation will be written off.
- STUDENT SUPPORT FOR FEES – a new package of student support will be introduced, up to a maximum (for the poorest students) which equals the fee level set (new living costs grant + max. fee remission + new university bursary = tuition fee).
- LIVING COSTS – new bursary and loan amounts will be available see Annex C.1 in main document.

(N.B. DfES proposals referred to relate to full-time undergraduates)

Impact on universities

- The full impact of tuition fees will take some time to become apparent. Fees are set to be introduced for new entrants to universities in 2006, suggesting that around one-third of the new income will arise in the academic year 2006/07, roughly two-thirds in AY 2007/08, and a little less than the full effect in AY 2008/09, with more or less the full effect by 2009/10 so it will take until 2009/10 for the system to fill up with fee-paying students (allowing for the existence of 4 year courses in England and treating 5 year and longer courses as de minimis).
- If three-quarters of university courses are charged at the full £3,000, and the remaining one-quarter at existing levels, then DfES estimate that, ultimately, fees will generate an approximate £1 billion extra per annum for the English HE sector. Under this assumption, the sector could therefore expect to benefit approximately by an extra £300 million a year in academic year 2006/07, and double that in AY 2007/08, in terms of impact within the 2004 Spending Review period.
- This assumption does not take into account the extra cost associated with growing the English HE system towards target participation rates of 50% (currently 43%), nor the cost of actually maintaining current participation against a steeply climbing demographic curve (see 1.9). Calculations around extra levels of income to be generated from tuition fees also assume that all other funding streams remain constant.
- In terms of UK Government spending on higher education, over the next 5 years conventional spending review settlements are therefore expected to be as important as any extra tuition fee income.

Impact on government

- The UK Government has committed to paying tuition fees to universities as they fall due, on behalf of English students using the student loans scheme. The cost to Government of financing this arrangement is calculated according to a Resource Accounting Budgeting charge which stands at around 30% in England (the 30% figure is currently under review, but is calculated to take account of the interest rate subsidy, and the expectation of less than full value recovery). For every £100 of tuition fee paid, the cost to Government is $\text{£100} \times \text{RAB \%} = (\text{at } 30\%) \text{ £30}$.
- Repayments, when they are eventually on stream, are repayable not to DfES, but to the Student Loans Company. Spending on tuition fees will therefore be a permanent recurrent annual cost for DfES, which is anticipated to be financed by new money.
- The effects of increases in DfES funding on the Scottish Executive budget are not easy to quantify. Because of the arrangement outlined above, subject to Treasury rules, Scotland potentially stands to benefit via the Barnett formula. The same phasing as applied to new income, outlined above, should apply to the cost to government, as the public subsidy to the new arrangements, provided through use of the student loans scheme, should count as expenditure immediately the student loan is issued. Once the tuition fee scheme is fully up and running (around 2009/10), at a RAB charge of around 30%, and if it comes from new government spending, £1 billion of additional tuition-fee income for the English HE system would generate around £30 million per annum recurrent consequential funding for Scotland. The overall Barnett consequentials for the whole Scottish Budget will of course depend on the totality of decisions taken by the UK Government across all relevant spending in SR2004.

A further important element of the proposals in England is the plan to increase participation rates through reliance, in particular, on Foundation Degrees, many of which are expected to be channelled through further education colleges. This report does not explore the specific implications of this for Scotland. It is however an area which deserves further attention, in particular for the potential impact on HN provision in Scotland (see Section 1.10 below).

1.6 COMPARING SCOTLAND AND ENGLAND

With a clear understanding of the impact, over time, of the introduction of tuition fees, a key element of the debate about their impact on Scotland has been the controversy over how the financial position of institutions will compare in different parts of the UK.

The principal concern of Scottish HEIs has been that their ability to compete for staff, students and competitively-won sources of external funding will be damaged by any 'funding gap' which might open up. In this context, attempts have been made (though not specifically as part of this Review) to arrive at a definitive analysis of how current higher education funding in Scotland compares to England.

It is widely recognised that it is difficult to compare the funding of Scottish and English higher education institutions (a fact acknowledged in the Scottish Parliament's Enterprise and Culture Committee's 'Scottish Solutions' report on higher education funding).

The main reasons for this are:

- The traditionally longer undergraduate degree course provided by Scottish HEIs
- Scotland's position as a 'net importer' of undergraduates from England, most of whom study for the full length undergraduate programme
- The higher proportion of students on higher-cost courses in Scotland – such as medicine, veterinary science and other sciences
- The higher participation in SCQF level 7 and 8 courses (mainly HNC/D) in Scotland, provided largely through FE colleges, which in turn is mainly responsible for Scotland's higher participation rates in HE
- Differences in the responsibilities of the Funding Councils – so that, for example, SHEFC funds only HEIs whereas HEFCE also funds HE provided by FE colleges in England; SHEFC funds teacher training, whereas in England this falls to the TTA
- Differences in the way the Councils distribute funding – so that, for example, SHEFC puts out a higher proportion of its funding through the main teaching and research formulae, whereas HEFCE 'top-slices' a larger proportion of the revenue it distributes for specific ring-fenced purposes.

As a result of these factors, there are several different ways of looking at the relative funding of higher education systems, and there are different views across the sector as to which comparisons are the most valid to draw, ranging from those that look at teaching funding per student per year, to comparisons of the teaching funding per individual graduate, to comparisons of the relative research investment and finally to comparisons of national overall investment such as are published by the OECD.

This Review has not attempted to settle the detail of this question, beyond stating that there is broad agreement, across the whole HE sector, that for a country of its size Scotland is a relatively larger investor in higher education than England, with the corollary that outputs in terms of numbers of students catered for and levels of research activity are correspondingly higher. The important issue is to understand which elements of the system will be most vulnerable to pressure as funding levels improve in England.

The Group noted as a further piece of context that the Scottish Committee of the Dearing Committee accepted as relevant the Dearing Committee's finding that for the UK as a whole the unit of resource for teaching in HEIs (specifically) reduced in real terms between 1976 and 1995 by 40%.

1.7 RESEARCH

The Scottish research base in HE is currently very strong. In recent years, around 12% of UK Research Council awards have been won by Scottish HEIs, and in the last RAE in 2001, nearly 50% of HE research was rated as internationally competitive. The rate of improvement over the previous RAE exercise was faster than in other parts of the UK.

Maintaining the competitiveness of the Scottish research base is vital if it is to continue to win Research Council awards and lever in funding from other sources, including Europe, charities and the private sector. It has been suggested that the changes proposed in the DfES White Paper will threaten this competitiveness, firstly by providing additional funding to English HEIs more generally and secondly by the further concentrating research in a smaller number of highly research active universities. Arguably, this will act as a magnet to Scotland's star researchers and to their teams, and it has been suggested that this process has already begun. This Review therefore examines the factors which affect staff mobility and asks whether, and to what extent, Scotland would suffer a 'brain drain' of key staff as these policies are introduced.

Phase 2 of this Review indicated that the Executive did not intend to match the DfES policy of further concentration of research within the Scottish HEI base. The case was made instead for better collaboration on research between institutions and across disciplines. SHEFC is therefore working with the sector on a number of promising collaborative projects, including proposals to pool research resources in four pilot areas (physics, biological sciences, economics and the creative arts). The intention is to create critical masses of internationally competitive research expertise. It is hoped that strengthening the research base in key areas will help to increase competitiveness in UK terms. A revised RAE system, in which collaborative bids will be welcomed, will report in 2008. SHEFC will be able to develop its own funding regime based on the new RAE to meet Scottish needs.

1.8 STUDENT NUMBERS

According to the latest available figures (2001/02), there are well over a quarter of a million students on HE courses in Scotland (272,627).¹

See 1.10 for a discussion on the proportionate share of HE which takes place in FE colleges.

Extensive statistical data is available giving more detail on the make-up of the student population, broken down by student type, level and mode of study (e.g. undergraduate/post-graduate). It can be accessed at <http://www.scotland.gov.uk/about/ASD/ELL-EAS6/00017875/page1648662713.aspx> and <http://www.hesa.ac.uk/products.home.htm>

The Age Participation Index, which is the established measure used to express the level of HE participation among Scots under 21 years old anywhere in the UK, whether at an HEI or FEC, stands at 51.5%. This compares to a comparable English figure of around 35%. The Initial Entry Rate for people under 30 years old, including part time students is 43% in England (the IER is a figure only recently constructed for England and is not officially gathered for Scotland).

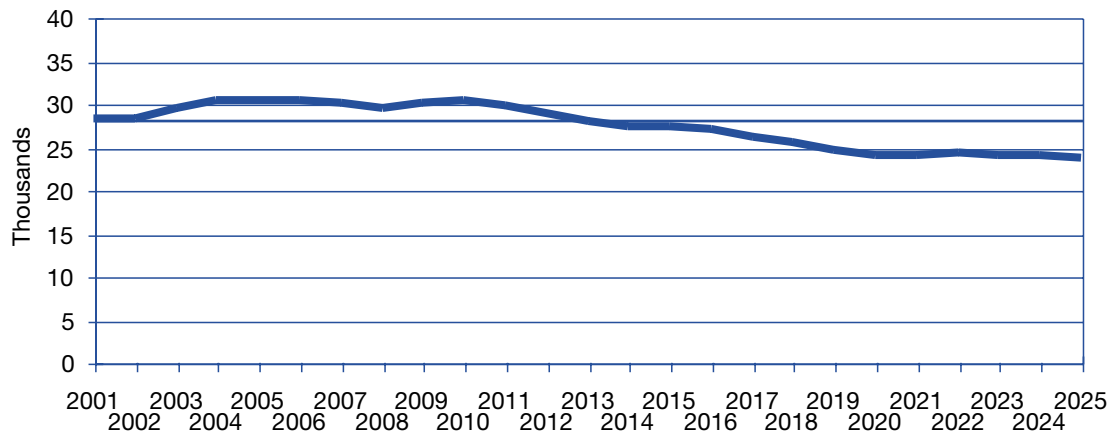
1.9 FUTURE POPULATION TRENDS

Future demand for HE will be driven by a number factors, a key one being the projected demographic decline in Scotland compared to the rest of the UK.

¹ Source: HESA. HESA data does not include OU figures for Scotland throughout this report.

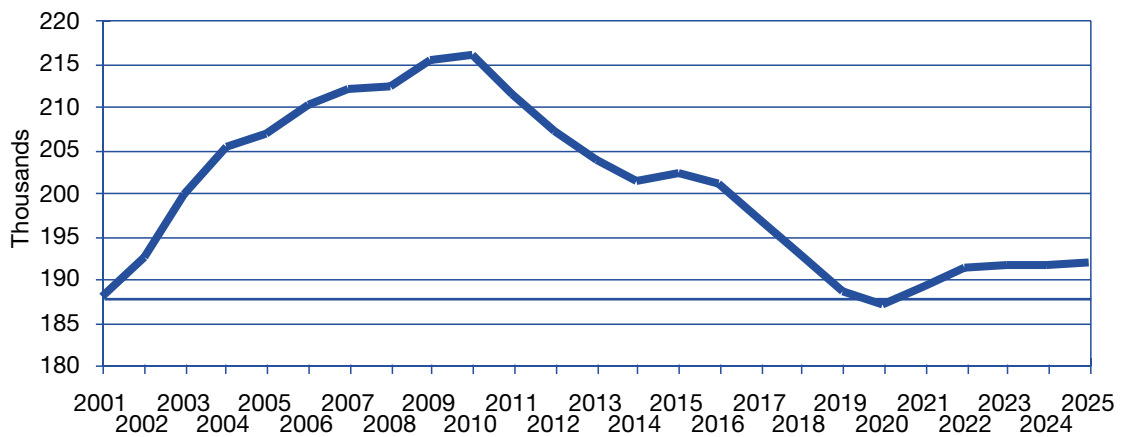
The following graphs illustrate projected numbers of young entrants to HE assuming current participation rates remain unchanged.

Projected number of Young Entrants to HE from Scotland assuming unchanged API (DFES definition) 2001-2025



Source: ETLLED Analytical Services Division Government Actuaries Department

Projected number of Young Entrants to HE from England assuming unchanged API (DFES definition) 2001-2025



Source: ETLLED Analytical Services Division Government Actuaries Department

If these projections are borne out, demand in Scotland and England will diverge at the end of this decade, with the numbers of entrants in Scotland starting to fall below their current levels after 2012, while the number of entrants in England will remain higher than current levels right through to 2020.

1.10 HIGHER EDUCATION IN FURTHER EDUCATION COLLEGES (FECs)

The Review set out with the ambition to include fully in its work this important element of HE provision, and to assess the competitiveness of Scotland’s higher education system not only with reference to its higher education institutions but also to its further education colleges. HE provision in FE colleges is predominantly focused on shorter, vocational higher national certificates and diplomas.

There are various ways of measuring the contribution made by further education colleges to higher education provision in Scotland. As an indication of overall numbers, for all levels of study including postgraduate, 20% of students by full-time equivalent (FTE) (note: there are differences in the way FTEs are calculated for HEIs and FECS) or 24% of students as measured by headcount, undertaking higher education do so in further education colleges. In terms of completed qualifications, including those at postgraduate level, FE colleges account for 30% of those gaining a higher education qualification, mainly at Higher National Certificate or Diploma level. Measured by those entering higher education the colleges' share is 37%. HE courses in FE are shorter and therefore a higher percentage share of qualifiers and entrants than overall students is to be expected. (Note: figures here exclude OU students)

The individual sub-groups all identified limitations on readily-available comparable data for HE and FE early on and in the time available all four sub-groups chose to focus their analysis on HE provided in HEIs. In its treatment of HE delivered in FECs, this report therefore restricts itself to limited analysis, and highlights those areas where further analysis could be undertaken or new information could most usefully be sought. Each section of the report includes as much comment as each group felt able to make at this stage on how the specific issues would apply to HE in FE. Ensuring that there is readily-available comparable data and analysis across all types of HE provision should be an important task in the run-up to the creation of the proposed new merged funding body.

One critical recent development in Scotland has been the establishment of the UHI Millennium Institute. UHIMI is a designated HEI funded by SHEFC; however its HE provision is all delivered through 13 'academic partners', which are mainly further education colleges.

Executive Summary

2.1 KEY FINDINGS – STAFFING

2.1.1 In order to examine the issue with more clarity it was felt useful to categorise academic staff according to three broad groupings:

top academics – most strategically important and very mobile
established staff – most stable
younger academics new to the profession – most mobile

2.1.2 Number of factors influence staff choices for all three groups: including career progression and job security as well as salary, particularly for younger academics; opportunity to work on cutting edge research, in good research facilities with gifted colleagues more important for top academics.


2.1.3 Salary increases have not kept pace with comparable professions which it is reasonable to assume will have had an impact on HEIs' ability to recruit and retain staff; significant pressures facing the sector from costs of proposals to modernise pay systems (Universities Scotland estimate the cost of modernisation at £30 million).

2.1.4 Long-term importance of attracting gifted young academics to the profession, particularly given demographic profile of HE staff (35% due to retire within 10 years under current legislation). Change needed to enhance career prospects, especially in relation to other industries.

2.1.5 Strong correlation between top academics and research funding levered into HEIs (roughly, 20% of staff may attract 80% of research funding); top academics also act as magnets for best younger academics, and determine overall status of a department.

2.1.6 HEIs are very vulnerable to staff moves amongst top academic group. Dynamic transfer market already in existence, but need better data on staff moves into, between, and out of HEIs to inform future staffing policies.

2.1.7 Any extra investment would send out a strong message about growth potential of the sector in Scotland; perceptions are important in attracting high quality staff.



2.1.8 Infrastructure investment is relevant to the recruitment and retention of staff: investment would ensure continuing attractiveness of facilities, the quality of which is a major pull for senior and junior academics alike.

2.2 POLICY OPTIONS AND ISSUES TO MONITOR – STAFFING

2.2.1 Consider how salaries and other terms and conditions might be made more competitive in comparison to other comparable professions, recognising that this must be a fundamental issue in terms of the long-term ability to recruit and retain staff.

2.2.2 Gather staff data on a more systemic basis across Scottish HEIs, and FECs.

2.2.3 Develop ways of attracting and retaining, young academic staff of suitable calibre (possibly exploring a collaborative approach between HEIs to offer career progression for the most able).

2.2.4 Allocate funding specifically to finance pay modernisation ('ring-fencing' from within current baseline would be unwelcome in the sector as this would imply eating into funding available for existing pay).

2.2.5 Establish and finance fellowships to attract internationally renowned professors to Scotland, and support young 'rising star' researchers.

2.2.6 Promote/fund work through LECs to attract academic staff (recent good exemplar of Tayside/Dundee University).

2.2.7 Reduce percentage of fixed-term contract staff amongst research staff, to improve recruitment and retention through increased job security.

2.2.8 Develop more family-friendly policies within the confines of the national pay framework.

2.2.9 Identify ways, and monitor the ability of, HEIs to recruit female academics in all disciplines including but not only those where females are dominant in the graduate workforce. Also monitor the appointment of female academics into promoted posts, with a view to gender balance in HEIs reflecting that of the graduate workforce.

2.2.10 Monitor any increase in pay premia offered by HEIs UK-wide.

2.2.11 Monitor impact of 'Golden Hellos' being offered to new academics in England.

2.2.12 Monitor impact of HEFCE funding stream for Rewarding and Developing Staff.

2.2.13 Monitor perceptions of Scottish HEI sector: if any perception, real or otherwise, that Scottish HEIs are underfunded in comparison to RUK, staff will be less inclined to consider working in Scotland.

2.2.14 Monitor ability to attract staff of suitable calibre (quality rather than quantity). Research is required.

2.2.15 Consider how to reduce staff churn amongst younger cohort, and thereby address issues arising from current ageing workforce.

2.3 KEY FINDINGS – CAPITAL

2.3.1 The evidence shows that there is a clear problem among HEIs in terms of backlog maintenance, which is currently estimated to be around £430 million.

2.3.2 Almost 50% of the Scottish HE estate requires major repair expenditure due to:

- high proportion of old, expensive-to-upgrade buildings
- high proportion of post-war concrete buildings nearing end of design life
- historic under-spend on maintenance
- a reducing unit of resource against which institutions have found it difficult to sustain long-term estates strategies; and
- relatedly, spending being prioritised elsewhere.

2.3.3 The Scottish estate is large, diverse and expensive to maintain, however, investment in capital and maintenance is proportionally lower than in the rest of the UK.

2.3.4 There is a balance of responsibility which has to be shared between the Executive and the institutions.

- As the main funder of HE, the Executive must ensure that HEIs are adequately funded to meet its priorities.
- At the same time, institutions must demonstrate that they are making the best use of public funds, monitoring effectively and investing in a sustainable manner. As autonomous bodies, institutions must continue to do all they can to find alternative sources of funding to supplement Executive investment and to rationalise and better utilise their estates.

2.3.5 Scotland has traditionally worked to reduce top-slicing of the budget for specific purposes to maximise the autonomy and discretion of principals to make decisions. It is understood that this situation has the continued support of the sector.

2.4 POLICY OPTIONS AND ISSUES TO MONITOR – CAPITAL

2.4.1 Pressures on the sector identified by Phase 3 will be the subject of bids going into the forthcoming Spending Review and as in previous years, could benefit from the *ad hoc* use of in-year flexibility.

- 2.4.2 Any future capital investment must be allocated by SHEFC in a manner which ensures:
- that institutions demonstrate best value being achieved from public funding, through excellent, long-term estates strategies, which are focused on delivering a high quality experience for students, researchers and other staff
 - that a fair distribution of funds is achieved to meet need across the sector
 - that those HEIs which have followed a sustainable and progressive capital investment plan are still able to compete for funds.
- 2.4.3 As autonomous bodies, institutions must continue to do all they can to rationalise and better utilise their estates.
- 2.4.4 Further information and analysis is required on the utilisation of space in HEIs.
- 2.4.5 SHEFC should continue to play a proactive role in evaluating and querying the estates strategies of institutions and assisting institutions to invest in capital in a sustainable manner.
- 2.4.6 Institutions and SHEFC should work more closely to identify and facilitate increased collaboration and innovative approaches to estates strategies on a national and regional level. Where practical and beneficial this should not just take place among HEIs, but also with SHEFC and other potential partners in the public or private sectors.
- 2.4.7 The existing main grant allocation should not be ring-fenced for capital. However, any additional funds should be allocated on a strategic basis through some form of Teaching Infrastructure Fund.
- 2.4.8 If additional investment is to be made, institutions must be able to demonstrate systems are in place to ensure Best Value. SHEFC should continue to monitor this.
- 2.4.9 More information is required in the area of capital for HE in FE, particularly considering the expansion of HE in England which will, in the main, be delivered through Foundation Degrees.
- 2.4.10 More information on the student experience of facilities would be of benefit, in particular, to explore any correlation between quality of estates and learning outcomes.
- 2.4.11 When proposing any action on capital investment in HEIs, the implications for HE provision in FECs should be considered.

2.5 KEY FINDINGS – STUDENTS

- 2.5.1 It is not possible to predict at this stage how the introduction of variable tuition fees in England will impact on students choices with regard to location of study.
- 2.5.2 Nonetheless, recently released data from UCAS indicate that it is reasonable to expect the changes in England to increase the cross-border pressure on places.
- 2.5.3 Factors influencing the choice patterns of Scottish students will vary for different groups and in accordance with individual circumstances.

- 2.5.4 For some groups of students the key decision is *whether* to participate and for others it will be *where* to participate.
- 2.5.5 Education, career and culture are the key drivers in the decision to study overseas.
- 2.5.6 RAE ratings are most commonly used by overseas students to inform the decision-making process, in particular by sponsors, and postgraduate research students.
- 2.5.7 Many of the factors affecting non-EU overseas student choices apply to EU students.
- 2.5.8 Additional factors affecting patterns of choice for EU students are tuition fee status and facilitated mobility through European Commission programmes.
- 2.5.9 Students in England will generally, under the new system, have more debt than they do now.
- 2.5.10 Students from England will have more debt if they study in England than if they were to study in Scotland under existing arrangements.
- 2.5.11 In the medium to long term Scotland's HE sector *may* be affected by a growing perception that HE in England is better funded as a result of increased income from variable tuition fees (and also possibly the concentration of research funding) leading to perceptions of better quality.

2.6 POLICY OPTIONS AND ISSUES TO MONITOR – STUDENTS

- 2.6.1 As of the current year, monitor the flow of applications, acceptances and entrants to Scottish HEIs – ensure that while cross-border student flows are not discouraged, Scottish applicants are not disadvantaged as a result of pressure on places from English students.
- 2.6.2 In the event of a sudden surge in applications to Scotland, be prepared to raise the cap on student numbers within the Scottish HE sector.
- 2.6.3 Maintain current arrangements ensuring that no English student coming to Scotland is disadvantaged in terms of fee liability as a result of the longer period of study required in Scotland when compared to an equivalent course in England. Monitor this policy in light of the actual pattern of fee charges in England, when this becomes more apparent.
- 2.6.4 Make an early announcement which ensures (before the beginning of academic year 2004/05) that Scottish students going to England from 2006 will be at least no worse off in terms of the assistance available to them for fee costs as compared to English students.
- 2.6.5 Closely monitor the demand for medical and related subjects within Scottish HEIs and if, over time, there is a distortion of current student flows, ensure that Scottish students, particularly from lower social class backgrounds, do not find it harder to enter such professional areas. This needs to be done over and above any work to address the current levels of recruitment from Scottish students into Scottish medical schools.

- 2.6.6 Work closely with DfES to ensure that next year's proposed investigation of the likely impact of variable tuition fees and graduate debt on wider access to key public sector professions takes account of the findings of both this report and of Sir Kenneth Calman's 'Review of Basic Medical Education'.
- 2.6.7 Monitor and assess the demand for HNC & HND study within Scotland in light of the promotion of the Foundation Degree in England.
- 2.6.8 Continue to support the needs of part-time and mature students and fully reflect the Executive's vision of lifelong opportunity through lifelong learning.
- 2.6.9 Continue to ensure that Scotland's HE system is encouraged and enabled to attract the best international students.

2.7 KEY FINDINGS – SOURCES AND USES OF INCOME

- 2.7.1 Although further work remains to be done on detailed modelling, the introduction of variable fees will clearly improve the relative financial positions of institutions in England, particularly those most able to charge at the highest rate.
- 2.7.2 Total income of Scottish HEIs in 2001/02 was 11.5% of income of all UK HEIs (compared to Scotland's 9% of the UK population). They received 13.2% of all UK research grant funding; nine out of 17 Scottish HEIs had research grant income above the median for UK HEIs, and three were in the top 20.
- 2.7.3 Review unable in timescale to consider exhaustively the potential ability of HEIs to grow non-government income streams. However, evidence reviewed to date suggests that within current models, the potential is limited.
(Further research has been commissioned – see 6.10)
- 2.7.4 It is important to be careful not to confuse income with profit. The first call on most non-Funding Council income will be the specific activity for which it is provided by the funder in question and the capacity of the institution to generate a surplus on it will vary and for many types of funding will be nil or strictly limited.
- 2.7.5 Scottish HEIs obtained a lower percentage of their income from tuition fees than those in the UK as a whole in 2001/02. Regardless of any relative change to England, there is no reason to expect income from publicly-funded teaching in absolute terms to fall as long as HE demand in Scotland remains at current levels.

2.8 POLICY OPTIONS AND ISSUES TO MONITOR – SOURCES AND USES OF INCOME

- 2.8.1 A key issue is the level of Scottish Executive support for the activities the Executive looks to the HE system to provide.
- 2.8.2 Research commissioned under Phase 3 (awaiting outcomes) to identify, UK-wide, which institutions have been successful over the past 10 years at growing non-Funding Council income. Pending outcomes of this work, potential to apply good exemplars to Scottish HEIs with comparable potential (see 6.10).
- 2.8.3 Greater recognition needed from business and industry that expertise coming from HE sector needs to be paid for at full consultancy rates, and research paid

for at full economic cost. The Executive should support HEIs in charging full market rates for services provided to others, such as consultancy to business or the Executive itself.

- 2.8.4 Consider the Lambert Review of Business-University Collaboration, to examine potential to strengthen commercial links between business and HEIs.
- 2.8.5 While the review did not consider the impact of the new Intermediate Technology Institutes, Scottish HEIs should be in a good position to attract significant amounts of the £450 million earmarked for investment in these, although work remains to be done on how this relationship will function in detail over the next 10 years.
- 2.8.6 Figures show untapped potential in terms of fee-paying non EU-students. The Executive is already increasing funding to Education UKScotland as central marketing function for Scottish education overseas. HEIs could benefit from more collaborative work in this area and the Executive should be closely involved in any UK initiatives such as development of the visa rules.
- 2.8.7 Endowments – publicise tax relief on charitable giving. Make charitable giving more attractive through changes in current regulations – the Executive is already in contact with DfES Taskforce examining specific proposals.
- 2.8.8 Consideration should be given to how Executive funding can be used most effectively to assist HEIs in leveraging in funds from other sources, whether public (such as Research Council) or private.

2

3.1 KEY FINDINGS

- In order to examine the issue with more clarity it was felt useful to categorise academic staff according to three broad groupings:
 - top academics – most strategically important and very mobile
 - established staff – most stable
 - younger academics new to the profession – most mobile.
- Number of factors influence staff choices for all three groups: including career progression and job security as well as salary, particularly for younger academics; opportunity to work on cutting edge research, in good research facilities with gifted colleagues more important for top academics.
- Salary increases have not kept pace with comparable professions, which it is reasonable to assume will have had an impact on HEIs' ability to recruit and retain staff; significant pressures facing the sector from costs of proposals to modernise pay systems (Universities Scotland estimate the cost of modernisation at £30 million per annum).
- Long-term importance of attracting gifted young academics to the profession, particularly given demographic profile of HE staff (35% due to retire within 10 years under current legislation). Change needed to enhance career prospects, especially in relation to other industries.
- Strong correlation between top academics and research funding levered into HEIs (roughly, 20% of staff may attract 80% of research funding); top academics also act as magnets for best younger academics, and determine overall status of a department.
- HEIs are very vulnerable to staff moves amongst top academic group. Dynamic transfer market already in existence, but need better data on staff moves into, between, and out of HEIs to inform future staffing policies.
- Any extra investment would send out a strong message about growth potential of the sector in Scotland; perceptions are important in attracting high quality staff.
- Infrastructure investment is relevant to the recruitment and retention of staff, and would ensure continuing attractiveness of facilities, the quality of which is a major pull for senior and junior academics alike.



3.2 APPROACH OF THE STAFFING GROUP

The Staffing Group set out to identify the current and possible future issues affecting the recruitment and retention of staff working in the Scottish higher education sector. This section analyses the current academic labour market in Scotland, identifies some current and potential pressures, and suggests some areas for future development.

The Staffing Group considered it important to identify the factors that influence staff choice in relation to taking up new posts, remaining in post, and moving onto new posts. It was also considered important to quantify the amount of staff movement between HEIs. The remit was to examine the current situation and not future trends. However, gaining a better understanding of the scale of turnover and the factors influencing staff choices will help consideration of what the impact of any funding changes in England may be, and inform decisions about any steps taken in Scotland to improve the attractiveness of the Scottish higher education labour market.

Evidence assessed as the basis for this report included:

- HESA data,² and related analysis by the Scottish Executive
- UCEA data on recruitment and retention in UK HEIs
- an informal survey undertaken by Scottish Heads of Personnel (SHOP)
- members' own knowledge of the higher education labour market.

The main focus of the Staffing Group's discussion centred on academic staff in Scottish HEIs, although there is a much wider range of staff delivering or supporting the delivery of higher education in Scotland, including technical, professional and administrative support staff. The work of the Staffing Group did not include consideration of the important element of HE delivered in further education colleges. This is acknowledged as a gap in the analysis which requires to be addressed at a later stage.

² The HESA data used throughout this section of the report include Bell College but exclude UHIMI, which was not included in the 2001/02 staff returns.

Another critical factor is the ongoing ability of Scottish institutions to attract and retain the most talented senior managers, and there is scope for further work in this area. A number of considerations influenced the focus of the Staffing Group's work, particularly:

- the timescale for carrying out Phase 3
- availability of data sources
- the critical importance of academic staff to the competitiveness of Scottish HEIs
- the fact that the most significant moves on a global scale take place at professorial level.

In view of the above, the Staffing Group's work concentrated mainly on factors affecting the recruitment and retention of academic staff in HEIs, particularly academic staff whose work was biased towards research.

WHAT DO WE KNOW NOW?

3.3 MARKET FOR HEI STAFF

Scottish HEIs already operate in a highly competitive, national and international labour market, or more accurately, a complex series of labour markets for different types of staff. HESA data show that 17% of staff who left Scottish HEIs in 2001/02 did so to work or study at overseas institutions. The comparable figure for departures from institutions in the rest of the UK was 16%. These figures are high when compared to other employment sectors.

The two-way flow of staff is illustrated by the fact that 15% of new staff in Scottish HEIs were either employed or students overseas in the previous year (18% in the rest of the UK).

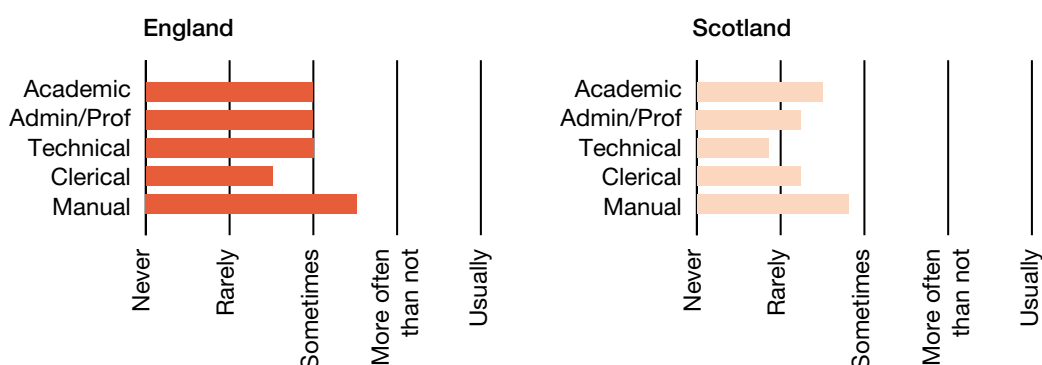
3.4 RECRUITMENT AND RETENTION

UCEA published a report in May 2002 on 'Recruitment and retention of staff in UK higher education'.³ The publication presents the findings of two projects which investigated recruitment and retention difficulties in UK HEIs. Based on data collected in September and October 2001, the aim of both projects was to assess the extent and nature of any difficulties, as well as the factors contributing to them. Eleven Scottish HEIs took part in the projects.

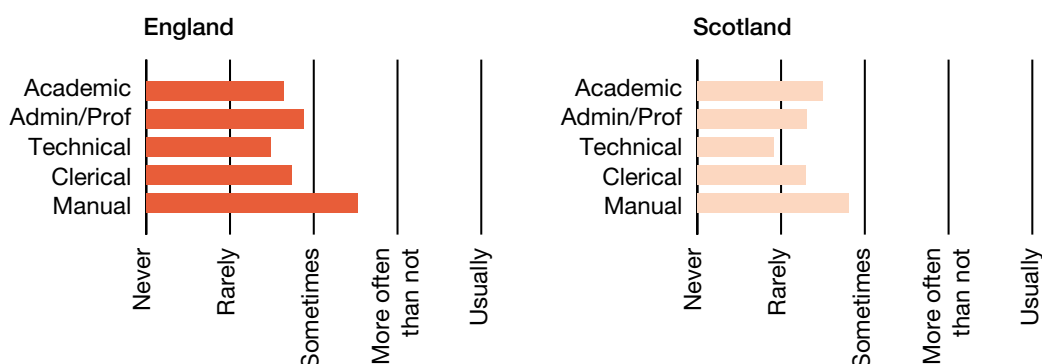
The results of these projects indicate that in 2001 Scotland had the fewest recruitment and retention difficulties in comparison to English regions, Wales and Northern Ireland. This suggests that Scottish HEIs benefit from a more buoyant labour market than English HEIs.

³ www.ucea.ac.uk/rrresearchreportfinal.pdf.

Regularity of recruitment difficulties in English Regions, Wales, Scotland and Northern Ireland, using average scores, 2001 – showing that Scotland has less frequent problems in these areas compared to all other UK regions



Regularity of retention difficulties in English Regions, Wales, Scotland and Northern Ireland, using average scores, 2001



Source: UCEA Recruitment and retention of staff in UK higher education, A Survey and Case Studies.

3.5 POTENTIAL IMPACT OF DfES PROPOSALS

Notwithstanding the figures above, it is recognised that there are comparatively few significant differences between the academic labour market in Scotland and in England (see 3.6). However, like all markets, the higher education labour market operates on the basis of confidence: if staff or potential staff believe that higher education in one part of the UK is 'better off' or 'worse off' than another, then it will influence staff behaviour. This in turn may accentuate a problem or create a future one.

The DfES proposals give rise to a number of specific issues that may affect staffing in Scottish HEIs. The proposed introduction of top-up fees in England has led some to believe that a 'brain drain' of academics from Scotland to the rest of the UK will result. There is concern that any increased funds for English HEIs will allow them to increase the standard of their teaching and research facilities, as well as to potentially enable them to pay higher rates, which could draw Scottish staff to English HEIs.

Further, DfES proposes that the level of participation in HE should increase from the current 43% to 50% by 2010. This increase in the size of the HE sector in England, coupled with expansion to meet demographic pressures (see 1.9) could result in increased competition for available academic staff of a suitable quality.

It is important, however, to keep such concerns in an appropriate perspective. In particular, it has to be recognised that the main targeted area for expansion in England is in fact through Foundation Degrees at sub-degree level (i.e. degree level courses taught at further education colleges, not HEIs). This may not, therefore, have a particular impact on staff working in HEIs – though the need to monitor take-up of Foundation Degrees and their potential impact on the Scottish FE sector is highlighted at 3.27.

In summary, though, there remains some concern that the emerging UK and international HE labour market environment, over the forthcoming period, will present challenges to the Scottish HE sector, which could be intensified if the Scottish sector is placed at significant additional disadvantage (through the impact of tuition fee income) relative to the rest of the UK.

THE HE LABOUR MARKET SUMMARY FINDINGS

- Scottish HEIs already operate in a highly competitive national and international labour market.
- Evidence gathered in 2001 suggests Scottish HEIs have fewer problems with recruitment and retention of staff compared to the rest of the UK.
- There is concern that emerging UK and international HE labour markets will present challenges to Scottish institutions.

3.6 STAFFING COMPARISONS – SCOTLAND AND THE UK

Analysis of HESA data from 2001/02 identified the main similarities and differences in the staffing position at Scottish HEIs and in the rest of the UK. The results demonstrated that, currently, there were few marked differences. A summary of the data used in the analysis is given at Annex A.1.

The results of the analysis can be summarised as follows:

Similarities between Scottish and RUK HEIs:

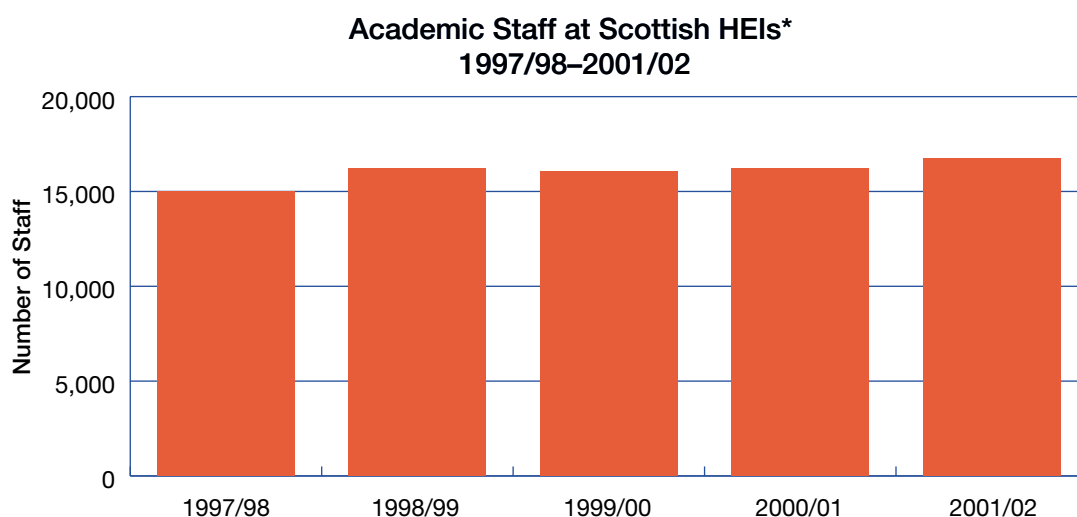
- distribution of staffing type (e.g. teaching/research) largely comparable
- average age and gender balances broadly similar
- salary distributions of academics in Scotland are broadly similar to RUK
- starting salaries broadly similar
- known destinations of academic staff who left their HEI are also the same
- percentage of those who left HEIs to work or study abroad (at HEIs) was similar.

Differences between Scottish and RUK HEIs:

- annual academic staff costs were marginally lower at Scottish HEIs (£27,892 vs £31,099)
- trend toward greater polarisation of salaries towards the bottom and the top of the distribution curve in Scotland
- including fixed-term contract staff, staff turnover rate is slightly higher in Scotland (14.9% compared to 13.5% RUK institutions)
- a slightly higher percentage of Scottish academic staff are also reported to be on fixed-term contracts
- lower staff turnover amongst permanent academic staff in Scotland.

3.7 HE STAFF NUMBERS IN SCOTLAND

According to HESA data, there were 16,760 academic staff employed at Scottish HEIs in 2001/02. This number represented over 11% of academic staff at all UK HEIs in that year, which reflects the comparative size and importance of the higher education sector for a country which has only around 9% of the population of the UK.



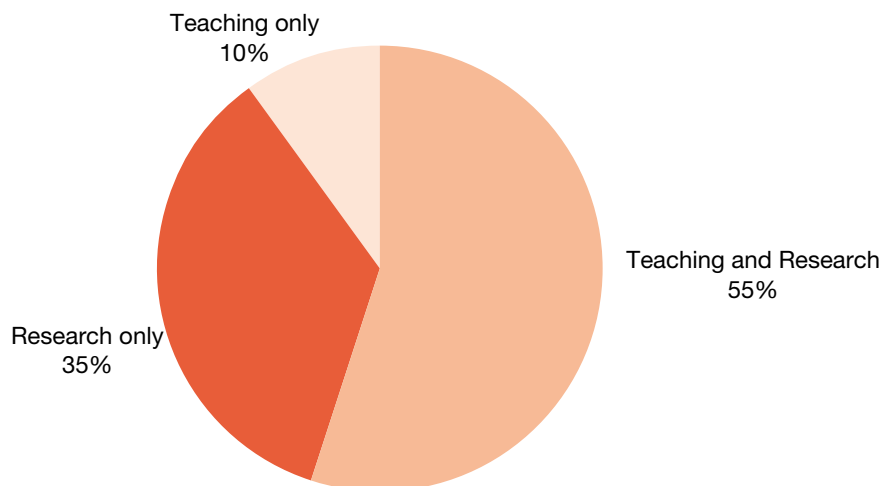
Source: HESA

*In 2001 UHI Millennium Institute and Bell College were designated as new higher education institutions. Both of these institutions are included in figures from 2001/02 onwards.

3.8 STAFF ACTIVITY

The breakdown illustrated in the figure below (2001/02 data) is similar to the situation in the rest of the UK.

Staff Engaged in Teaching and Research in Scottish HEIs



Using average student to staff ratios, there is a student to staff ratio at Scottish HEIs of 12.1 compared to 15.8 in the rest of the UK. In terms of the ratio of students to teaching staff, at 18.7 for Scotland and 22.8 for the rest of the UK, the figures are again lower in Scottish HEIs.

However, staff to student ratios vary significantly across disciplines depending on the teaching method. Medicine and veterinary medicine have low student to staff ratios, while some parts of the humanities have much higher student to staff ratios. It is therefore difficult to make direct comparisons with student to staff ratios in England, unless the figures are standardised for subject-mix. This is particularly important given that Scotland has a higher proportion of staff-intensive disciplines than elsewhere.

3.9 STAFF TURNOVER

There is evidence to suggest that staff turnover amongst permanent staff in Scottish HEIs is, at the moment, slightly lower than in the rest of the UK. For example, in 2001/02 arrivals of new permanent academic staff at Scottish HEIs accounted for 9.5% of all permanent academic staff while departures accounted for 6.7%. Equivalent figures for the rest of the UK were 11% and 7.1% respectively.

However, analysis shows that the average staff turnover figures mask considerable differential between a relatively static 45-50 age group, and much higher staff turnover amongst the younger cohort.

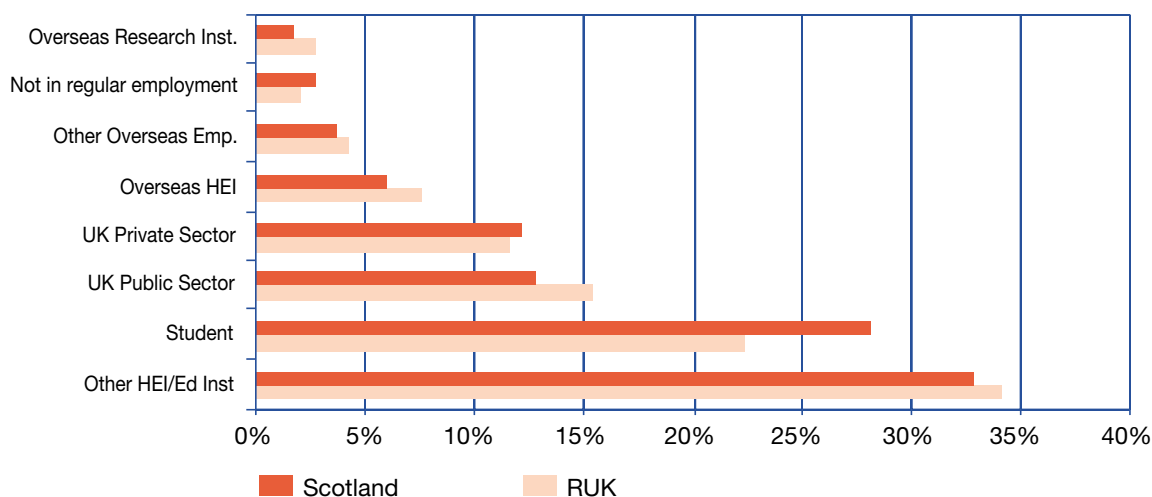
Staff turnover is more common amongst younger academics in the early stages of their career. In terms of the arrivals of all academic staff, both domestic and overseas, 61% in Scotland were under 35 years of age (RUK: 58%). This higher turnover in younger staff is also reflected in the findings for international movements. Some 70% of overseas arrivals to Scottish institutions were less than 35 years old compared to only 4% above 45. The picture was similar for the RUK – 65% and 6% respectively. The finding that staff turnover is higher among younger staff is reinforced by the results of the SHOP survey

(attached at Annex A.2), which found that the most frequent reasons for staff leaving Scottish HEIs are: medical staff returning to NHS, and career progression to other HEIs.

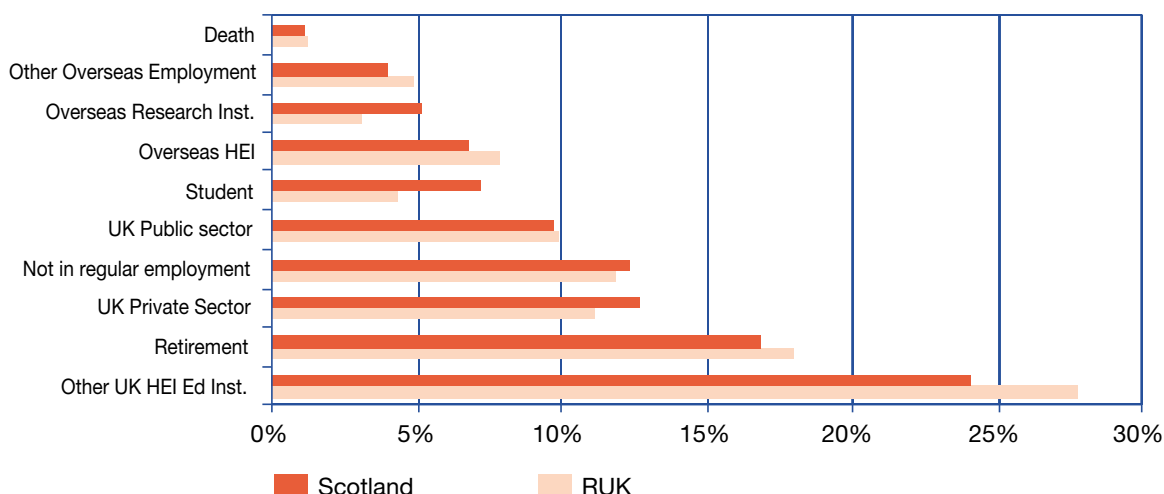
There is a dynamic labour market amongst UK HEIs. The graphs below illustrate the extent of movement between HEIs and other educational institutions. In 2001/02, a third of new arrivals at both Scottish HEIs and HEIs elsewhere in the UK came from other UK HEIs or academic institutions. In terms of the destination of academic staff who left Scottish and RUK HEIs in 2001/02, the largest share in both cases moved onto another UK HEI or academic institution at 24% and 28% respectively.

Data are not available to illustrate flows of staff between Scotland and RUK. These data could be critical in the future if the impact on staff flows of real or perceived improvements in the relative competitiveness of Scottish HEIs is to be tracked. This includes tracking against the leading research-intensive universities in England in the lead up to the next RAE.

**Previous Year's Employment of Academic Staff
New to an HEI in 2001/02**



Destination of Academic Staff who Left an HEI in 2001/02



Source: HESA data

THE UK PICTURE SUMMARY FINDINGS

- No major differences between Scottish and English staffing positions.
- Difficult to make direct comparisons with student to staff ratios in England, unless the figures are standardised for subject-mix.
- Staff turnover is more common amongst younger academics in the early stages of their career, which must in part reflect the concentration of fixed-term contracts in this group.
- Need to collect more detailed data on staff moves affecting Scotland, to show cross-border flows of staff.

3.10 INFLUENCES ON STAFF CHOICES

It is important for the maintenance and development of a strong Scottish academic labour market to have an understanding of factors influencing staff choice. Based on the results of the SHOP survey, the following key factors influencing staff choice (not in any particular order) were identified:

- teaching and research facilities
- opportunity to work in prestigious departments
- level of academic support
- salary
- job security
- good pension scheme
- career progression.

Other factors beyond “felt fair” pay that influence staff choices include:

- interesting and challenging work and opportunities for personal development and growth
- quality of leadership – academic, research and organisational
- good facilities – building and equipment for research and for other professional activities
- scope for innovation, creativity and commercialisation of research and other intellectual property
- access to good teaching and research teams and funds.

There is some variation in the extent to which the factors influencing staff choice affect different disciplines, with disciplines such as business studies and IT facing greater competition from the higher salaries available in industry, and clinical disciplines facing competition from the NHS. Evidence from the SHOP survey suggests there are greater staff shortages in the following areas: clinicians; scientists; medical; IT; statistics; business subjects; and in some areas of professional expertise, e.g. accountants.

3.11 GROUPINGS OF ACADEMIC STAFF

Factors affecting recruitment and retention issues differ depending on the institution, department or subject, the balance between teaching and research within posts, and the career stages of individual members of staff.

In order to examine the issues with more clarity, it was felt useful to categorise academic staff according to three broad groupings, and to enable reference to different markets for HEI staff as follows:

- top academics
- established staff
- younger academics

Particular factors affecting the three broad groupings of academic staff are identified below.

3.12 PROFESSORS AT THE TOP OF THE ACADEMIC TREE

3.12.1 Who are they?

Staff with an annual salary in excess of £50,000; 7%⁴ of the total; a very small proportion (under 1%) are aged under 30.

3.12.2 Mobility

Top academics are a relatively mobile group, with HEIs already competing in a global market. Top academics range in age from people in their 30s through to those closer to retirement. They publish in internationally visible journals, and already have substantial international networks. Top academics in their 50s are generally extremely mobile, as they tend to have fewer family ties.

There are numerous examples of high profile moves at this level into and out of Scottish HEIs. For example, senior academics have recently moved from Harvard to join the Dept of Psychology at St Andrews;⁵ five staff have left the USA to work in the Informatics Dept at the University of Edinburgh; and Cambridge professors have moved to Scotland. Examples also illustrate the flow of similar calibre staff between Scottish HEIs, and out of Scotland to the UK or overseas. The available evidence does not make it possible to assess whether there is a net in-flow or out-flow in this specific group.

Scottish HEIs are generally considered to hold a strong position within the global academic labour market at professorial level, however, there is considerable variation amongst HEIs, with research intensive HEIs facing more competition at international level. Across the sector as a whole, there is a view that it is difficult to attract the very best applicants from North America due to an inability to compete on salary or reward packages.

3.12.3 Strategic importance

Top academics are the most strategically important and potentially the most vulnerable group, due to the strong correlation between top class academics and the level of research funding levered into HEIs.

⁴ HESA data 2001/02.

⁵ <http://education.guardian.co.uk/higher/careers/story/0,9856,1076878,00.html>

Both a department's reputation and its research grant funding from SHEFC and other sources are heavily dependent on the results of the most recent RAE. Top academic staff are attracted to departments receiving a high star research rating, which in turn allows departments to compete more effectively for additional research funding from UK, European and other research funding bodies.

Universities Scotland estimate that approximately 20% staff lever around 80% of research funding. Thus, the loss of any top academic from an HEI could have significant consequences for the HEI's income as well as its prestige and research capacity.

Top academic staff are also seen as magnets for each other and for the rising academic stars of the future. The latter is particularly important to ensure the future competitiveness of the HEI, hence the strategic importance of top academics to the future strength of the Scottish higher education sector.

3.12.4 Factors influencing choice

While salary is a factor that influences choice amongst top academics, opportunities to work on cutting-edge research with gifted colleagues in centres of excellence, and access to good research facilities are often more important factors than salary alone.

The importance of these non-salary aspects is evidenced, for example, by the results of an international survey undertaken by 'The Scientist' amongst 2,210 full-time scientific researchers. This survey ranked Dundee University as being the best scientific institution in which to work in the UK and the third best outside the USA. Dundee's high ranking was based on the attractiveness of its research facilities and the opportunity to work as part of a well developed research community.⁶ This implies that those factors will need to be maintained, if the Scottish higher education sector is to remain competitive.

On the other hand, the importance and potential scale of financial packages available in some cases to top academics should not be underestimated. An emerging "star" based at a prestigious US university was recently persuaded to stay in the US, despite interest in a potential move to Dundee, when the US university offered them a \$10 million package.

The recognised strength of the Scottish research base and the collaborative approach being taken to develop it further (see 3.20) should enable Scottish HEIs to continue to compete in the funding research market.

TOP ACADEMIC STAFF – SUMMARY FINDINGS

- Top academic staff are the most strategically important group, affecting income as well as determining the prestige of an HEI.
- High correlation between top academics and research funding.
- Top academics act as magnets for each other and for best younger academics.
- Staff choices influenced by prestige of department, RAE, research funding and facilities.

⁶ Times Higher, 28 November 2003

3.13 ESTABLISHED STAFF

3.13.1 Who are they?

Staff aged 30 plus with an annual salary of up to £50,000; 77% of the total.

3.13.2 Mobility

Analysis suggests that, overall, this group contains the majority of an HEI's academic staff, who are in any event least likely to move, or to move as a result of external changes, with factors such as children's schooling and partners' careers, as well as other quality of life factors, militating against a predisposition to move to other posts.

3.13.3 Strategic importance

The established group is the largest group and includes the core staff providing both teaching and research at Scottish HEIs. It includes staff aged from late 20s up to their 60s, holding posts as lecturers, senior lecturers and professors, all of whom make important contributions to their institution in teaching, and other contributions to the university community.

Within this broader, more stable group of staff, there are also the future top academics. This sub-group of staff are still developing their reputations at international level, but may move to work with other internationally renowned professors to develop their careers or to raise their own profiles.

Career options available to staff in the established group illustrate the future possibilities open to younger academics, and may thus appear attractive or act as a disincentive for them to join or remain in the academic labour market.

3.13.4 Factors influencing choice

Average wages at Scottish HEIs are already slightly below the level for the UK. No significant recruitment or retention issues are evident at an overall level, although specific disciplines do reportedly face problems. Quality of life factors are considered to be most significant for this group of staff. Further detail on pay differentials are found at 3.16 and 3.17.

ESTABLISHED STAFF – SUMMARY FINDINGS

- Established staff are critical to the successful delivery of HE.
- The middle group of established staff are the most stable.
- This group also contains future top academics, who may be more mobile.
- Younger academics are able to evaluate future career paths by reference to this group.
- Choices for this group are more likely to be influenced by quality of life factors.

3.14 YOUNGER ENTRANTS TO THE PROFESSION

3.14.1 Who are they?

Staff aged under 30 with an annual salary of up to £50,000; over 90% earn less than £25,000; 16% of the total. This group includes new, young academics recruited to HEIs when they are still finishing their PhDs.

3.14.2 Mobility

As noted in 3.9.

3.14.3 Strategic importance

The comparatively low salaries, combined with poor career progression opportunities, are considered to militate against graduates and postgraduates of a suitable quality electing to take up an academic career. This suggests that there may be difficulties ahead in filling post-doctorate/new academic posts.

Some departments are considered to be at greater risk than others of failing to attract staff of a suitable quality, such as business management, clinical disciplines and IT.

The new national pay framework is designed to help retain a common pay-spine in higher education, but any enhanced funding for English HEIs may enable them, if they wished, to offer more competitive salaries in key areas. Some are already offering 'golden hellos' as a means of attracting new staff in shortage areas from ring-fenced HEFCE funding for HR modernisation. As well as affecting adversely the research capacity of Scottish HEIs in the short-term, any such trend would have significant consequences for the long-term robustness of the Scottish research base and the overall competitiveness of the sector.

Recognising the importance of attracting future academic 'stars', Dundee University has set up 'BioRecruit Dundee'⁷ with the assistance of the local enterprise network, Scottish Enterprise Tayside, to support recruitment initiatives.

3.14.4 Factors influencing choice

The fact that salary distribution has been broadly similar to that of HEIs in the RUK could suggest that Scottish HEIs are generally well placed compared to RUK institutions to attract younger academic staff – i.e. recent postgraduates.

Recent increases in entry-level salary for postgraduates have been welcomed in the sector. However, there is anecdotal evidence to suggest that some HEIs are experiencing difficulties in filling some PhD and post-doctorate places with students of a suitable quality.

The funding mechanisms used by research funding bodies can also reinforce low pay and set, in some cases, very narrow constraints. No data, however, are available to illustrate the current, or predicted, scale of difficulties in recruiting quality staff at entry level.

Evidence suggests that career progression and job security are important factors for this group of staff. For HEIs with a strong research focus, opportunities to work on leading-edge research with gifted academics are also important factors in influencing staff choice.

⁷ <http://www.biorecruit-dundee.com>

YOUNGER ACADEMICS – SUMMARY FINDINGS

- The ability to attract gifted, young academics is crucial to the long-term competitiveness of the sector.
- Change is needed to enhance career progression opportunities, for instance through a collaborative approach, if the sector is to attract and retain the best young academics.
- There are examples of good practice between HEIs and local enterprise networks to attract future academic stars.
- Low starting salaries are resulting in increasing competition from other industries particularly in certain disciplines.
- Choices for this group are affected by career progression opportunities and job security, as well as salary.

3.15 RING-FENCED FUNDING

Through SHEFC the Scottish Executive provides approximately 50% of funding to Scottish HEIs. In broad terms, the basic unit of teaching funding (T grant) is distributed using formulae applied to the number of students, within set categories of courses, attending each HEI. Research funding (R grant) is largely based on performance in the RAE.

In Scotland, it has been agreed in principle that institutions should receive as much of their funding from SHEFC as possible in block grant, leaving principals with the autonomy and discretion to use funds as they see fit to meet the goals of their institutions and address the priorities set by Ministers.

Funding directed specifically to pay modernisation would be welcomed by HEIs, but it is expected there would not be support for ringfencing from within the current block grant.

3.16 HEI PAY FRAMEWORK

At the present time, there is a set of nationally negotiated pay scales for HEI staff, reflecting structures which date back to the 1970s.

However, the pay scales are not binding in as much as institutions are free to improve upon them and where there is a severe shortage or it is competitively essential to recruit a particular candidate, HEIs can exceptionally pay a higher rate. This happens in a limited number of cases at professorial level. Other recent exceptions might include premium payments to IT staff.

HEIs are also free to withdraw partially or entirely from national pay bargaining. In practice, some HEIs have introduced local pay arrangements for particular pay-markets. For example, RSAMD has never subscribed to the national pay scales and employs academic staff at rates not consistent with any national scale. Of those that did agree to work to the national scales, only the University of Central England has withdrawn from the whole system thus far.

In 1999, the Review of Pay and Conditions in Higher Education⁸ (Bett Review) reported, recommending a radical overhaul but noting that additional investment from public and other sources would be needed.

In 2000, in line with recommendations from the Bett Review, a new deal was struck to bring in new national pay bargaining arrangements with the objective of delivering a new national framework based on a common pay-spine by August 2003. The purpose was to replace the 30-year-old structures with a framework which would preserve a national framework and address modernisation issues, notably ensuring compliance with legislation on equal pay.

This modernisation agenda is not unusual in the public sector, but higher education has lagged behind. Both the Dearing⁹ and Bett reports reinforced the need for change and the sector – employers and trade unions – has worked to address this.

Experience of pay modernisation in other sectors suggests that the exercise would cost between 3% and 5% of the total payroll in the Scottish HE sector, to carry out the necessary job evaluation exercise and align salaries to the new scales. On this basis, Universities Scotland estimates that some £30 million may be required to complete the introduction of the pay modernisation agenda in Scottish HEIs.

The issue of pay modernisation also applies to colleges. Expectations of staff and trades unions will keep this issue to the forefront. It was put to the group that colleges would be willing to address this issue if funding were available on comparable terms to that for HEIs.

STAFF PAY SUMMARY FINDINGS

- Present pay scales for HEI staff do not meet modern, equal pay requirements.
- Universities Scotland estimates that some £30 million may be required to complete the introduction of the pay modernisation agenda in Scottish HEIs.

⁸ <http://archive.official-documents.co.uk/document/irhec/irhec.htm>

⁹ <http://www.leeds.ac.uk/educol/ncihe/>

3.17 SALARY SCALES

There is evidence that salaries for academic staff have not kept pace with pay increases in other professions. This was first quantified in some detail in the Bett Review in 1999.

Data from a paper produced by the Academic Staff Sub-committee Trade Union Side to support its pay claim for 2003¹⁰ illustrate that the average weekly pay for academics has increased least between 1993 and 2002 when compared to a range of other professions.

Change in average weekly pay: academics and comparators (cash)

Year at April	Higher education teaching professionals	Personnel, training & industrial relations managers	Computer analysts/programmers	Secondary education teaching professionals (England)	Scottish teacher salaries	Chartered and certified accountants	Non-manual average	General administrators national government (HEO to senior principal/Grade 6)	Medical practitioners
Percentage change 1993/2002	30.00%	38.60%	39.40%	39.80%	44.60%	44.80%	47.30%	49.80%	57.50%

Notes: data are gross weekly pay for full-time employees, both sexes, whose pay was not affected by absence

Source: New Earnings Survey (series); % change calculation by AUT

¹⁰ Joint Negotiating Committee for Higher Education Staff, Academic Staff Sub-Committee Pay Scales for 2003/04 and 2004/05.

Despite recent increases in the starting salary for postgraduates, entry-level salary remains low in comparison to a range of other jobs.

This supports concerns about the ability of the sector to attract young academics of suitable quality, in the face of increasing competition from other professions and potentially from a limited number of better funded English HEIs.

Entry-level starting salaries 1 (outside London)			
	Date	£	Reference
Researcher A, post-92 HEIs	1.8.02	11,932	www.aut.org.uk
NHS professions allied to medicine, technical instructor grade III	1.4.02	12,310	IDS Report 863:29
Engineering staff technician (City & Guilds qualified)	May/June 2002	15,171	IDS Report 863:11
Tesco checkout manager (medium-sized stores, lowest band)	1.7.02	15,810	IDS Report 866:28
NHS professions allied to medicine, basic grade (all professions)	1.4.02	17,115	IDS Report 863:29
Market research analyst, Nationwide Building Society	1.7.02	17,546	IDS Report 868:24
School teacher (England & Wales)*	1.4.02	17,595	IDS Report 859:30
Police constable (on appointment)	1.9.02	18,264	IDS Report 865:26
Research Grade IA/IB, pre-1992 HEIs	1.8.02	18,265	www.aut.org.uk
Academic related Grade 1, pre-1992 HEIs	1.8.02	18,265	www.aut.org.uk
NHS house officer	1.4.02	18,585	IDS Report 864:30
Graduate median starting salary	2001-02	19,800	IDS MPR 259:17
Graduate median starting salary (forecast)	2002-03	20,500	IDS MPR 259:17
<i>Lecturer A, pre-1992 HEIs/Lecturer, post-92 HEIs</i>	<i>1.8.02</i>	<i>22,191</i>	<i>www.aut.org.uk</i>
<i>Bett recommendation for lecturer posts minimum</i>	<i>2002</i>	<i>22,500</i>	
Police sergeant	1.9.02	27,897	IDS Report 865:26

* entry grade for graduate with 2nd class degree or higher

SALARIES SUMMARY FINDINGS

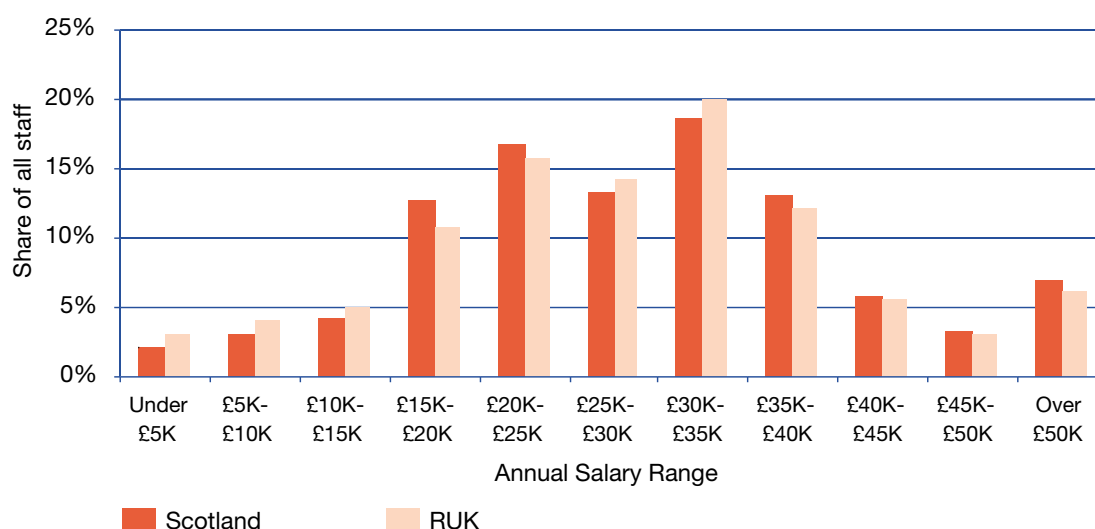
- Salaries for academic staff have not kept pace with pay increases in other professions.
- Despite recent increases in the starting salary for postgraduates, entry-level salary remains low in comparison to a range of other jobs.
- This supports concerns about the ability of the sector to attract young academics of suitable quality.

3.18 ACADEMIC STAFF COSTS

The average annual staff cost per member of academic staff in Scottish HEIs was £27,892, lower than the equivalent figure for HEIs in the rest of the UK at £31,099. Academic staff costs are taken from HESA data, using associated HESA definitions.

In general terms, although average annual academic staff costs were lower at Scottish HEIs in 2001/02, the salary distribution of academic staff was broadly in line with that of academic staff at HEIs in the rest of the UK. This may be accounted for by the fact that Scotland has 4% more research staff than England. Research staffing only levels are heavily weighted to junior grades.

Salary Distribution of Academic Staff at HEIs 2001/02



Source: HESA data

The graph above also shows that the distribution of the gap between average salary costs at Scottish HEIs and HEIs in the rest of the UK was not uniform in 2001/02. In Scotland, a higher share of academic staff were in the £35k+ salary range.

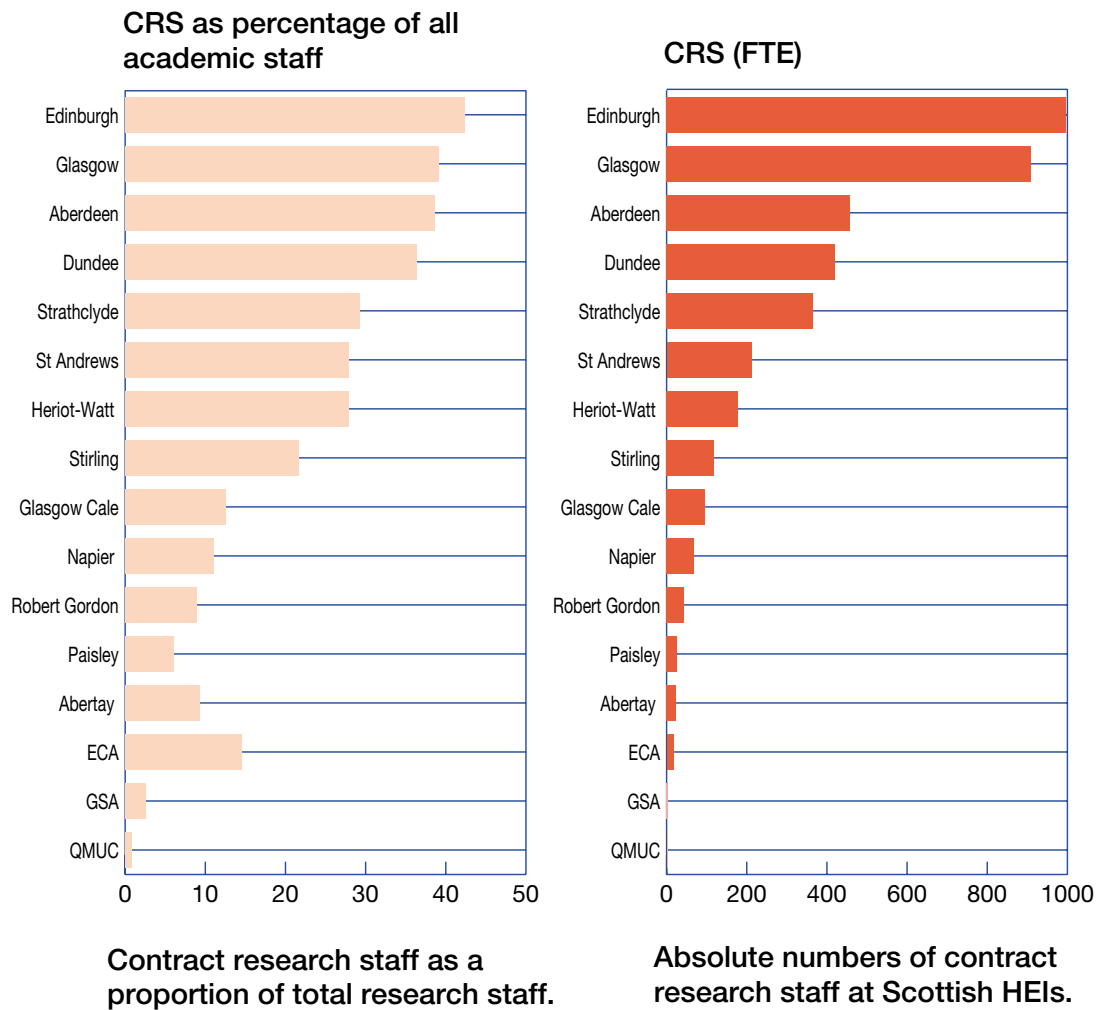
This illustrates that Scottish HEIs have been at least as well placed as UK HEIs to offer salaries at the higher end of the scale. This, together with the higher concentration of junior research only staff, has the effect of polarising staff costs towards the bottom and top of the pay scale.

STAFF COSTS SUMMARY FINDINGS

- Average annual staff cost per academic staff is lower in Scotland than in England, with a greater concentration of staff costs at the lower and higher end of the distribution curve.

3.19 FIXED-TERM AND CONTRACT RESEARCH STAFF

Analysis of the HESA data found that 46% of academic staff at Scottish HEIs in 2001/02 were employed on fixed-term contracts; in RUK, only 42% of academic staff are employed on fixed-term contracts. In Scotland, over 70% of fixed-term contract staff were research only staff, while at the same time 93% research only staff were employed on a fixed-term contract. Details of the number of contract research staff at each Scottish HEI are given in the tables below.



Source: SHEFC report¹¹

The graphs illustrate that the distribution of contract research staff varies considerably and reflects the strong research focus in some of Scotland's HEIs.

The reason that Scottish HEIs have a larger percentage of academic staff on fixed-term contracts may in part be explained by the higher percentage of medical schools within Scottish HEIs. Medical schools and some areas of science are considered to attract more research funding than other departments and consequently have a higher number of contract research staff. The fact that so many research staff are employed on a fixed-term basis has been in part therefore a function of research funding patterns.

¹¹ <http://www.scotland.gov.uk/library5/education/crsi-00.asp>

The high dependency on fixed-term contracts may underpin a number of recruitment and retention issues affecting academic staff, particularly those in the earlier part of their careers.

According to HESA data, in terms of salary (and largely reflecting their age and career point), research staff on fixed-term contracts tend to earn salaries that were much more clustered within the £15K – £25K salary band than was generally the case for academic staff within Scottish HEIs. In 2001/02, 64% of research staff on fixed-term contracts at Scottish HEIs earned a salary within this range.

Salary Distribution of Contract Research Staff at HEIs 2001/02



Source: HESA data

The higher percentage of contract research staff and the tendency to pay contract-research staff slightly less than English HEIs suggests there is scope for Scottish HEIs to increase their efforts to reduce the number of staff on fixed-term contracts, and for salaries for contract research staff to be brought into line with those being offered in England.

Legislation came into force in October 2002 which obliges HEIs to protect employees on fixed-term contracts from being treated less favourably than comparable employees on indefinite contracts. HEIs are obliged to limit the overall duration of a series of fixed-term contracts to 4 continuous years after which the contract automatically becomes indefinite unless there is a justifiable objective reason for it continuing as a fixed-term contract. The Joint Negotiating Committee for Higher Education Staff (JNCHES – the national negotiating machinery for higher education staff)¹² has published guidance on the Fixed-term Employee Regulations 2002 specifically for HEIs, but trade union representative bodies remain concerned at the progress Scottish HEIs are making towards implementing the JNCHES guidance.

¹² <http://science.ntu.ac.uk/unison/JNCHES/JNCHES%20Guidance%20on%20Fixed%20Term%20and%20Casual%20Employment.pdf>

SHEFC has introduced a new condition of grant which requires institutions to devise and implement effective human resource strategies covering all staff, including contract research staff. SHEFC monitors institutions' performance in relation to the condition of grant through a range of sources of evidence, including institutions' strategic plans and separate returns.

CONTRACT RESEARCH SUMMARY FINDINGS

- A higher percentage of Scottish academic staff are employed on fixed-term contracts than in RUK.
- Almost all research only staff are employed on a fixed-term basis.
- Most contract research staff are paid between £15k – £25k.

3.20 COLLABORATIVE APPROACH TO RESEARCH

There is a recognised imperative in general for Scotland to retain and build on its strength in HEI research. Increasingly, efforts in this direction are being made on a collaborative basis, including the funding council/Universities Scotland pilot initiative to pool research activity in Scotland across several areas, including physics, economics, biological science and the creative arts.

A high level ambition is to make Scotland a viable alternative to the so-called Golden Triangle of London, Oxford and Cambridge, and any progress towards this objective is bound to make the Scottish research landscape more attractive to staff active in this area.

The Scottish Parliament's Enterprise and Culture Committee report into higher education funding¹³ recommends developing a more collaborative approach to enhance benefits packages for research staff.

This is also a feature of the Scottish Science Advisory Committee's report to the Scottish Executive,¹⁴ which suggests that stakeholders should act more collectively and creatively to support exceptional cases for the recruitment, career development, retention and resourcing of outstanding talent in the science base in Scotland.

As with senior academics, there is evidence to suggest that salary is not the most important factor affecting choices made by contract research staff. Research undertaken by the Institute for Employment Research as part of the Academic Research Careers in Scotland project¹⁵ found that job security and improved career prospects were the most important factors which had led to staff leaving HEIs for new careers. This view is also supported by the results of the SHOP survey.

To address the problem of fixed-term contract research staff at Scottish HEIs, there may be scope to develop a collaborative approach to offering research staff permanent posts and access to career progression across a number of Scottish HEIs.

¹³ <http://www.scottish.parliament.uk/enterprise/reports/elr03-03-02.htm>

¹⁴ http://www.scottishscience.org.uk/main_files/publications.htm

¹⁵ Academic Research Careers in Scotland, published by SHEFC and IER, December 2001

Working collaboratively to influence funding bodies to pay research staff in a way that works for, rather than against, long-term employment planning would also be essential. Some progress has already been made in this area.

RESEARCH COLLABORATION SUMMARY FINDINGS

- Job security and career progression are important factors for contract research staff.
- Potential scope exists to develop a collaborative approach to career progression across a number of Scottish HEIs – highlighted by the Scottish Solutions report and the Scottish Science Advisory Committee.

3.21 HOUSING COSTS

The SHOP survey identified housing costs as a factor influencing staff choice. It suggested that high housing costs, particularly in the Edinburgh area, were acting as a barrier to attracting staff.

As a factor, this is not unique to the Edinburgh area. The average house price in Greater London at around £239,000 is estimated to be nearly three times the price of a house in the north of England.¹⁶ This differential is above any advantage offered by a London weighting.

Conversely, high housing costs can be seen as an indicator of a thriving economy and exert a positive influence on staff choice.

There may be a case for Edinburgh-based HEIs to consider whether a housing premium would improve the attractiveness of jobs in HEIs located in that area.

HOUSING COSTS SUMMARY FINDINGS

- High housing costs are perceived to be a barrier to some, particularly in the Edinburgh area.
- Scope exists for Edinburgh-based HEIs to consider introducing Edinburgh weighting.

¹⁶ *The Times*, 10 December 2003

3.22 COMPETITION FOR HEI STAFF: AGE PROFILE

There are concerns about the impact of the age profile of university staff in Scotland, RUK and overseas. SHOP estimate approximately 35% of experienced staff are due to retire in the next 10 years.

For some disciplines, the percentage of staff aged over 50 is 40% or over. These include Mathematics, Business and Management, Physics, some areas of Engineering, Architecture, Languages and Health.

At the same time, the size of the younger cohort of staff is getting smaller. SHOP estimate that 16% of Scottish HEI staff are under 35, compared to 19% five years ago.

Assuming that age participation rates remain constant, demographic trends in Scotland are likely to decrease the number of Scottish graduates entering the workforce, thereby decreasing the pool of possible academic staff. The effect of this may be exacerbated by the potential for increased competition from industry for post graduate/post-doctorate staff, particularly in some disciplines.

A further factor is that, in future, new entrants to the HEI staff market may not be young graduates entering with a PhD. Particularly in the post-92 sector, where vocational programmes are more significant, a typical entrant might be an older person with more practical experience. Given the disparity with salaries in other sectors, this might suggest future recruitment problems in shortage subject areas, e.g. teacher training, business, finance and IT.

It is not yet certain what impact the forthcoming legislation on age discrimination may have on the issues surrounding the age profile of HEI staff, or on the ability of HEIs to respond to them. The new legislation may however give scope to alleviate the effect of a significant number of retirements taking place within a comparatively short period, as there may no longer be a recognised state pension age. Equally, the effect of the new legislation may be to skew the age profile further.

DEMOGRAPHICS SUMMARY FINDINGS

- Approximately 35% of experienced academic staff are due to retire over the next 10 years.
- Demographic trends point to a long-term declining pool of Scottish graduates from which to recruit academic staff.

3.23 OVERSEAS APPLICANTS

The proportion of overseas applicants for positions at Scottish HEIs varies considerably between the older and the post-92 universities. In the older universities, there is a reasonable proportion of overseas applicants, but these are increasingly in narrow subject areas and locations.

There has been a significant increase in applicants for engineering and computing disciplines, particularly from the Far East and Eastern Europe. In post-92 HEIs, less than 5% of applicants tend to be from overseas. However, there is again considerable variation, with one HEI reporting to SHOP 40% of applicants coming from overseas for a particular group of staff. Across the whole Scottish sector, there are difficulties in attracting the very best applicants from North America due to an inability to compete on salary or reward packages.

Looking ahead, there may be increasing competition for staff of a suitable calibre for Scottish and other universities alike. USA, Canada, Australia and RUK face the same issues in terms of an ageing staff profile, and increased competition from industry for post graduate/post doctorate staff. The planned expansion of the sector in USA, Canada and RUK is also expected to increase competition for staff of a suitable quality.

OVERSEAS APPLICATIONS SUMMARY FINDINGS

- There have been significant increases in overseas applicants for engineering and computing disciplines.
- Competition is likely to increase from other HEIs in USA, Canada, Australia and RUK.

3.24 GENDER BALANCE

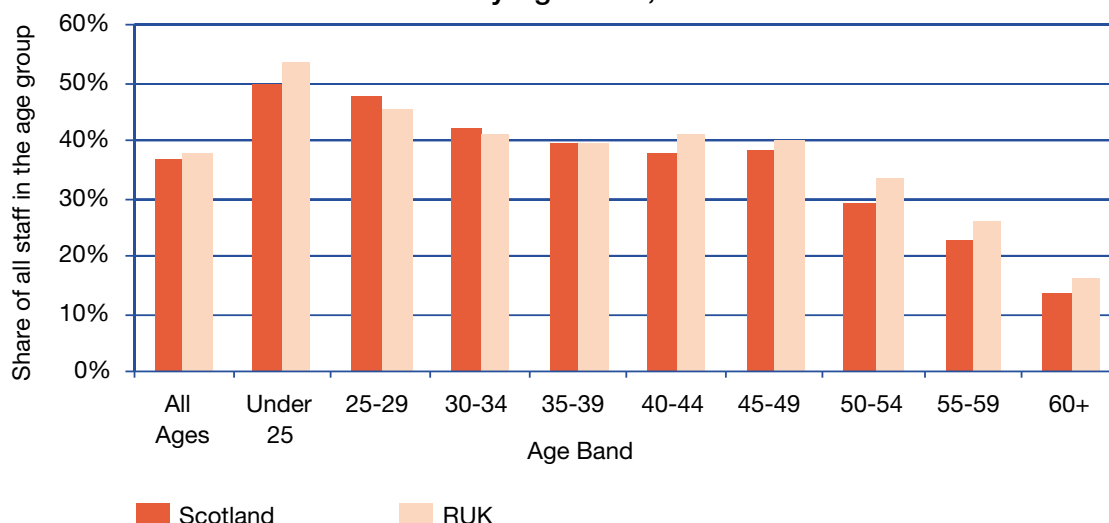
The SHOP survey identified the need for the academic sector to look to increase the number of female academic staff. At present, female staff are under-represented in the academic labour market, particularly in promoted posts. The table below illustrates the gender balance at Scottish HEIs and in the rest of the UK in 2001/02.

Gender summary of academic staff at HEIs in Scotland and the rest of the UK, 2001/02

	Scottish HEIs			RUK HEIs		
	Total	Male	Female	Total	Male	Female
Number of academic staff	16,760	63%	37%	128,477	62%	38%
Teaching and research	9,165	70%	30%	76,578	67%	33%
Teaching only	1,679	54%	46%	12,588	52%	48%
Research only	5,916	55%	45%	39,311	57%	43%
Full time	14,415	66%	34%	106,313	66%	34%
Part time	2,345	43%	57%	22,164	46%	54%
Average age	41.2	42.7	38.6	41.9	43.1	40

Source: HESA

Percentage of all Academic Staff at HEIs who were Female by Age Band, 2001/02



Source: HESA data

The graph above demonstrates that, on average, the percentage of women at Scottish HEIs is slightly lower than that in RUK (the graph shows the position at 2001/02). The position looks markedly better on more recent evidence in terms of higher proportions of younger women in the early career group, reflecting an increasing proportion of graduates who are women.

The figures suggest there may be a need to work to ensure the higher education sector offers family friendly policies in order to compete effectively with other employers, particularly for staff who have, or plan to have, caring responsibilities.

GENDER BALANCE SUMMARY FINDINGS

- Women are currently under represented in the academic workforce at Scottish HEIs.
- There is a need to work to increase the proportion of women working in Scottish HEIs, and in promoted posts.

3.25 THE ENTERPRISE AND CULTURE COMMITTEE'S SCOTTISH SOLUTIONS INQUIRY¹⁷

As part of its work to assess the impact for Scotland of the DfES proposals, the Enterprise and Culture Committee's Scottish Solutions Inquiry reported that:

The Committee is of the view that a pre-existing problem in recruitment and retention, caused at least in part by falling comparative pay scales, is likely to be exacerbated by any additional income stream to English universities. Precise timescales and effects are impossible to model but the Committee is clear that the trend would be for the situation to worsen over time. The Committee therefore recommends that the Executive works with institutions and representative bodies, including trade unions, to address recruitment and retention issues for Scottish higher education.

¹⁷ <http://www.scottish.parliament.uk/enterprise/reports/elr03-02.htm>

The comments of the Enterprise and Culture Committee may be directed more generally at a pre-existing problem in the UK rather than at a Scottish-only problem. Data such as that produced by UCEA indicates that Scotland currently has the fewest recruitment and retention difficulties in comparison to all English regions, Wales or Northern Ireland (see 3.4).

To support this view, as identified above, evidence from the sector does suggest that there are a variety of future threats to staffing recruitment and retention, and it is accepted that there is a need for HEIs, SHEFC and the Scottish Executive to review current policies affecting staff recruitment and retention.

SCOTTISH SOLUTIONS SUMMARY FINDINGS

- The Scottish Solutions report points to problems in recruitment and retention.
- There is a need for HEIs, SHEFC and the Scottish Executive to review current policies affecting staff recruitment and retention.

WHAT WOULD WE LIKE TO KNOW IN THE FUTURE?

3.26 DATA REQUIREMENTS

In order to allow Scottish HEIs, SHEFC and the Scottish Executive to take action at an appropriate time, there is a need for better data about staff movements and the factors affecting staff choice.

In particular, there is a need for data to complement that already available from HESA. This includes more qualitative data about the factors influencing staff choices, but also more quantifiable data about staff movements. Currently, HESA data do not identify which universities staff move from and to.

To capture more qualitative data, it may be necessary to undertake a survey of Scottish HEIs on a regular basis or sample HEI staff on a periodic basis, to obtain their views on recruitment and retention issues.

HEIs could put in place more robust mechanisms to gather data about staff movements on a regular basis.

Specific data that it would be beneficial to gather include:

- number and percentage of total posts unfilled across the sector and by department
- number of posts where no appointment made following advert (i.e. to assess quality of applicants)
- feedback from exit interviews, i.e. why staff leave, and where they go to
- trend data on staff movements.

3.27 HE IN FE COLLEGES – STAFF

Within the context of this Review, it has not been possible to obtain data relating to the recruitment and retention of staff teaching higher education in FECs. This is in part due to the integrated way in which higher education is delivered in FECs.

The report however recognises the importance of having access to such data in the future, and makes it clear that mechanisms should be put in place to track movements of staff into and out of FECs. This will be particularly important in the future, due to the potential impact of the plans to expand the size of the higher education sector in England, particularly at Foundation Degree level.

More data in particular on staff delivering HE courses, including those who deliver franchised degree courses, is needed.

WHAT ISSUES ARE LIKELY TO BE IMPORTANT IN THE FUTURE?

3.28 TRENDS TO MONITOR

There are a number of issues which may affect the future strength and stability of staffing in the Scottish HE sector. The extent to which these factors will affect individual institutions will vary. To inform future policy developments, there are a number of issues that should be tracked. They include:

- any increase in pay premia offered by HEIs UK-wide
- impact of 'Golden Hellos' being offered to new academics in England
- impact of HEFCE funding stream for Rewarding and Developing Staff
- perceptions of Scottish HEI sector: if any perception, real or otherwise, that Scottish HEIs are underfunded in comparison to RUK, staff will be less inclined to consider working in Scotland
- ability to attract staff of suitable calibre (quality rather than quantity – research required)
- ability of HEIs to recruit female academics and their appointment in all disciplines including but not only those where females are dominant in the graduate workforce.
- ability to reduce staff churn amongst younger cohort, and thereby address issues arising from current ageing workforce.

WHAT CAN WE DO NOW?

3.29 POLICY OPTIONS

The results of this data-gathering exercise suggest that there are a number of current and potential pressures affecting staff recruitment and retention for the Scottish higher education sector. To address these pressures, it is suggested that there is scope to consider the following:

- consider how salaries and other terms and conditions might be made more competitive in comparison to other comparable professions, recognising that this must be a fundamental issue in terms of the long-term ability to recruit and retain staff.
- gather staff data on a more systemic basis across Scottish HEIs, and FECs
- develop ways of attracting and retaining, young academic staff of suitable calibre (possibly exploring a collaborative approach between HEIs to offer career progression for the most able)
- allocate funding specifically to finance pay modernisation ('ring-fencing' from within current baseline would be unwelcome in the sector as this would imply eating into funding available for existing pay)

- establish and finance fellowships to attract internationally renowned professors to Scotland, and support young ‘rising star’ researchers
- promote/fund work through LECs to attract academic staff (recent good exemplar of Tayside/Dundee University)
- reduce percentage of fixed-term contract staff amongst research staff, to improve recruitment and retention through increased job security.
- develop more family-friendly policies within the confines of the national pay framework
- identify ways of attracting more females to academic positions, with a view to gender balance in HEIs reflecting that of the graduate workforce.

4.1 KEY FINDINGS

- The evidence shows that there is a clear problem among HEIs in terms of backlog maintenance, which is currently estimated to be around £430 million.
- Almost 50% of the Scottish HE estate requires major repair expenditure.
- The Scottish estate is large, diverse and expensive to maintain, however, investment in capital and maintenance is proportionally lower than in the rest of the UK.
- There is a balance of responsibility which has to be shared between the Executive and the institutions.
- As the main funder of HE, the Executive must ensure that HEIs are adequately funded to meet its priorities.
- At the same time, institutions must demonstrate that they are making the best use of public funds, monitoring effectively and investing in a sustainable manner. As autonomous bodies, institutions must continue to do all they can to find alternative sources of funding to supplement Executive investment and to rationalise and better utilise their estates.
- SHEFC should continue to play a proactive role in evaluating and querying the estates strategies of institutions and assisting institutions to invest in capital in a sustainable manner. Any future capital investment must be allocated by SHEFC in a manner which ensures that institutions demonstrate best value being achieved from public funding through estates strategies which are focused on delivering a high quality experience for students, researchers and other staff.
- Institutions and SHEFC should work more closely to identify and facilitate increased collaboration and innovative approaches to estates strategies on a national and regional level. This should not just take place among HEIs, but also with SHEFC and other potential partners in the public or private sectors.
- When proposing any action on capital investment in HEIs, the implications for HE provision in FE colleges should be considered.
- Any future additional capital funding for teaching should be allocated explicitly for this purpose.
- A comparable analysis in terms of HE provision in FE still needs to be done.



4.2 APPROACH OF THE CAPITAL GROUP

The Capital Group set out to explore and address the issues surrounding investment in capital in institution's estates, focusing on all aspects other than the residential estate. Investment in estates had been identified at the outset of this exercise as one of the critical pressures on HEI budgets.

The majority of the Group's discussions were based around the information provided from SHEFC's annual estate and financial forecast returns and the UK-wide, joint Funding Council Estate Management Statistics (EMS) project, both of which are based on data provided by institutions. Further background on the estates returns and the EMS are available in Annex B.1.

In addition to this, the Group considered the findings of two reports from JM Consulting which look at the UK position of research and teaching estates. These reports were based on data from HESA including Scottish institutions. Therefore, the conclusions are as relevant in Scotland as they are across the rest of the UK.

The information provided from these sources informed detailed discussions around the key issues concerning capital funding and estates. This report begins by looking at the findings of the JM Consulting work and then examines the Scottish position in more detail before highlighting the conclusions of the Group.

4.3 UNDERSTANDING THE CURRENT POSITION – UK

4.3.1 JMC Reports on Teaching and Research Infrastructure

It is a feature of UK HEIs that teaching and research are conducted in the same institutions, often using some shared accommodation and facilities. Their infrastructure requirements are therefore closely inter-related and parallel studies were commissioned from JM Consulting on the infrastructure needs of both teaching and research.

Due to this inter-relation and the fact that the research report was published first (December 2001), some of its key findings also apply to teaching infrastructure. The research report is therefore considered first in this paper. The teaching report was published in June 2002.

4.3.2 Study of science research infrastructure

A report for the Office of Science and Technology by JM Consulting, December 2001

This study reviewed past investment in science research infrastructure in UK universities and colleges of higher education, assessed the extent of remedial investment required and set out the conditions needed for managing research infrastructure on a sustainable basis in future.

It reported prior to the announcement of the second phase of the Science and Research Infrastructure Fund (SRIF2) which is specifically aimed at addressing past under-investment in existing research infrastructure. SRIF2 will provide additional investment of £98 million in 2004/05 and 2005/06. Analysis of the submissions from Scottish institutions suggests the bulk of this investment will improve the quality and condition of the existing estate. The institutions benefiting the most from this will clearly be those which are the most research-intensive.

4.3.3 Key findings for UK HE institutions

- Fifty per cent of the estate was built in the 1960s and 1970s to relatively low and inflexible specifications and is now nearing the end of its design life while there are significant new requirements arising from scientific and technological advance, from recent growth in research (and student) volumes and from legislation.
- There are significant remedial investment needs in terms of the maintenance condition of buildings and services, their fitness for modern research purposes and the adequacy and specification of the specialist contents that support research, namely libraries, information technology networks and scientific equipment.
- Analysis of expenditure by institutions over the last decade shows that institutions have invested very broadly the right amount to stand still in maintenance condition terms but this has not been sufficient to remedy the maintenance backlogs – the reasons for this under-investment are complex and multi-faceted.
- Institutions have become increasingly responsible for financing their own infrastructure although the injection of public funds through the Joint Infrastructure Fund and the Science Research Investment Fund Phase 1 will off-set this trend in the short-term.
- While this infrastructure funding has been invaluable they have made a relatively modest impact on the problems of the existing research infrastructure, although the Science Research Investment Fund 1 has been more effective in this respect, as will SRIF2.

4.3.4 Recommendations from JMC study into research infrastructure

- Self-help by the higher education sector taking greater responsibility for its own asset management.
- A remedial capital funding programme to address identified backlogs.
- Action across the range of research funders to address the low-price culture, and to bring the recurrent funding of research closer to a sustainable level.
- Continuing government support for exceptional advanced infrastructure projects such as those funded by the Joint Infrastructure Fund.

4.3.5 Teaching and learning infrastructure in higher education

A report to the Higher Education Funding Council for England by JM Consulting, June 2002

This study reviewed the requirements for infrastructure for teaching and learning in UK universities and colleges of higher education, assessed the extent of investment required and set out the conditions needed for managing teaching and learning infrastructure on a sustainable basis in the future.

4.3.6 Key findings for UK HE institutions

- Teaching infrastructure has probably suffered relatively more because of the competition for resources from research, including the need for matching funds for programmes such as JIF and SRIF. This need has had an adverse effect on levels of investment available for teaching.
- Of £4 billion in capital funds allocated to institutions over the past 10 to 12 years, a maximum of 35% was, in principle, accessible for teaching, compared with its 60% share of infrastructure costs attributable to teaching.
- Key issues affecting the need for investment in teaching infrastructure are essentially the same as those affecting research space, that is age; condition; significant backlog maintenance including growing legislative requirements; changing teaching methods (including information technology) and the rise in new subjects and increasing quality requirements. In particular, new subjects are often more vocational and can need more expensive equipment for simulation (e.g. computer science, nursing).
- An additional factor for teaching infrastructure is the changing profile and increasing diversity of the student population in terms of age, ethnicity and social background and related changes in needs and expectations including those of international fee-paying students, who are often paying a premium and therefore can have higher expectations.
- A crucial factor is the suitability and utilisation of space and the limited capacity of institutions to create new space or use existing space more effectively without significant capital investment over a reasonable timescale.
- Although many institutions could use their space more efficiently if funds were available for restructuring and refurbishment, a key issue is not just configuration and upgrading of existing estate but how large the future estate needs to be and how it should be configured. Especially given that communications and IT are improving the quality of learning and are helping to meet rising student expectations, but for on-campus students as yet these have had little substitution effect for conventional learning methods.

4.3.7 Recommendations from JMC study into teaching and learning infrastructure

- A policy initiative, by the government and the Funding Councils, is needed to clarify and support the responsibility for institutions for planning and investing to maintain their own physical infrastructure on a sustainable basis.
- The government should provide a capital funding scheme, allocated to institutions on a formulaic basis and spread over several years to address the £5 billion (2001 prices) remedial investment in existing infrastructure.
- To address the evolving needs of UK capability in e-learning and widening participation, a more selective project-based scheme is needed to which HEIs could bid for a limited number of advanced facilities perhaps at a level of £100 million over a five-year period.

In terms of response, capital investment of £1.18 billion in the period 2002/03 to 2005/06 for institutions funded by HEFCE was announced in the DfES White Paper – ‘The Future

of Higher Education' in January 2003 – this represents an increase of 185% in cash terms in 2005/06 over 2002/03. In its 2004/05 grant allocation, around 10% of HEFCE's funding for institutions is ring-fenced for capital. This compares to around 6% of its allocation in 2002/03.

SHEFC made a submission to the Spending Review 2002 for additional capital funding for teaching infrastructure. In Scotland no additional ring-fenced funding was provided for teaching capital, giving institutions the responsibility and flexibility to use their funding to address their individual priorities and situations. The 2002 Spending Review settlement will provide over £800 million per year for the HE sector in Scotland by 2005/06, an increase of nearly 15% in cash terms compared to £700 million in 2002/03. This increase includes significant funding of £25 million for 2004/05 rising to £35 million in 2005/06 to boost science and research in Scottish HEIs, but no funding was specifically allocated to teaching infrastructure.

JMC REPORTS – SUMMARY FINDINGS

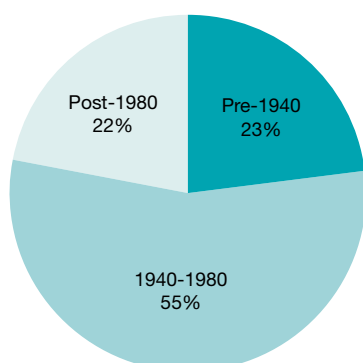
- The JMC reports show that there are significant investment requirements in the teaching and research infrastructure and suggest that this backlog restricts the ability of institutions to invest in an effective and innovative way.
- The reports make it clear that there should be greater responsibility on HEIs to manage assets and maintain estates in a sustainable manner. This will include better utilisation of space and rationalisation of estates.
- For both teaching and research JMC advocate the continued use of selective project-based funding schemes to support developments in key areas.

4.4 UNDERSTANDING THE CURRENT POSITION – SCOTLAND

4.4.1 Age and size of the estate

Of Scotland's 21 HEIs, 18 submit annual estates information to the Funding Council (see Annex B.2). Between them, these 18 HEIs have 89 sites and 1652 buildings of which 962 (58%) are non-residential and 690 (42%) are residential.

4.4.2 Construction of HEI buildings

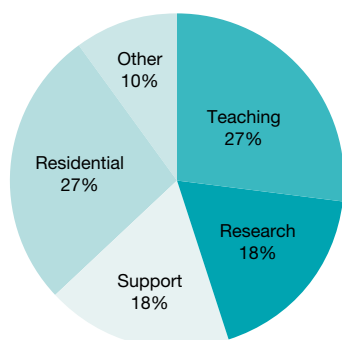


23% of these buildings were constructed pre-1940
55% were constructed between 1940 and 1980, and
22% were constructed after 1980.

Source: SHEFC Estate Management Statistics

4.4.3 Size of the estate

The total net internal area of the estate is 2.2m m², split as follows:



Source: SHEFC Estate Management Statistics

4.4.4 HE provision in FE colleges

FE Colleges are funded directly through SFEFC for HE level provision, in the main at HND/HNC or equivalent levels. The SFEFC allocation includes a ring-fenced capital budget for colleges. There is no corresponding capital budget allocated to HEIs by SFEFC. SFEFC currently monitors the estates of FE colleges and the first phase report of the UK-wide joint funding Council Estate Management Statistics Project in FE colleges was published in November 2003.¹⁸ When considering the capital needs for estates infrastructure in HEIs, the effect of any changes on the HE provided in FE colleges must be taken into account. This issue has not been addressed in this report.

4.5 THE CONDITION OF THE SCOTTISH HE ESTATE

4.5.1 General information

The condition of HE estate in Scotland, like the sector itself, is extremely diverse and situations differ significantly from institution to institution. As the first pie chart above shows, the majority of buildings were built between 1940 and 1980 and as such, a number of these will require refurbishment or rebuilding over the coming years.

Compared proportionally to the rest of the UK, there is a high concentration (almost one quarter) of pre-1940 buildings. Older buildings such as these face particular challenges, especially with regards to difficulties in complying with disability legislation, etc. In many cases these buildings will also be listed which adds to the complexity of managing and maintaining these facilities in a sustainable way.

4.5.2 Royal Institute of Chartered Surveyors – condition classifications

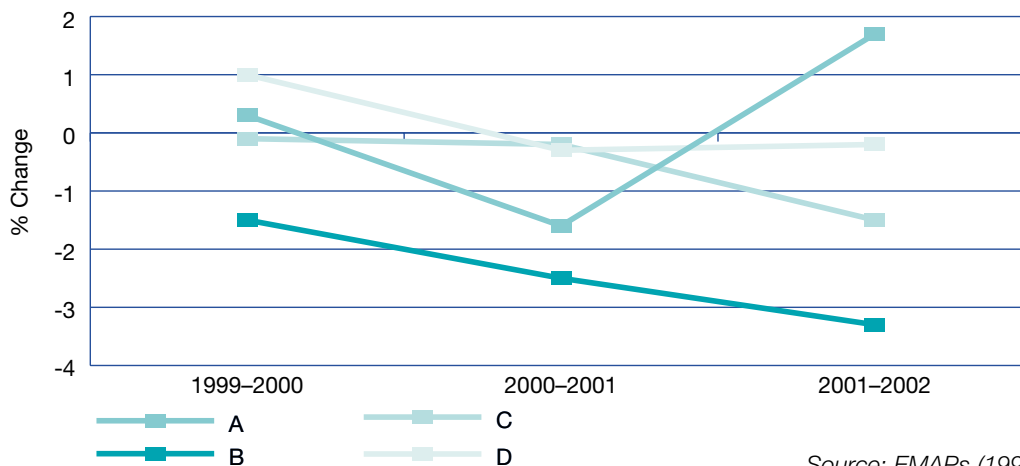
Information on estate condition is based on Royal Institute of Chartered Surveyors (RICS) categories and this categorisation of the estate necessarily involves a degree of subjective judgement. Condition surveys are costly and time-intensive and universities normally undertake these for the whole estate every five years. The RICS categories are:

- A As new
- B Sound, operationally safe, exhibiting only minor deterioration
- C Operational but major repair or replacement needed soon
- D Inoperable or serious risk of failure or breakdown

Institutions first provided information on estate condition and the cost to improve to category B in the 1999 estate returns. Based on the most recent condition surveys,

¹⁸ www.sfehc.ac.uk

Fluctuations Between RICS Categories 1999–2002



around half of the Scottish HE estate is in poor condition, i.e. RICS categories C and D and nearing the end of its economic and practical life. This compares to a UK average of 33%. The condition of the Scottish estate has exhibited only minor fluctuations between RICS categories as the table below shows.

In December 1999 SHEFC set a provisional target for all institutions to have 70% of the estate in conditions A and B. This was based on a similar target held by HEFCE. The EMS 2003 report reveals only eight of the 18 institutions had met or exceeded this target, by their own estimation, by 2001/02. Both Funding Councils have now moved away from such targets to support more focussed estates strategies based on the individual circumstances of particular institutions.

4.5.3 Maintenance backlog

In 2001/02 institutions estimated the cost to improve the whole estate to RICS Condition B as around £430 million. This is compared to an estimated £465 million in 2000/01. In that, therefore, there was a reduction in the region of £35 million (7.5%) in total backlog maintenance.

This backlog has accumulated as a result of the increasing number of institutional choices about how to respond to the downward pressures on the unit of resource throughout the 80s and 90s. In recent years, the backlog has been further exacerbated by the requirements of meeting disability legislation.

THE SCOTTISH ESTATE SUMMARY FINDINGS

- Around 50% of the Scottish estate falls into RICS categories C and D.
- An estimated £430 million is required to bring the entire HEI estate up to category B.
- The Scottish HE estate is large, diverse and contains a higher proportion of older buildings than the rest of the UK, making the estate more complex to manage.
- Eight of the 18 Scottish HEIs which report estates information have over 70% of their estate in RICS categories A or B.

4.6 MAINTENANCE EXPENDITURE OF SCOTTISH HEIs

Several sources (including the JMC reports) have suggested that a figure of between 1.5% of insurance replacement value should be invested in the estate annually to ensure current maintenance requirements are met and no backlog is allowed to accumulate. Based on an estimated insurance replacement value of £4.2 billion, this suggests institutions should be spending in the range of £60 – £200 million annually on maintaining the building fabric of the estate. This does not take account of additional expenditure required on utilities and other associated costs. Also, the JMC figure of 1.5% was qualified by assumptions of a more favourable overall environment which JMC did not regard as being met.

The figures in the table below for maintenance expenditure increased in 1999 as information began to be gathered from institutions' financial forecast returns.¹⁹ This definition of premises costs includes the total cost of maintaining the estate and figures in the financial forecast returns do not differentiate between the different types of expenditure, which includes maintenance of premises, roads and grounds (except residences and catering) including the costs of staff associated with building maintenance and estate administration; rent; buildings and contents insurance; cleaning; portering; security; and recurrent costs such as fuel, gas, electricity, water and sewerage.

Maintenance Expenditure of Scottish HEIs (Including utilities, staff cost, etc.)

	<i>Actual:</i>					<i>Planned:</i>			
	1998	1999	2000	2001	2002	2003	2004	2005	2006
£m	43	65	74	67	70	84	87	87	89

Sources: Estate and financial forecast returns and EMS report 2003

MAINTENANCE SUMMARY FINDINGS

- The EMS **2002** report suggested that institutions' maintenance levels purely on building fabric were sufficient only to retain the current position and had little impact on backlog maintenance and obsolescence due to significant increases in other cost categories such as energy, water and the growing cost of legislative requirements.
- The EMS **2003** report shows marginal increases in building fabric maintenance expenditure by some institutions, a finding also evident from analysis of institutions' strategic plans and estate strategies.

¹⁹ Table 2c – other operating expenses – premises

4.7 CAPITAL EXPENDITURE OF SCOTTISH HEIs

Actual investment in the estate in the past six years has been £763 million with planned investment in the next three years of £489 million. This includes funds from all sources: SHEFC; Research Councils; bodies such as the Wellcome Trust and the British Heart Foundation; the reinvestment of sales receipts from major disposals and institutions' own funding.

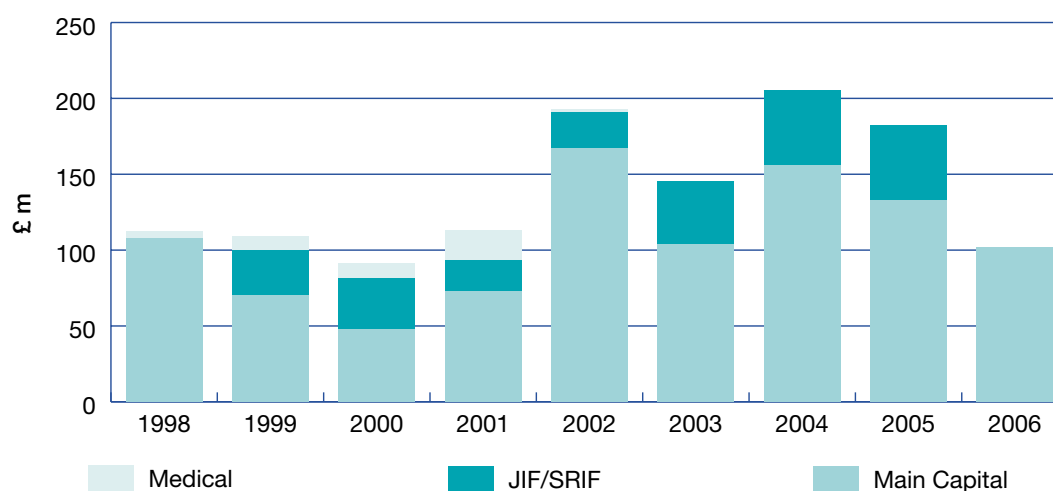
A number of factors have resulted in the increased levels of investment (mainly in research intensive institutions). For example:

- Several injections of capital funding for medical schools:²⁰
£45 million between 1998/99 and 2004/05
- Science research infrastructure²¹ – £256 million:
£68 million from (JIF) between 1999/00 and 2001/02
£15 million for the SHEFC Research and Infrastructure Fund in 2001/02
£65 million from SRIF in 2002/03 and 2003/04.
£98 million will be invested through SRIF2 in 2004/05 and 2005/06.

Some background on JIF and SRIF is included in Annex B.3.

Capital Expenditure (including specific allocations)									
£m	Actual:						Planned:		
	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total	112	109	91	113	193	145	205	182	102
JIF/SRIF	0	30	33	20	24	41	49	49	tbc
Medical	4	9	10	20	2	0	0	0	0
Other	108	70	48	73	167	104	156	133	102

Capital Expenditure of Scottish HEIs



Sources: Estate returns and 2001/02 financial forecast returns – HE/03/03 Annex C

²⁰ Over recent years, almost £40 million was given to support the capital cost for the new medical school at the University of Edinburgh Medical School and over £6 million was given to the University of Glasgow in 2001/02 to supplement investment raised from fund-raising to build their new medical facility.

²¹ These figures include additional monies from outside the Executive such as the OST and the Wellcome Trust.

Estate return analyses show an underlying downward trend in capital expenditure. For example, in 2002 planned investment for 2004/05 was anticipated to revert to a level similar to those prior to the introduction of the first SRIF.

Analysis of institutions' financial forecast returns for 2001/02 indicated that a large proportion of capital investment was to be financed from institutions' cash reserves. This analysis also indicated many HEIs are severely limited in their ability to make further investments in capital assets from cash reserves in the short term and suggested such further investment will have to be financed from surpluses generated from operating activities or increased borrowing, to the extent that they are not met through further public investment.

4.8 OTHER PRESSURES

Over and above the backlog maintenance issue there are other significant and increasing pressures on Capital Budgets. For example, nationally recognised indexes – the Building Cost Information Service (BCIS) – demonstrate that costs in the construction sector have significantly outpaced other inflationary benchmarks. Consequently, the ability for institutions' capital programmes to address problems and make improvements is diminished. Also, the cost of meeting increasing legislative requirements imposes further demands albeit for positive reasons, such as the requirements for improvements with regard to disability and physical access.

The cost of meeting progressive legislative requirements increased from £58 million in 1998 to £109 million in 2002. A sector audit in 2002 suggested that £40 million was required to meet the cost of bringing all Scottish HEIs in line with the physical access requirements of the disability legislation. It was expected that part of this requirement would be met through the standard replacement build. In December 2002, to assist institutions in meeting these requirements, the Executive provided SHEFC with an additional £10 million.

CAPITAL EXPENDITURE SUMMARY FINDINGS

- Expenditure on capital over recent years has been supplemented by additional investment for example through JIF, SRIF and specific medical school projects.
- Over and above the backlog maintenance there are other significant, and increasing, pressures on capital budgets such as the cost of meeting legislative requirements with regards to disability and physical access.
- At the same time, building costs have increased at a rate in excess of standard inflation.

4.9 DIVERSITY OF THE SCOTTISH HE SECTOR

As this report has highlighted, there is a significant degree of diversity in Scottish HEIs. The following information is derived from a variety of sources²² and is supported by estate visits and discussions between SHEFC and university Directors of Estates.

Analysis of institutions' total capital investment in the estate reveals the dominance of the two largest institutions. For example, in 2001/02 the proportion of the Scottish HEIs' total capital investment for each institution was 28% (Edinburgh) and 15% (Glasgow). Fourteen institutions accounted for less than 10% and 12 institutions for less than 5% of total capital investment in the estate in 2001/02.

As has been highlighted, the Scottish estate is very diverse with each institution having unique circumstances and facing many different pressures, especially in the small specialist institutions. Problems can become particularly acute where the maintenance of heritage buildings, for example, Glasgow School of Art's Mackintosh building, are involved.

Both of the JMC studies recognised that the priority of investing in the estate varies between institutions. This finding is supported by discussions at estate visits undertaken by SHEFC. The capacity to attract different sources of funding including endowment funding (principally for those institutions which are research-intensive) and, in particular, the ability to dispose of assets and reinvest the sales proceeds varies between institutions, as does the incidence of higher land values in some geographical areas and access to borrowing.

A number of institutions are involved in major estate projects, including those funded by science research infrastructure grant. All of these projects necessarily have high professional and project management costs. Major investment in science research infrastructure, the bulk of which has been allocated to a small number of institutions, has directed some maintenance budgets to specific projects and away from planned maintenance, further increasing backlog maintenance levels in these institutions.

4.10 IDENTIFICATION OF POTENTIAL FOR GREATER EFFICIENCY

4.10.1 Existing examples

There is substantial evidence that many institutions are involved in major measures to improve both the efficiency and use of existing resources and the effectiveness of their estates. Some examples include:

- a major relocation financed by the disposal of poor condition estate and reinvestment in a new build estate (QMUC)
- major disposals of poor condition estate and reinvestment in new build or refurbished facilities (Aberdeen; Edinburgh; GCU; Napier; Robert Gordon; Strathclyde)

²² HEIs Estate Management Action Plans, EMC, JMC reports, SHEFC Financial Forecast returns.

- merger implementation.²³
- science research infrastructure fund (major allocations to Dundee; Edinburgh; Glasgow; Strathclyde).
- rationalisation and improved space management is being implemented by a number of HEIs such as the University of Edinburgh and The Robert Gordon University. Some details on these examples are set out in the boxes below.

Edinburgh University was one of the first UK HEIs to introduce a Space Management Committee. The university has, recently, been able to relocate some medical facilities to its medical school at Little France. This allowed them to reconfigure a range of activities in the city centre which, with effective space management, eventually allowed them to dispose of four properties in the former estate of Moray House. The resultant sale proceeds will be used to renew certain facilities and address some of its backlog maintenance in the city centre (by approx. £5 million).

The Robert Gordon University approved an Estates Strategy in 1994 covering a 20-year planning period. Its principal recommendation over the first 10 years was the rationalisation of RGU's estate – which was spread across five main teaching campuses and two further, minor campuses within Hospital Trust properties – on to two sites, allowing the University to enjoy the benefits of a greenfield campus development and a city centre presence on the University's historic site.

By the end of 2004, the university will have fulfilled all of the objectives set for the first 10 years of the estates strategy through a phased implementation of its plan at a total cost of £65 million. The funds for this investment by RGU have been raised from a variety of sources as follows: SHEFC capital grant (£9 million); sale of surplus assets (£25 million); internal funds – accumulated profits from commercial activity (£20 million); borrowing (£10 million); fundraising (£1 million).

²³ Recent mergers (since 1992) include: Jordanhill College of Education with the University of Strathclyde; Craigie College of Education with the University of Paisley; The Queen's College, Glasgow with Glasgow Polytechnic to form Glasgow Caledonian University; Duncan of Jordanstone College of Art with the University of Dundee; Moray House Institute of Education with the University of Edinburgh; The Scottish College of Textiles with Heriot-Watt University; St Andrew's College of Education with the University of Glasgow; Northern College of Education with the Universities of Aberdeen and Dundee.

4.10.2 Strategic approaches to effective estates management

Many institutions have also developed strategic estate development frameworks in which they have prioritised projects for investment subject to funding becoming available. Most institutions are now developing and enhancing their approach to estates with many now developing frameworks which evaluate possible priorities over periods of up to 20 years.

Potential exists for increased efficiency but evidence suggests this may be difficult to achieve until the adequacy and prioritisation of existing resources for the estate is addressed. Substantial capital funding is required to enable institutions to address the high and growing levels of backlog maintenance. The questions that must be addressed are how much of this additional resource needs to be redirected from within the existing budget and how much must come from new sources and how should additional funds be allocated to achieve the desired results?

The most potential lies in the area of more effective space management as many institutions are hampered by the existing type and configuration of space to meet current and future needs and expectations. However, this area is not always within the control or influence of the estates function.

In recognition of this the UK Funding Councils have established the Space Management Group chaired by Roger Williams, former Vice Chancellor, University of Reading and a major piece of research has just been commissioned to examine the many and varied cultural issues surrounding the management of institutional space. Phase 1 of the study should be completed in June 2004 and is due to report in August/September 2004.

There are several examples of models of the affordable estate that could be developed but any application would need to accommodate the diversity of institutions. In addition, implementation needs to take into account the complexities of planning; local, community and political issues; academic requirements especially in new research areas; and the need for sufficient space to respond flexibly to the institutions' strategic direction. Shared use of resources across the sector (and with others beyond) will become increasingly important in the future and greater collaboration on a regional and national scale will be essential.

The refurbishment and reconfiguration of existing space requires substantial investment. Some of the key estate ratios in the EMS project could provide a basis for efficiency measures.

The National Audit Office Wales is currently scoping a study into carrying out a review of the efficiency measures used by the EMS project. Results of the main study are planned for April 2004.

4.11 ENTERPRISE AND CULTURE COMMITTEE – SCOTTISH SOLUTIONS

The Enterprise and Culture Committee's report into Scottish Solutions,²⁴ paragraph 123, recognises that the taxpayer must be assured that any investment is being used as effectively as possible. The Committee recommends that the Executive should actively assess the economies of scale that could be achieved by sharing aspects of university operation, potentially on a regional or even national basis. The Committee considers that resources released by such action could then be redirected to core teaching and research activities.

The Executive's response noted that it supported this recommendation and will look to SHEFC in future to take a more proactive role in working with institutions to achieve this.

SCOTTISH SOLUTIONS SUMMARY FINDINGS

- There are currently a number of good examples of innovative approaches to estates management across Scottish HEIs. Such positive examples of best practice should be shared across the sector and lessons learned.
- Further innovation appears to be hampered by the burden placed on HEIs by the excessive maintenance backlog.
- Additional funding is required to address the backlog maintenance. At the same time, institutions must be able to demonstrate that full efforts are being made to address these problems from existing budgets.

4.12 SCOTLAND IN THE UK CONTEXT

4.12.1 Investment in HE

Traditionally, DfES has ring-fenced an amount of its core funding for capital. The figures in the table below show that the direct grant for capital in England is planned to increase significantly by 2005/06.

Comparison of Expenditure in HE – Scotland and England							
	Scottish Executive		DfES				
£m	HE Budget ²⁵	HE Budget	Amount ring-fenced for Capital	Teaching	Research	Capital as % of total HE budget	
2002/03	700	7,596	Total	411	155	256	5%
2003/04	737	8,309		571	207	364	7%
2004/05	786	9,057		830	377	453	9%
2005/06	820	9,918		895	442	453	9%

Sources: Scottish Executive, DfES 'The Future of Higher Education'²⁶

²⁴ www.scottish.parliament.uk/enterprise/report/elr03-02.htm.

²⁵ Does not include funding through the Student Awards Agency for Scotland.

²⁶ www.dfes.gov.uk/highereducation/hstrategy/

In Scotland, SHEFC has decided not to ring-fence funding for capital in this way. It was agreed in principle that institutions should receive as much of their funding as possible in block grant (allocated through the SHEFC formulae) leaving Principals with the autonomy and discretion to use funds as they saw fit to meet the goals of their institution and address the priorities set out by Ministers.

The sector welcomed this decision to integrate capital funding into the unit of resource. This has enabled universities to make sensible decisions suiting individual circumstances. However, institutions have suggested that the increasing and varied pressures on the unit of resource for both capital and running costs mean that teaching infrastructure is under-maintained and developed in some areas. The evidence available suggests that ring-fencing an element of the existing HE budget for capital will not provide an answer to existing problems.

COMPARING HEFCE AND SHEFC SUMMARY FINDINGS

- England ring-fences a significant and increasing proportion of funding for capital.
- Scotland has traditionally worked to reduce top-slicing of the budget for specific purposes to maximise the autonomy and discretion of principals to make decisions. It is understood that this situation has the continued support of the sector.
- The issue of ringfencing for capital funding should be considered further by the merged Funding Council.

4.12.2 Estates comparisons between Scotland and England

The table on the following page sets out comparisons of a number of key estate ratios in Scotland, England and Wales. Some of the most stark figures have been highlighted.

These figures clearly illustrate that a far greater proportion of the Scottish estate is in need of major repair and expenditure in comparison with the rest of the UK. Almost 50% in Scotland compared to around 30% in England and Wales (Key Ratio 1). It is also evident that capital expenditure per m² is significantly higher in England (£76.64) than it is in Scotland (£24.60) or Wales (£27.75) (Key Ratio 7).

When reading these figures, there are numerous other factors which must be taken into account. For example, as regards space per student, there is no reference to differences in research accommodation and Scotland traditionally has more medics and engineers which could be expected to lead to a higher space per student ratio.

Looking further at the key ratios, Scotland also has a higher proportion of older and listed buildings than in England. These figures do provide an strong indication of the different situations North and South of the border. Some of the key ratios can be outlined as follows:

Key Ratio 1 This suggests that, compared to England and Wales, a significant proportion of the Scottish HE estate is in need of major repair expenditure.

- Key Ratio 4 In Scotland, property costs take up a higher proportion of overall income.
- Key Ratio 5 In Scotland, the property costs per m² are higher than elsewhere in the UK.
- Key Ratio 6 Scotland has significantly higher property costs per (FTE) student.
- Key Ratio 7 Capital expenditure is far higher in England than the rest of the UK and has risen sharply. In the previous year, 2000/01, the English median was significantly lower at £40.37 compared to a Scottish median of £25.98 and a UK figure of £35.78, although these figures were taken from smaller samples.
- Key Ratio 8 Maintenance costs per m² are lower than the UK average in Scotland.
- Key Ratio 11 Estate management ratios are higher in Scotland
- Key Ratio 12 The Scottish estate has a greater space-to-student FTE ratio.

SCOTLAND AND ENGLAND SUMMARY FINDINGS

- Scotland has a larger estate per student which is in greater need of repair and is more expensive to maintain.
- Compared to the rest of the UK, Scotland invests less in maintenance and spends less per m² on capital. At the same time, property costs make up a greater proportion of overall income.

The following table illustrates how Scotland sits alongside England, Wales and the UK as a whole when comparing key estate ratios.

Key ratio	UK median 99-00 ²⁷	UK median 00-01	England median 01/02	Scotland median 01/02 ²⁸	Wales median 01/02	UK lower quartile 01/02	UK median 01/02	UK upper quartile 01/02
1 % of non-residential estate not requiring major repair expenditure	63%	67%	67%	51%	69%	47%	67%	84%
2 % of non-residential estate suitable for current functions	60%	66%	69%	65%	67%	50%	69%	80%
3 HEI income per square metre NIA	£629	£666	£716	£681	£616	£613	£711	£854
4 Ratio of total property costs to income	9.9%	9.8%	8.9%	11.30%	9.8%	8.1%	9.1%	11.2%
5 Total property costs/m ² NIA (excludes capital expenditure)	£77.37	£80.65	£83.45	£89.80	£73.24	£71.94	£84.74	£99.87
6 Total property costs per student FTE	£722	£760	£725	£1,130	£748	£533	£758	£1,075
7 Capital expenditure/m ² NIA	£38.76	£35.78	£76.64	£24.60	£27.75	£21.29	£66.28	£112.62
Component property costs								
8 Maintenance costs/m ² GIA	£16.18	£16.00	£15.93	£12.18	£16.33	£11.97	£15.64	£22.24
9 Ratio of maintenance costs + capital expenditure to insurance replacement value	3.6%	3.6%	4.4%	2.7%	3.1%	2.2%	4.2%	6.2%
10 Energy costs/m ² GIA	£6.08	£6.33	£6.68	£6.81	£6.59	£5.92	£6.71	£7.95
11 Estate management costs/m ² NIA	£2.73	£2.71	£2.73	£3.04	£1.84	£1.80	£2.73	£4.38
Non-residential space ratios								
12 Total space NIA per student FTE	7.8	9.1	8.4	11.1	9.3	6.3	9	12.6
13 Support space per student FTE	2.3	2.3	2.2	2.9	2.6	1.6	2.3	3.1
Residential ratios								
14 Total residential property costs per bedspace	£783	£875	£901	£619	£749	£680	£854	£1,105
15 Residential income per bedspace	£1,973	£2,059	£2,231	£2,305	£1,969	£1,930	£2,170	£2,563
16 Ratio of residential property costs to income	41%	41%	42%	27%	37%	29%	40%	51%

NIA: net internal area.

Source: UK Funding Councils.

GIA: gross internal area.

¹ The 1999/2000 and 2000/01 results for all UK HEIs are derived from the most up to date dataset and may in some cases differ from results reported in the 2002 Annual Report. This is the result of revised data submissions from institutions which the Service Team consider to represent the most accurate set of information available.

² Two Scottish institutions were unable to submit data for 2001/02. Their figures for the 2000/01 year have been included in these 2001/02 medians to obtain the most complete picture possible for Scotland.

²⁷ The 1999/2000 and 2000/01 results for all UK HEIs are derived from the most up to date dataset and may in some cases differ from results reported in the 2002 Annual Report. This is the result of revised data submissions from institutions which the Service Team consider to represent the most accurate set of information available.

²⁸ Two Scottish institutions were unable to submit data for 2001/02. Their figures for the 2000/01 year have been included in these 2001/02 medians to obtain the most complete picture possible for Scotland.

WHAT WOULD WE LIKE TO KNOW IN THE FUTURE?

4.13 HE provision in FECs

SHEFC collects a significant amount of data on estates, which has been instrumental in shaping this sub-group's discussions. It was suggested that one potential information gap centred around the HE which is provided in FECs. FECs are funded directly through SFEFC for this provision. The first phase report of the UK-wide joint Funding Council Estate Management Statistics project in FE colleges was published in November 2003.³⁰ When considering the capital needs for estates infrastructure in HEIs, the effect of any changes on the HE provided in FECs must be taken into account. This issue has not been addressed in this report.

It is clear that there is a lack of information available on the different pressures on estates on HE and FE delivery in FE Colleges. The forthcoming merger of the Funding Councils, should allow facilitation of more innovative approaches to cross-sector collaboration on estates in future, and such capital issues should be considered as part of this process.

HE PROVISION IN FECs SUMMARY FINDINGS

- More information is required in this area, particularly considering the expansion of HE in England which will, in the main, be delivered through Foundation Degrees.

4.14 Student experience

Another important information gap was what the students' opinions were on the state of their teaching facilities. The Funding Council's survey of student experience³¹ currently contains three questions relating to facilities: books available in libraries; access to adequate computer facilities; and the quality of equipment in labs or workshops. Findings for HE in 2003 (with 2001 comparisons) suggested that:

- 56% (52%) of students were satisfied the books they required were available in libraries
- 81% (78%) of students were satisfied they had adequate access to computer facilities
- 67% (62%) of students were satisfied at the quality of equipment in labs or workshops.

The general feeling of the group was the while there are many other factors which affect the learning, the condition of estates and the facilities provided to students are an important and influential element of the student's experience. It was noted that HEFCE is currently conducting a study on the effect of estates on teaching and learning and the student experience.

STUDENT EXPERIENCE SUMMARY FINDINGS

- More information on the student experience of facilities would be of benefit, in particular, to explore any correlation between quality of estates and learning outcomes.

²⁹ SFEFC Circ. 39/03. Update on Further Education Estates Management Statistics project phase 1

³⁰ Available on www.shefc.ac.uk

4.15 UTILISATION OF SPACE AND FACILITIES

Other possible information gaps which were debated by the Capital Group centred around the facilities available in institutions such as libraries, computers, etc. The Group felt that it would be extremely difficult to collate this information in a way which would provide robust and useful information.

The final area where a gap in the information was identified was on the utilisation of space in HEIs. The effective utilisation of space is a critical issue in the management of estates and one which involves a number of complex factors. The issue of utilisation must be considered in due course, but the relevant information must be collated and analysed in depth and in a way which recognises the unique situation of each institution and which addresses the complex factors surrounding this issue.

SPACE UTILISATION SUMMARY FINDINGS

- Further information and analysis is required on the utilisation of space in HEIs.

4.16 WHAT ISSUES ARE LIKELY TO BE IMPORTANT IN THE FUTURE?

The evidence which has been collected clearly shows that further investment is required to ensure that the current HE estates are fit for purpose. Action must be taken in the short, medium and long term to ensure that our estates allow Scottish HEIs to retain their competitive advantage.

In the short term there is a need to look at ways of reducing the £430 million maintenance backlog. This will require detailed analysis of the specific pressures on estates including the cost of meeting new legislative requirements. Such analysis must take into consideration the different positions of each institution and must ultimately address the key concern which is the provision of a suitable environment for students, researchers and other staff.

In the medium to long term, there needs to be a greater emphasis on managing capital investment in a sustainable way to ensure that such a backlog does not occur again.

4.17 ALTERNATIVE SOURCES OF FUNDING

HEIs in Scotland have proven to be very successful in attracting funding from a variety of sources, and currently just over 50% of their income is derived from non-public sources. As well as improving collaborative approaches to capital, institutions, SHEFC and Government must continue to explore new ways of leveraging greater investment into HEIs from diverse sources, especially from the private sector.

The importance of increasing sources of income from other sources can not be understated, but this should not be seen as a substitute for Government funding. To remain competitive, the level of public funding must be maintained to allow institutions to continue to operate successfully in expanding their income streams.

4.18 PRIVATE SECTOR INVESTMENT

PFI has been suggested as a possible mechanism for leveraging more funding into HE but evidence suggests that this is not the preferred way forward for the Scottish HE sector. A recent HEFCE-commissioned KPMG review outlined a number of reasons why PFI has had limited success as a procurement route. The key reasons stated were:

- Perception of long timescales and high set-up costs
- Ability of HEIs to secure other sources of finance through alternative vehicles, such as covenants and loans with none of the perceived downside of passing ownership of the assets to the private sector
- Tax disincentives (paying VAT on services outsourced through PFI).

SHEFC continues to promote PFI, particularly where SHEFC and HEIs judge that circumstances lend themselves to partnership with the private sector such as sports and leisure facilities and residences. Several large partnership deals are either being considered, or have been concluded, in these areas. In addition SHEFC is actively considering how best to lever in private finance in other ways. HEFCE recently secured a £100 million lending facility from the European Investment Bank (EIB). Under the arrangement, the EIB lends, on a competitive basis to individual HEIs, and takes assurance from HEFCE's role in monitoring the sector's financial health. SHEFC is in discussion with EIB to explore the potential to roll this out into the Scottish HE sector.

Other ways of guaranteeing cheap or low interest borrowing such as bridging loans in cases of estates disposal, especially for institutions with small endowments, could be considered.

4.19 COLLABORATION

The Framework for Higher Education in Scotland asked the Funding Council and the institutions to ensure the effectiveness of public investment in HE and to maximise the use of assets within and across institutions and, where suitable, with organisations outside the HE sector, for example, FE Colleges, local authorities or businesses. These strong messages of collaboration have been supported by the Enterprise and Culture Committee's report 'Scottish Solutions'.

It is clear that there is currently little collaboration between FECs and HEIs around the use of estates. Such cross-sector collaboration must be explored to maximise the effective use of public money and to enhance the learning experience for all students in HE and FE.

There are some examples of FEC/HEI collaboration on estates such as UHI Millennium Institute (see box) and in the south of Scotland where Crichton Campus has created an innovative cross-sector environment for students.

UHI Millennium Institute operates on a unique model where it owns no academic or research buildings and provision is delivered through its network of 13 Academic Partners – FE Colleges and other institutions in the Highlands and Islands. UHIMI is entirely dependent on these collaborative arrangements which are built into its constitution.

A number of HEIs, including the Universities of Glasgow and Paisley and Bell College all offer provision from the Crichton Campus in Dumfries. The campus, based on the site of the former Crichton Royal Hospital, also includes a business park and function facilities and there are strong links with local businesses, enterprise and community.

It must be recognised that collaboration is not an easy or cheap solution to making estates more efficient. Collaborative projects generally require significant initial investment, and often bring their own unique challenges for management. Where suitable though, collaboration of this type also provides a number of benefits and the development of these, where they will improve delivery of provision, should be encouraged.

FUTURE ISSUES

- The group recognised the outstanding maintenance backlog in Scottish HEIs and the need to address this.
- Institutions must continue to attract funding from a variety of sources.
- As autonomous bodies, institutions must continue to do all they can to rationalise and better utilise their estates.
- Institutions and SHEFC should work more closely to identify and facilitate increased collaboration and innovative approaches to estates strategies on a national and regional level. Where practical and beneficial this should not just take place among HEIs, but also with SHEFC and other potential partners in the public or private sectors.

WHAT CAN WE DO NOW?

4.20 ESTATES TARGETS

The data provided by SHEFC, which have formed the factual basis for this report, have been very useful in showing the Scottish position. However, it is clear from the estate management data that there are very different pictures regarding individual institutions. Due to the confidential nature of the data collection, it has not been possible to publish data at an institutional level.

If the problems facing HEIs are to be addressed accurately and effectively this can not be achieved by a simple blanket solution. In the group's discussions, it was suggested that SHEFC should play a more proactive role in terms of questioning institutions' estates strategies and encouraging more collaborative approaches – especially between FE and HE.

In their joint corporate plan,³¹ published in 2003, the Funding Councils include two relevant targets on estates:

48. Colleges and higher education institutions to meet their obligations under the relative disability legislation, including DDA and SENDA. To be assessed in 2005/06.

49. We will develop by 2004/05 an array of estate management and financial statistics to monitor the performance of each sector in investing in their infrastructure.

While this report highlights the need for investment in estates, any future Government investment must be distributed in a measured and innovative way to ensure that the real problems are effectively addressed, but at the same time making sure that those who have managed their estates well should not be penalised and miss out on funding as a result. Ultimately, the key concern should be that estates do not detract from, or negatively affect the student experience but should in fact enhance it.

4.21 MONITORING

The targets set out in the Funding Councils' joint corporate plan, emphasise the importance of the monitoring role that SHEFC must continue to play in these processes. If these estates problems are to be properly addressed in the longer term then it is essential that public money is invested effectively by institutions. The Funding Council has a critical role in continuing to work with HEIs on estates strategies, where appropriate, becoming more proactive in identifying opportunities for collaboration, innovation or rationalisation and in facilitating this. The Council's existing monitoring arrangements currently work towards this and should continue to be developed and reviewed to ensure the Scottish HE estate is sustainable.

4.22 ALLOCATION OF FUNDS

In the earlier section on comparisons between Scotland and England, it was concluded that ring-fencing part of the existing main HE budget for capital was not the best way to deliver results in estates. However, it is clear that the funding mechanisms and checks put in place by the Funding Council must continue to ensure that the proper levels of accountability and transparency are retained, and that the required change is delivered by any further investment.

Taking this into account, any additional funding which is provided to address the capital problems should be allocated explicitly for this purpose. It is essential that a distribution mechanism is established which fully recognises the different nature of each institution's estate and the specific issues facing each of them.

4.23 TEACHING INFRASTRUCTURE FUND

If additional investment does become available, the group suggested that a Teaching Infrastructure Fund (TIF) should be created to work in a similar way as SRIF has for research. Such a fund would allow a stronger focus to be placed on developing the teaching capital in institutions and would allow SHEFC some flexibility to attempt to tackle the unique situation facing each of the HEIs.

³² www.shefc.ac.uk/publications/corp-plan/2003-06/sfc-joint-corporate-plan-2003-06.pdf

It was clear that if a strong case is to be made for such additional funding, the institutions must be able to demonstrate that they have the systems in place to ensure that the best value is being obtained from the significant public investment in higher education.

CURRENT ISSUES

- SHEFC should continue to play a proactive role in evaluating and querying the estates strategies of institutions and assisting institutions to invest in capital in a sustainable manner.
- If additional investment is to be made, institutions must be able to demonstrate systems are in place to ensure Best Value. SHEFC should continue to monitor this.
- The existing main grant allocation should not be ring-fenced for capital. However, any additional funds should be allocated on a strategic basis through some form of Teaching Infrastructure Fund.
- When proposing any action on capital investment in HEIs, the implications for HE provision in FECs should be considered.

4

Students

5.1 KEY FINDINGS

- It is not possible to predict at this stage how the introduction of variable tuition fees in England will impact on students' choices with regard to location of study.
- However, recently released data from UCAS indicate that it is reasonable to expect the changes in England to increase the cross-border pressure on places. (This important data from UCAS only became available very late in the review process, on 15 January.)
- Factors influencing the choice patterns of Scottish students will vary for different groups and in accordance with individual circumstances.
- For some groups of students the key decision is *whether* to participate and for others it will be *where* to participate.
- Education, career and culture are the key drivers in the decision to study overseas.
- RAE ratings are most commonly used by overseas students to inform the decision making process, in particular by sponsors, and postgraduate research students.
- Many of the factors affecting non-EU overseas student choices apply to EU students.
- Additional factors affecting patterns of choice for EU students are tuition fee status and facilitated mobility through European Commission programmes.
- Students in England will, under the new system, generally have more debt than they do now; and more debt than if they were to study in Scotland under existing arrangements;
- In the medium to long term, Scotland's HE sector may be affected by a growing perception that HE in England is better funded, as a result of increased income from variable tuition fees (and also possibly the concentration of research funding), leading to perceptions of better quality.

5.2 APPROACH OF THE STUDENTS GROUP

The Student Group set out to explore current patterns in relation to student flows to and from Scottish institutions; costs associated with these flows; and factors which may have a bearing on the student decision-making process. The central objective was to obtain a better understanding of the current position and, where possible, to identify which changes to the English system may impact on the sector in Scotland.

Discussions were structured around three central questions:

- What determines student choice?
- How will changes in England affect the needs of Scotland?
- What changes in England will require the Scottish Executive and the sector in Scotland to respond?



The Student Group examined a range of evidence including detailed statistical breakdowns on numbers of students from various domicile groups flowing to and from Scottish and UK institutions; selected studies and additional information provided by institutions looking at factors influencing the decision-making process for different groups of students; material provided by the Association of Scottish Colleges; a range of documents looking at tuition fee and maintenance support across the UK within current and future contexts; and the recent work of the Enterprise and Culture Committee in this area.

Given the fact that the final shape of variable tuition fee arrangements is still unknown it has only been possible at this stage to offer speculative commentary on what the potential impacts could be rather than definitive conclusions. Overall, it is hoped that the evidence provided here will help to sign-post those areas which should be monitored and provide information to inform policy development.

The publication of important UCAS data in January 2004 (see 5.11.2 below) in particular illustrates the need for continued close monitoring.

5.3 FACTORS AFFECTING CHOICE

The relative weighting of factors influencing choice will vary between different groups of students (undergraduate, postgraduate, mature learners) and in accordance with individual circumstances. External changes (such as fee regimes), will also have a bearing on the student decision-making process. Change over time is also a relevant factor in that clear information on aspects such as quality has not been readily available to students and advisors to assist with the evaluation process until fairly recently.

Generic factors which may influence student choice are as follows:

- Entry requirements.
- Design, content and quality of course provision.
- Flexibility of delivery and support services available.
- Availability of places.
- Possibility of articulation from FE to HE.
- Finance issues.
- Location of the institution.
- Facilities available.
- Employment prospects after study.
- Personal circumstances.
- Perceived status of the institution or course.
- Research status of institution.

Factors influencing choice may vary in accordance with the domicile of particular groups of students. Perceptions of the Scottish sectors and levels of familiarity of students and their advisors with the Scottish system will vary widely. Correspondingly therefore, the amount and type of information used to guide the decision making process will vary considerably. These issues and the wider context, led the group to conclude that it would be useful to focus on factors perceived to influence choices of students within different domicile groups.

5.4 SCOTTISH STUDENTS

5.4.1 Whether to participate

The decision on *whether* to participate is most likely to be a primary consideration for those groups targeted by wider access policies, such as low income and mature learners. Resource constraints will tend to be an inhibiting factor for such groups. Mature students in particular may have additional commitments to balance such as mortgage and dependants. Correspondingly, future earning potential may be scrutinised more closely by these groups before committing to further study.

In integrating study with other commitments, the 'bite-sized' approach to learning offered by part-time study is often the preferred format. The availability of flexible modes of delivery such as distance and e-learning will therefore influence the decision-making process for non-traditional students, and will also be important for learners living in remote areas. As well as this, particularly given the important role played by the FE colleges in access, the availability of HE places via articulation routes between further and higher education will be an important factor influencing the decisions of such groups.

5.4.2 Where to participate

When the decision to participate has been taken, the next stage in the process will be to determine *where* to participate. There are a number of factors which may be important here and the relative weighting attached to each will depend on individual circumstances. The availability of places and course entry requirements will be central determinants. The design, content and quality of course and institution will also be important. The research rating may also be a consideration, particularly for post graduate research students. Facilities offered will be important for those with special needs. Anecdotal evidence suggests that lower income groups are less likely to study away from home, perhaps as a result of more limited resources. Such groups are more likely to study HE at a local FE college.

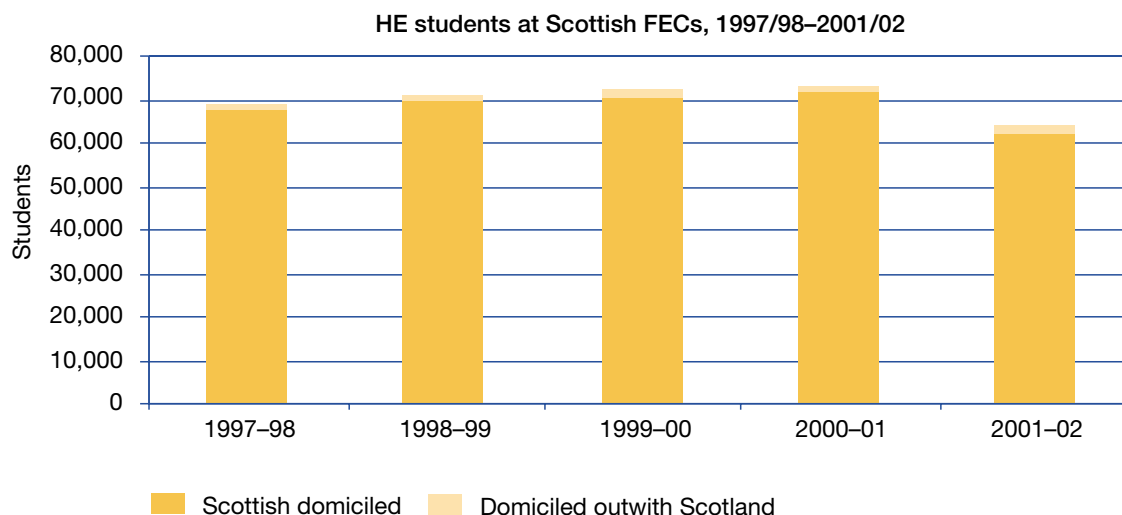
5.5 HIGHER EDUCATION IN FURTHER EDUCATION COLLEGES

In addition to the provision available within HEIs, Scotland's colleges offer a range of sub-degree certificates and diplomas of Higher Education. See section 1.10 for a discussion on the proportionate share of HE which takes place in FE colleges. Higher National awards have a distinct vocational focus and are well respected by employers as stand alone qualifications. As Figure 2 below illustrates, HE level study in FE has remained a consistently popular choice with students. The slight dip in numbers for the 2001/02 period is due to the re-classification of Bell College and UHIMI³² from the FE to the HE collection rather than a decline in the popularity of HE provision within FE colleges.³³

³² UHI Millennium Institute offers HE level provision in conjunction through 13 Academic Partners, the majority of whom are local FE colleges. This transfer of provision from the FE College sector to higher education institutions should be kept in mind when comparing student numbers between 2000/01 and 2001/02.

³³ In 2001/02, there were a total of 9,879 higher education students at Bell College and UHIMI.

Higher Education Provided in Further Education Colleges*



*Refer to Footnote on page 27.

5.6 STUDENTS FROM OTHER PARTS OF THE UK

Many of the factors referenced above will apply equally to students from elsewhere in the UK as to Scottish students. Those who choose not to participate as a result of considerations around finance, unsure employment outcomes and personal circumstances will face the same considerations as Scottish students from these groups.

5.6.1 Finance issues

With regard to study in Scotland, the key distinguishing factor for students from elsewhere in the UK is most likely to be associated with finance. This is relevant both in the current context where differential fee and support regimes apply and in considering the implications of the UK Government's proposals for higher education. When considering finance, the additional costs incurred as a result of living away from home and additional year of study at Scottish institutions (for study at honours level) may be a factor for some students, although it was questioned whether these were likely to be important considerations for young, full-time students. See 5.9 for fuller consideration of these issues.

A summary of current and future finance arrangements is included in Annex C, but it is not possible to predict at this stage how the introduction of variable tuition fees in England will impact on students choices with regard to location of study. These issues are examined more fully in subsequent sections of this report.

UK STUDENTS SUMMARY FINDINGS

- Factors influencing the choice patterns of Scottish students will vary for different groups and in accordance with individual circumstances.
- For some groups of students the key decision is *whether* to participate and for others it will be *where* to participate.
- For specific groups targeted by wider access policies, the availability of finance, flexible modes of delivery and articulation routes will be important considerations.
- It is likely that students coming to Scotland from the rest of the UK will be influenced by many of the same broad factors as Scottish students.

UK STUDENTS SUMMARY FINDINGS (Contd.)

- Differences in finance, support arrangements and course lengths across the UK are additional factors which may influence the decision-making process for some groups, particularly non-traditional students.

5.6.2 Areas for Future Action

Work to ensure that with regard to the factors which influence student choice, Scottish HE in all types of institution retains its competitive advantage.

5.7 OVERSEAS STUDENTS

5.7.1 Factors affecting non-EU overseas students' choices

Recent studies looking at the above area give a useful overview of the generic factors which influence overseas student choices, however, as before, the relevance of such factors will vary between different groups of students (for example undergraduate/ postgraduate), within different overseas markets, and depending on personal circumstances.

According to the most recent survey of international student experience carried out by MORI on behalf of British Council,³⁴ 'Education, career and culture are the greatest drivers for study overseas'. As opportunities for study abroad become more diverse with a wider range of countries and providers entering the field, the demands and expectations of consumers have become increasingly sophisticated. The study goes on to note that 'the majority of students considering coming to the UK cite its academic excellence and internationally recognised qualifications as key factors, with culture, lifestyle and opportunity to learn English featuring strongly behind'. Other factors include:

- perceived currency of qualifications with international employers
- institutional links with employers and opportunities for work experience
- quality and flexibility of provision, pathways and modes of delivery
- reputation of institution, school, department or particular academic/course
- perceived openness (visa issues), inclusiveness and diversity of wider society
- cost of living and overall assessment of value for money
- location of an HEI (accessibility/local amenities) and perceived quality of life.

Fee levels for overseas students are already higher than for domestic students, permitted under the 1997 Fees and Awards regulations as amended. Numbers of non-EU overseas students at Scottish HEIs have risen overall between 1997/98 and 2001/02 despite changes to the fee regime for this group.

It is important to note that FE colleges also recruit overseas students into higher education courses. In 2001/2002 for all types of study, there were around 2,500 non-EU overseas enrolments at Scottish FECs.

³⁴ Education UK: The Prime Minister's Initiative four years on: MORI/British Council (August 2003)

Evidence from the MORI survey indicates that for many overseas students, value for money is more important than unit cost. As UK education is perceived overall as being of a very high quality, with rigorous entry and quality standards, many international students consider it to be a worthwhile investment which will pay dividends in terms of future career development.

Available evidence suggests that international students use a variety of sources and analytical measures to enable them to take decisions on where, what and how to study. A survey of overseas student experience in Scotland³⁵ found that ‘most commonly, students had chosen Scotland or the institution they were studying at, on the direct recommendation of friends or other students’. This factor is also emerges strongly in the MORI study. Additional sources referenced included British Council, the internet and generic education guides (such as ‘The Times’ Education Guide). Institutional materials and international officers were considered best placed to assist with more specific enquiries once general interest levels have been raised.

With regard to Research Assessment Exercise (RAE) ratings and league tables, a survey conducted by Universities Scotland (US) found that in general, the significance attached to such factors varies widely within different markets and between different types of student. However, in general, many institutions noted that overseas students are more likely to consult such ratings than domestic students. RAE and league table rankings can affect perceptions of the status of institutions and thus impact on overseas students’ choice of institution within the UK. Both the US survey and MORI research strongly indicate that RAE ratings and league tables are most scrutinised by Chinese students. Such measures are particularly scrutinised by overseas sponsors and postgraduate research students.

With regard to overseas undergraduate and taught postgraduates seeking opportunities for study abroad, many institutions indicated that location, course content and vocational considerations such as the availability of work experience and employment rates after study were the most salient factors influencing choice of course and institution for these groups.

5.7.2 Factors affecting EU student choices

As well as generic factors already identified, two factors in particular may have a bearing on choices made by EU students as a distinct category.

- Tuition fee status – EU students

As referenced in more detail (Annex C.1) elsewhere, eligible EU students are entitled to the same support as Scottish students with regard to the cost of tuition at Scottish HEIs. This means that such students are entitled to compete for funded places and to apply to SAAS for tuition fee support on the same basis as Scottish domiciled students. Therefore, free tuition may attract some EU students to courses provided at Scottish institutions.

- Facilitated mobility – EU students

The EU Commission is keen to encourage greater mobility within the EU. Initiatives such as Socrates Erasmus programme are designed to facilitate this. The Bologna process for HE reform in Europe is specifically intended to remove barriers to levels of mobility for HE students, but it is too early to predict its precise impact on mobility in practice.

³⁵ Institutional support for overseas students: University of Glasgow/Scottish Education and Training (1988)

OVERSEAS STUDENTS SUMMARY FINDINGS

- Education, career and culture are the key drivers in the decision to study overseas.
- RAE ratings are most commonly used by overseas students to inform the decision-making process, in particular by sponsors, and postgraduate research students.
- Taught postgraduate and undergraduate overseas students tend to look at the location of the HEI and vocational aspects of particular courses.
- Facilities and support available can impact on international student recruitment.
- Many of the factors affecting non-EU overseas student choices apply to EU students.
- Additional factors affecting patterns of choice for EU students are tuition-fee status and facilitated mobility through European Commission programmes.
- The Bologna process may have some impact on levels of EU student mobility.
- It is impossible to determine with any degree of certainty at present whether patterns of EU and non-EU student choices will be affected by UK Government proposals.

5.7.3 Areas for Future Action

Monitor flows of non-EU students to Scottish institutions through annual HESA and UCAS statistics to ensure that advances in this area are not eroded as a result of additional the revenue available within English HEIs.

Continue to support initiatives which encourage institutions to work collaboratively to attract international students and consider where and how this activity could be enhanced.

Continue to ensure that Scotland's HE system is encouraged and enabled to attract the high calibre of international students (including postgraduate research students).

5.8 THE COST IN FTE PLACES OF STUDENT FLOWS TO SCOTLAND

5.8.1 FTE Funding – an overview

The funding allocated to Scotland's HE sector by the Scottish Further and Higher Education Funding Councils (SFEFC and SHEFC) pays for the cost of course provision remaining after the imposition of tuition fees. However, this funding is not attached to a specific student. Rather, funded student places are allocated to each HEI and these must be filled by students eligible for funding (whether from Scotland, the rest of the UK or the EU). The Higher Education Funding Council for England (HEFCE) do not provide any funding support for places in Scottish HEIs, in the same way that the Scottish Funding Councils do not provide any funding support for places in English HEIs.

Given Scotland's position as a net importer of students (see below) there is a net cost to Scotland in the allocation of funded places to non Scots domiciles from the rest of the UK or EU. Non-EU domiciled students are fully self-funded.

5.8.2 Tuition, Maintenance and Loan costs within Scotland

Full details on the varying entitlements of different groups of students studying higher education in Scotland is contained within Annex C.1.

Actual expenditure in relation to the above categories for the 2002/03 period through the Student Awards Agency for Scotland (SAAS) are as follows:

5.8.3 Tuition fees

In 2002/03, the total SAAS budget for tuition fees was £124,891,706.

- The majority (93%) of the available budget was spent on Scottish students at Scottish institutions.
- A small proportion (3%) was spent on Scottish students studying outside Scotland.
- Around 4% of the available budget was spent on supporting students from other parts of the EU undertaking courses of study at Scottish institutions.

5.8.4 Maintenance awards

In 2002/03, the total SAAS budget for maintenance awards was £84,490,623.

- In terms of maintenance awards to students undertaking HE in Scottish institutions, 98% of the available budget is spent on Scottish students.
- The remaining 2% was spent on Scottish students studying outwith Scotland.
- Maintenance cost support is not available to students from elsewhere in the EU.

In 2002/03, the total SAAS budget for loans was £228,728,087.

5.8.5 Loans

- Approximately 92% of expenditure on student loans administered through SAAS was spent on supporting Scottish students at Scottish institutions.
- The remaining 8% was used to support Scottish students studying outwith Scotland.
- Student loans are not available to students from elsewhere in the EU.

5.8.6 Young Students' Bursary Fund

In 2002/03, 15 % of all students supported by SAAS who met the criteria required for means-testing for YSBF payments received a maximum YSBF payment, while a further 23% received a partial YSBF payment. The number of YSBF payments made in 2002/03 (21,859) has risen by 65% on 2001/02, as an increasing number of students become eligible for the bursary.

5.9 FINANCE ISSUES: SCOTLAND AND ENGLAND

5.9.1 Variable Tuition Fees

The UK Government's plans for higher education will allow English institutions to charge variable tuition fees of up to £3000 per year for full-time undergraduate courses from academic year 2006/07. Levels set for particular courses will be determined by individual institutions and students undertaking such courses will be required to meet the cost of

their tuition. Students will have the option of paying the cost of tuition after study and if they choose this option, will have access to interest-free loans from Government to meet tuition costs. Loan repayments will be recovered after graduation once earnings reach £15,000 at a minimum of 9% of annual earnings. These arrangements will be available to English domiciled and EU students. In addition, separate changes are being made to the maintenance system. Further details are given at 1.5 and Annex C.1.

One of the central questions running through this report is how the introduction of variable fees will impact on student choices and consequently on flows of students to and from Scottish HEIs. It is not possible to answer that question precisely at present given that there are a number of unknowns. For example, it is not yet clear how the proposed arrangement will apply across the English sector (in relation to what level of changes particular institutions will apply and for what courses). It is also still unknown how far the deferred nature of fees and proposed re-payment terms will actually off-set any deterrent effect of higher fees; fear of debt and actual debt are real factors for students in deciding whether to participate. It is also possible that fee increases could lead to different patterns with regard to *mode* of study (such as part-time options to combine study with employment to make HE more affordable).

5.9.2 Student Debt Accrued

Average student debt amongst final-year students was £8666 in 2002/03 (Student Income and Expenditure Survey (SIES)), which has risen by around £2500 since 2002 (Natwest 2003 Student Money Matters Survey). This includes elements for both average tuition and maintenance costs. The UK Government estimates that the average student debt (for students at English institutions) will rise to around £15K for those beginning study in 2006/07.

The costs of going to university (with the introduction and continuation of up-front tuition fees), have therefore increased considerably in recent years, particularly in England, and particularly in England will continue to do so for many students. The DfES has acknowledged that the impact of the changes on lower-socio-economic groups needs to be especially monitored and have promised a review of this three years after the introduction of the changes.

However, at the same time entrants to full-time higher education both in England and Scotland have risen by around 6% since 1998-99, the year up-front fees were introduced. This suggests that in spite of the increasing levels of student debt, demand for HE remains strong.

It should be noted also, however, that over the same period (1998-2003) applications from English-domiciled students to higher education (in England or Scotland) fell by 1%, but for Scottish-domiciled students (to England or Scotland) rose by 10%. These figures require further analysis, but do indicate more buoyant demand from Scottish-domiciled students.

5.9.3 Will perceptions of debt impact on choice of patterns?

It is worthwhile highlighting the effect of the *perception* of debt rather than monthly repayments as a proportion of income, to properly evaluate the possible disincentive to participation. As part of the group's discussions, it was suggested that student choice could be distorted as a result of the amount of debt accruing as opposed to the terms on which it would be repaid. The example cited was as follows:

Assuming no change in the current Scottish system, an English student, assumed to be living on £4000 student loan per year could face a fee differential of £5400 between studying in England and Scotland. This is based on a difference in fees between an English institution charging the maximum³⁶ allowable fee (3 years x £3000 = £9000) as compared to a Scottish institution charging £1200 per year (at 2006/07 prices) over a four year course (£3600, taking into account that under current arrangements (assuming no change to the Quigley arrangements under which the fee costs for eligible RUK students in their final year are met by the Executive) English students are not financially disadvantaged by the longer length of course in Scotland). This difference was therefore asserted as being a *significant* factor which would impact on student choice, *whatever the repayment terms*.

This example does not take into account the additional costs and inconvenience which can arise as a result of living away from home. However, it should be noted that the majority of students do live away from home and that there are benefits that prospective students take into account when thinking about the additional cost. For instance, for many students it is the first time they have had the opportunity to live away from the parental home, it allows greater access to student activities and a full engagement with their learning environment, and choice of institution and course is narrowed by staying at home. Those who do decide to stay at home are more likely to do so because the costs of living away from home, regardless of the extra year, are too high.

While the extra year in Scotland may be a factor for some students, there is no evidence at the current time to suggest that this is a major factor for the majority of students in choosing where to study or whether to stay at home. It is, however, possible that Scottish students who would have previously thought of studying in England will now decide to study in Scotland, at home or away from home, as a result of top-up fees, and this could put pressure on student places in Scotland. How far the changes in England will tend to encourage students to live at home more than at present is an important yet presently unknown factor.

In addition to this, the opportunity cost of a year's lost earnings incurred through undertaking a longer course within Scottish HE (the majority of degree courses in Scotland require four years of study while for the majority of courses in England, undergraduate study lasts for three years) *may* prove to be a consideration, although probably only for mature or overseas students weighing costs against outcomes when determining where they would like to study.

Assuming no change in the Scottish system, the *nature* of the future fee regimes applying to English students who choose to study in Scotland and that which would apply to English students if they study in England will be distinguished by the up-front nature of Scottish tuition fees (at £1200 a year) and the repayable nature of the tuition fees proposed in England (at a maximum £3000 a year). It is not yet clear whether the DfES will make loans available towards fee costs for students coming from England to Scotland.

³⁶ It is possible under the DfES proposals that some courses will reduce fees below present levels, although there is no clear evidence at this stage that this option will be widely taken up.

FINANCE ISSUES SUMMARY FINDINGS

- Students in England will, under the new system, generally have more debt than they do now.
- Students from England will have more debt if they study in England than if they were to study in Scotland under existing arrangements.
- Students in England (or their families) who would have paid fees from savings (rather than borrowings) will have more disposable income while students as fees are not to be paid in advance.
- There may be extra costs involved in studying in Scotland (one year extra loans for maintenance + potential loss of income, assuming that the graduate gains employment in the year after leaving university), although this will only be a factor for certain groups of students.

5.9.4 Areas for Future Action

Maintain current arrangements which ensure that no English student coming to Scotland is disadvantaged in terms of fee liability as a result of the longer period of study required in Scotland when compared to an equivalent course in England. Monitor this policy in light of the actual pattern of fee charges in England, when this becomes more apparent.

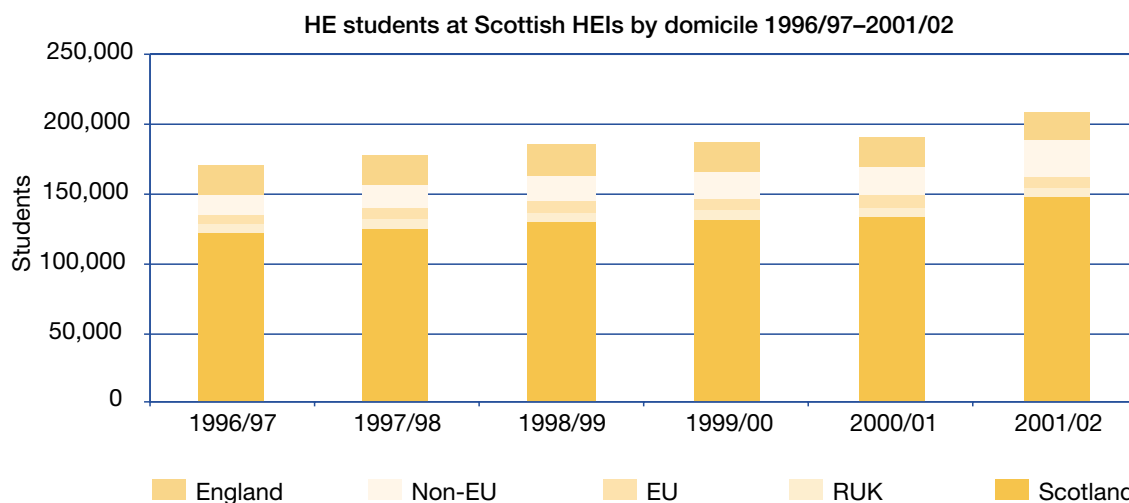
Continue to support the needs of part-time and mature students in all types of institution and fully reflect the Executive's vision of lifelong opportunity through lifelong learning.

5.11 STUDENT FLOWS

5.11.1 Student Population by Domicile

The chart below shows the composition of the total student population at Scottish HEIs by domicile between 1996/97 and 2001/02. Although not easily identifiable from the graph, up to 2001/02 there was a slight decline in the overall number of students from England and other parts of the UK studying at Scottish HEIs. Numbers of both EU and non-EU students have increased (non-EU most significantly). The number of Scottish domiciled students taking up places has increased slightly year on year. Overall, the largest number of places at Scottish HEIs are consistently filled by Scottish domiciled students. However, the latest UCAS data (see section 5.11.2 below) shows the trend of recent years in respect of RUK students reversing.

Composition of student population at Scottish HEIs* 1996/97– 2001/02



Source: HESA

*Refer to Footnote on page 27.

5.11.2 Universities and Colleges Admissions Service (UCAS) Statistics

Final UCAS figures (January 2004) show that the number of English domiciled undergraduate students accepted for study at Scottish HEIs has risen by 7.1% this year, reversing the trend of recent years. Numbers of Welsh and other EU students entering Scottish HE have also risen by 19.8% and 11% respectively over the same period. The number of Scottish domiciled students being accepted for study at English HEIs has fallen by 3.6% on the same point last year. These trends could be taken as early indication of the likely effect which the introduction of variable tuition fees will have on cross-border flows.

While cross-border flows of students are to be welcomed, this area should be closely monitored to anticipate and respond effectively to potential pressures within the Scottish system.

The UCAS applications figures for 2004/05 – made very recently available – show a further upward trend, so that applications for study at Scottish HEIs from English-domiciled students are 12% higher than at this time last year and from EU students to Scottish HEIs 22% higher. This may reflect uncertainty in England about the detailed timetable for the introduction of higher tuition fees. Also, these data include all the multiple applications made by individuals and therefore are not a secure predictor for the final pattern of acceptances, although they clearly give an indication of students' preferences of location and institution.

These figures do suggest that it is reasonable to expect the changes in England to increase the cross-border pressure on places in Scotland, although the precise scale of that pressure still cannot be safely predicted at this point.

5.11.3 Potential Impacts of England's changes on Student Flows

Many have noted concerns around the potential impacts which changes to tuition fee arrangements for undergraduate students in England could have on the Scottish system. These concerns mainly centre around the possibility that there may be an influx of students looking to avoid variable tuition fees. Under current arrangements, students from elsewhere in the UK and EU would be entitled to take up publicly-funded places on the same basis

as Scottish students. Therefore if levels of migration to Scottish HEIs from these areas were to increase significantly, and current support arrangements remain unchanged, there would be corresponding resource implications which could put pressures on the Scottish system in all types of institution providing HE.

Within that context, the primary categories for consideration would be undergraduate students from other parts of the UK and EU. With the anticipated accession of ten more countries to the EU on 1st May 2004, the number of students eligible for tuition support will increase (although the current view from British Council is that such students are unlikely to travel to the UK in large numbers in the short to medium term).

5.11.4 Undergraduate students at Scottish HEIs

Table 1 below shows trends in relation to numbers of first degree students from other parts of the UK and EU at Scottish HEIs between 1997/98 and 2001/02. As the figures show, the number of undergraduate students from England and other parts of the UK at Scottish HEIs have decreased. Numbers from EU and accession countries have increased only slightly.

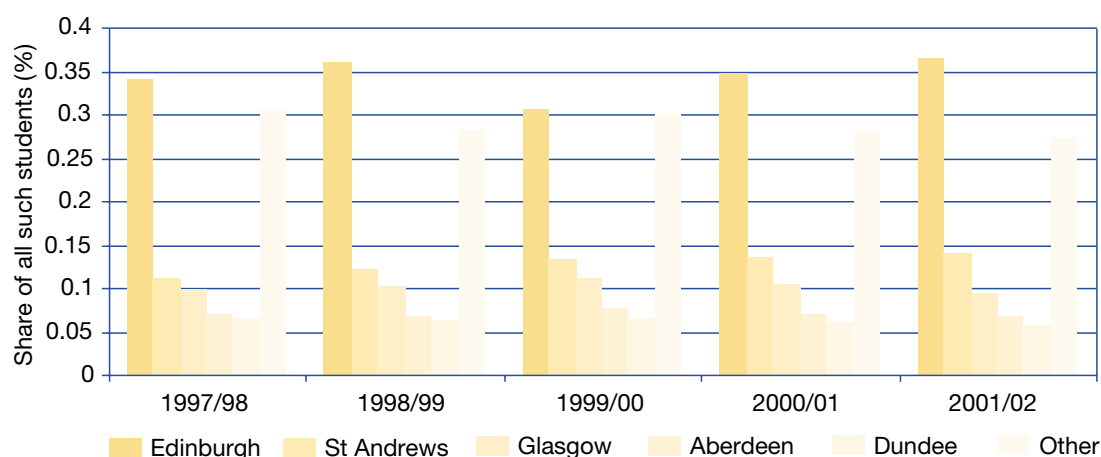
Non-distance learning first degree students at Scottish HEIs					
	1997/98	1998/99	1999/00	2000/01	2001/02
Scotland	79,587	80,591	83,067	83,818	87,139
England	16,325	16,291	14,254	14,853	15,025
Other UK	5,876	6,042	5,750	5,651	5,565
EU	4,182	4,360	4,381	4,370	4,494
EU Accession	63	63	60	75	79

Source: HESA

5.11.5 Pressure on particular institutions

The majority of English domiciled students attending a Scottish HEI do so at Edinburgh University, which, between 1997/98 and 2001/02 saw an increase in this proportion. St Andrews University, Glasgow, Aberdeen and Dundee (in descending order) have accounted for the majority of the remaining population of English domiciled HEI students in Scotland.

Non-distance learning English domiciled HE students at Scottish HEIs by institution, 1997/98-2001/02*

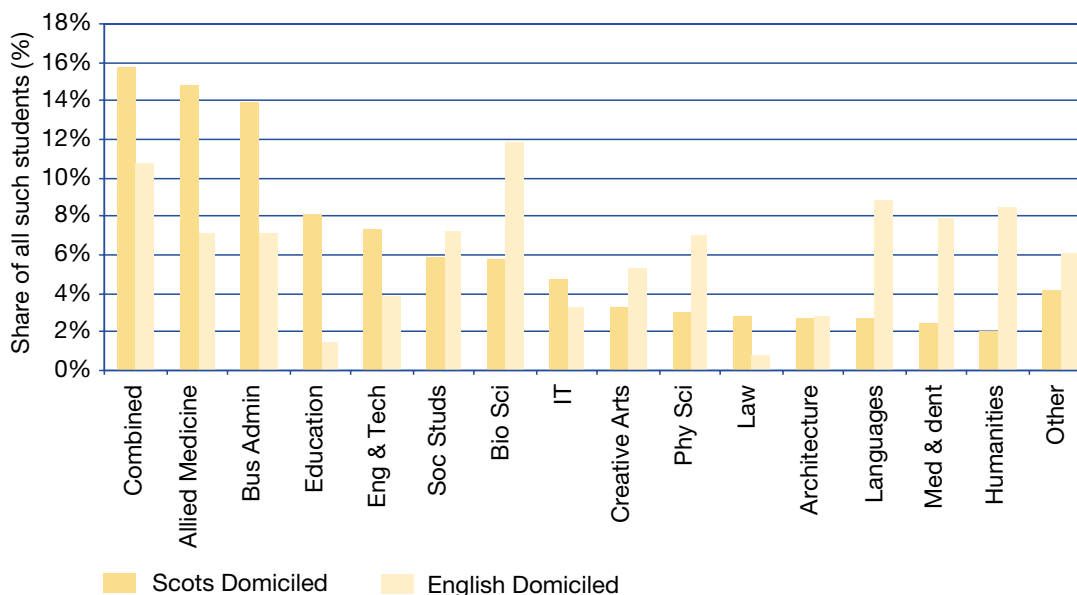


*Refer to Footnote on page 27.

5.11.6 Pressure on particular subject areas

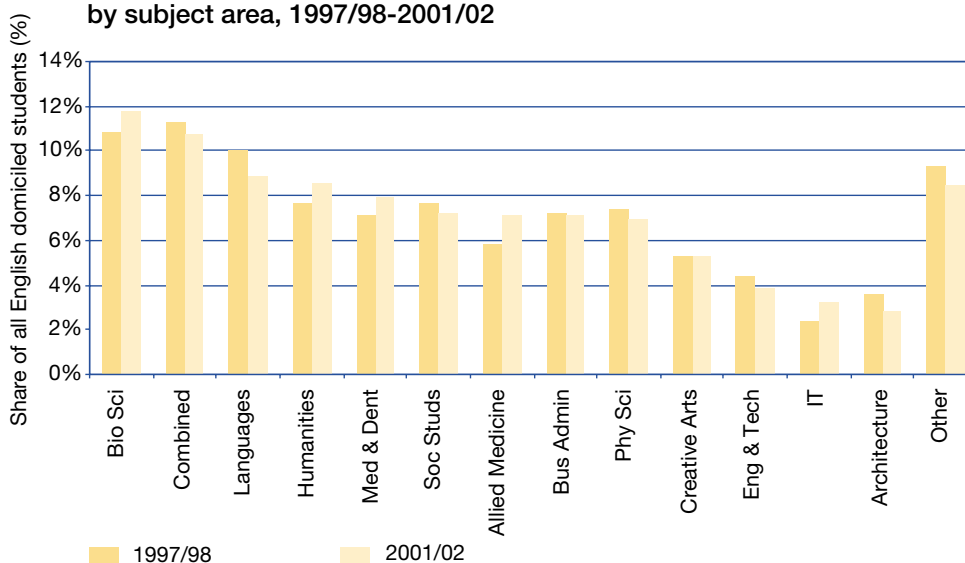
The most popular subject areas amongst English domiciled students at Scottish HEIs in 2001/02 are shown to be bio sciences, combined studies, languages, humanities and medicine/dentistry.

Non-distance learning HE students at Scottish HEIs by subject area



Between 1997/98 and 2001/02, the popularity of bio sciences, medicine and dentistry amongst English students at Scottish HEIs has increased by around 1%.

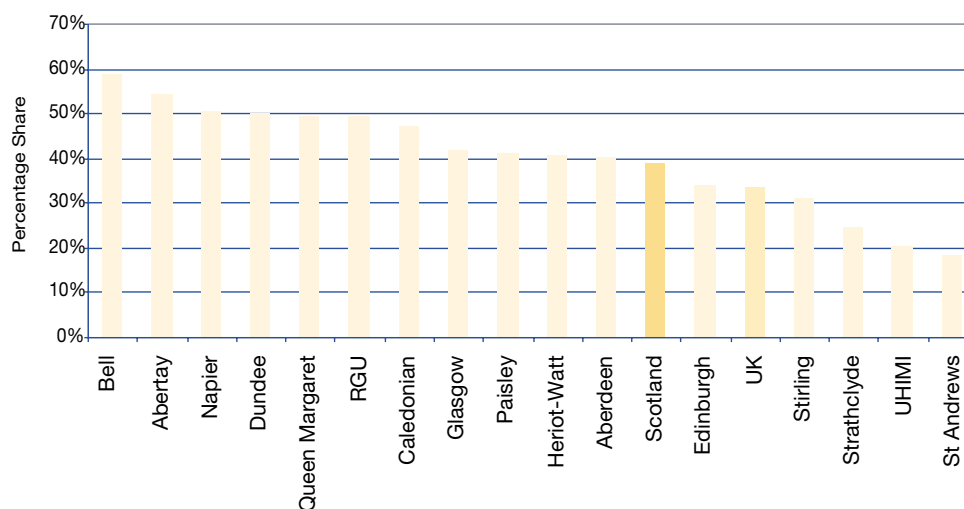
Non-distance learning English domiciled HE students at Scottish HEIs by subject area, 1997/98-2001/02



5.11.7 The pressure on more expensive Scottish courses

In 2001/02 38% of FTE students at Scottish HEIs studied subjects in the medical, science and engineering fields compared to 33% in the UK as a whole. As shown in the figure below, only four of the 17 Scottish HEIs which provide medical, science and engineering courses had a share of FTE students on such courses lower than the UK average.

Share of FTE students studying medicine, science or engineering in 2001/02



The proportionally high number of students in the subject areas which attract the highest band of (SHEFC) unit teaching resource, places additional pressure on the funding mechanisms. It can therefore be stated that Scottish HEIs educate a disproportionately high number of students in Clinical Medicine, Dentistry and Veterinary Practice. In 2003/04, these places are funded at £13,285 per undergraduate FTE. Places in Engineering & Technology (£7,100 per annum) and Science (£6,790) are overrepresented in the Scottish provision. By way of comparison, students in Mathematics & Statistics are funded at £4,595 per FTE, and Social Science students at £3,470.

5.11.8 Medical and related courses

Courses such as medicine, dentistry and veterinary studies take upwards of four years of study to complete and are of equivalent length across the UK. Given that these are courses more likely than most to attract the maximum tuition fee in English universities, there may be a significant price differential between studying in Scotland and studying in England.

DOH currently cover the fee cost for English domiciled medical students in the 5th and 6th years of study at all UK HEIs.

A five-year course in Scotland would, assuming no reduction for means testing and a continuation of current Scottish tuition fee rates, cost the English domiciled student £1,200 a year (to be paid annually in advance of study i.e. a total of $4 \times £1,200 = £4,800$.)

If DoH were to maintain current policy of providing fee support at current values for 5th year,³⁷ then the fees for a 5 year medical course in England, if charged at the maximum rate, would be $5 \times £3,000$, less $£1,200 = £13,800$ (to be repaid after graduation).

The BMA have stated recently that, based on a six-year course, a medical student whose parents earned between them £30,000, could leave university owing up to £64,661. Students from families with parental income of £15,000 would expect to leave with

³⁷ Department of Health have not yet made any policy decision on the fee support they will offer medical students under new tuition fee arrangements.

around £38,023 of accrued debt if outside London and £51,642 if in London – DfES have however challenged these figures.

The price sensitivity of students is difficult to determine at the moment but will, as with other courses, be seen in patterns of student flow over time.

5.11.9 The future impact on public sector recruitment

The future of medical course provision in Scotland is being addressed by Sir Kenneth Calman's ongoing 'Review of Basic Medical Education in Scotland' which will report very shortly. In addition, UK Government Ministers have announced that Sir Alan Langlands, Principal and Vice Chancellor of the University of Dundee is to lead work on the 'Gateways into the Professions' report. This will examine how the public and private sectors can sustain and improve recruitment opportunities for graduates in light of the introduction of variable tuition fees in England.

The report, which will be completed in 2005, will concentrate in particular on those looking to pursue careers in professions such as medicine, teaching, social care, law, engineering and architecture.

5.11.10 Undergraduate students at English institutions

The table below gives the number of undergraduate students by domicile at English HEIs over the same period. As the figures show, the number of students from EU countries opting for study at English HEIs has decreased in recent years. Numbers of EU accession country students have increased slightly, but still remain a small proportion of the total undergraduate student population in England. That said however the total *number* of EU and accession students at English institutions remains fairly substantial.

If changes in the movement of this group did occur, it is possible to speculate from the figures below that numbers involved could be fairly significant. Trends in this area should be monitored closely.

Non-distance learning first degree students at English HEIs					
	1997/98	1998/99	1999/00	2000/01	2001/02
England	698,584	710,969	715,952	715,355	739,034
Scotland	5,597	5,649	5,813	5,749	5,947
Other UK	30,790	28,964	28,132	28,311	27,775
EU	37,689	39,913	40,538	38,120	34,604
EU Accession	2,440	2,543	2,750	2,827	2,845

Source: HESA

5.11.11 Scottish students studying in English HEIs

As indicated by the figures above, the number of Scottish domiciled students studying at English institutions has increased slightly overall between 1997/98 and 2001/02. It is possible that the introduction of variable tuition fees could discourage Scottish students from undertaking study in England. This area should also be monitored to ensure that the choices open to Scottish students are not restricted as a result of changes to the fee regime in England.

STUDENT FLOWS SUMMARY FINDINGS

- The total number of students at Scottish HEIs has increased between 1996/97 and 2001/02.
- A significant proportion of Scottish higher education is delivered within FE Colleges.
- The largest proportion of places at Scottish HEIs are filled by Scottish domiciled students.
- Numbers of EU and accession students have slightly increased between 1996/97 and 2001/02.
- The number of non-EU students at Scottish HEIs has increased between 1996/97 and 2001/02.
- Recent UCAS statistics show that numbers of entrants to Scottish HEIs from other parts of the UK and EU are increasing. This could be taken as an indication of likely future trends.
- Correspondingly, the number of Scottish domiciled students accepted for study at English HEIs has declined over the same period.
- These trends should be monitored in order to predict and respond to potential pressures.

5.11.12 Areas for Future Action

Systems should be put in place to monitor flows of applications and entrants to Scottish HEIs using UCAS and HESA statistical releases.

While cross-border flows are not to be discouraged, arrangements should be reviewed to ensure that Scottish students are not disadvantaged as a result of pressure points due to changes to the fee regime in England.

In the event of a sudden surge in applications to Scottish institutions, the Executive should be prepared to raise the cap on student numbers within the Scottish HE sector.

The Executive should make an early announcement which ensures that Scottish domiciled students going to England are at least no worse off in terms of the assistance available to them for fee costs compared with English students.

Closely monitor the demand for medical and related subjects within Scottish HEIs and if, over time, there is a distortion of current student flows, ensure that Scottish students, particularly from lower social class backgrounds, are not discouraged from entering such professional areas.

Closely monitor the demand for HE in colleges, especially from mature and low-income students, and monitor access and articulation to HEIs of HN and FE students.

Work closely with DfES to ensure that next year's proposed investigation of the likely impact of variable tuition fees and graduate debt on wider access to key public sector professions takes account of the findings of both this report and those of Sir Kenneth Calman in his ongoing 'Review of Basic Medical Education'.

5.12 OTHER IMPLICATIONS OF ENGLISH CHANGES FOR SCOTLAND

5.12.1 The potential for a gap in reputations

Assuming no change in current Scottish arrangements, the principal perceived risk, in the short term, is of more students from Scotland and from outwith Scotland applying to study in Scotland, in order to avoid tuition fees.

Over the medium to longer term, increased tuition-fee income available to English HEIs, together, possibly, with the increased concentration of research funds to fewer English institutions, could lead to a perception of better quality HE provision in England, which more students, from all parts of the UK, might consider worth the price differential.

5.12.2 HE provision in FE colleges

Given the particular make up of HE participation in Scotland, it is important to also consider the impact of the DfES White Paper on HE delivered in Scottish Further Education Colleges. FE colleges provide teaching and training (but not exclusively) for people living and intending to work in Scotland. It was stated by the Association of Scottish Colleges (ASC) in its submission to the ECC that for FE colleges, competition with England is not a major much less an overriding concern. However, the changes proposed in England do present issues for Scottish colleges. An indirect effect of potentially greater numbers of English students attending Scottish HEIs may be greater pressure from Scottish students on available places within Scottish FE colleges. In addition, the introduction of 'Foundation Degrees' as the major vehicle for two-year full-time HE qualification could displace HNC & HND in terms of esteem while increased student flows into Scottish HEIs might limit their capacity to offer articulation routes to Scottish students studying at higher national level within a Scottish FEC.

The potential impact of developments in these areas on HE delivered in FECs in Scotland will be important to monitor.

IN SUMMARY

- More students may apply to study in Scotland.
- In the longer term, increased funding for the HE sector in England may lead to it being perceived as offering better quality education.

5.12.3 Areas for Future Action

Monitor student perceptions of Scottish and English HE and ensure that Scotland retains its competitive advantage.

Monitor and assess the demand for HNC and HND study within the light of the promotion of the Foundation degree in England.

Sources and uses of income of Scottish HEIs

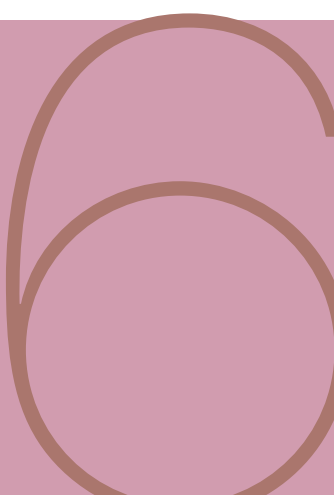
6.1 KEY FINDINGS

- Although further work remains to be done on detailed modelling, the introduction of variable fees will clearly improve the relative financial positions of institutions in England, particularly those most able to charge at the highest rate.
- Total income of Scottish HEIs in 2001/02 was 11.5% of income of all UK HEIs (compared to Scotland's 9% of the UK population). They received 13.2% of all UK research grant funding; nine out of 17 Scottish HEIs had research grant income above the median for UK HEIs, and three were in the top 20.
- Review unable in timescale to exhaustively consider the potential ability of HEIs to grow non-government income streams. However, evidence reviewed to date suggests that within current models, the potential is limited. (Further research is being commissioned – see 6.10.)
- It is important to be careful not to confuse income with profit. The first call on most non-Funding Council income will be the specific activity for which it is provided by the funder in question and the capacity of the institution to generate a surplus on it will vary and for many types of funding will be nil or strictly limited.
- Scottish HEIs obtained a lower percentage of their income from tuition fees than those in the UK as a whole in 2001/02. Regardless of any relative change to England, there is no reason to expect income from publicly-funded teaching in absolute terms to fall as long as HE demand in Scotland remains at current levels.

6.2 APPROACH OF THE SOURCES AND USES OF INCOME GROUP

The income group set out to examine sources of income available to Scottish HEIs, to identify where potential existed to grow non-government income streams, and to assess the impact of tuition fees of the income available to English HEIs, in order to draw comparisons with Scotland. The group did not attempt a comparable analysis for FE colleges and it is recognised that this is an area on which more work is needed.

An initial ambition was to examine, too, current uses of income. However, it was agreed early in the process that analysis of close detail, for instance, of variances in institutions' running costs across the sector, or of institutions' internal efficiency or use of resource would involve disproportionate use of resources in the short timescale available.



It was also noted early in the process that the final Phase 3 report might have to go to publication before all evidence had been gathered and analysis undertaken. In the event, this proved to be the case, with the results of a significant piece of research commissioned under the Review into sources of income UK-wide as yet unavailable (see 6.10)

The work under this heading has therefore been concluded, more than in the other areas considered, with proposals for further work which could usefully be undertaken to inform decision making, both in government and in the sector.

6.3 OVERALL INCOME AND EXPENDITURE OF SCOTTISH HEIs

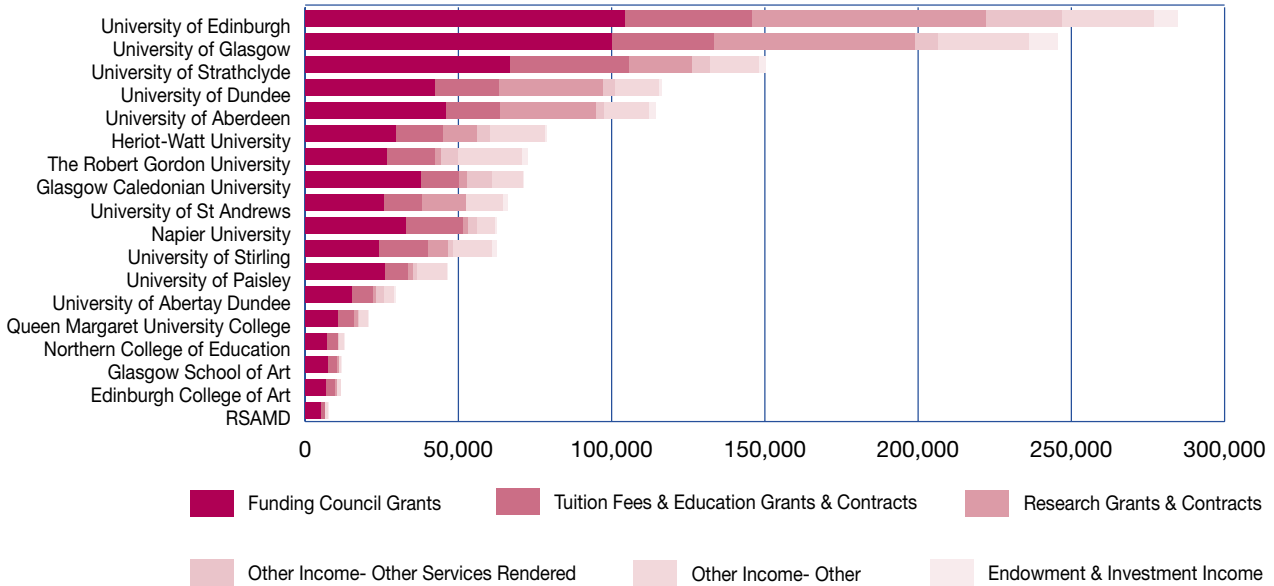
Any overview of the income and expenditure of Scottish HEIs of this type clearly demonstrates the relative financial size of institutions in the sector. Wherever figures on the institutions' income and expenditure are presented for comparison in this report, it is important to realise that the report is not making qualitative comparison between HEIs.

Where financial comparisons are presented, it is with the acknowledgement that Scottish HEIs are a diverse group of institutions, with different historical backgrounds, which offer differing ranges of teaching and research activities and which raise income from a varied range of sources.

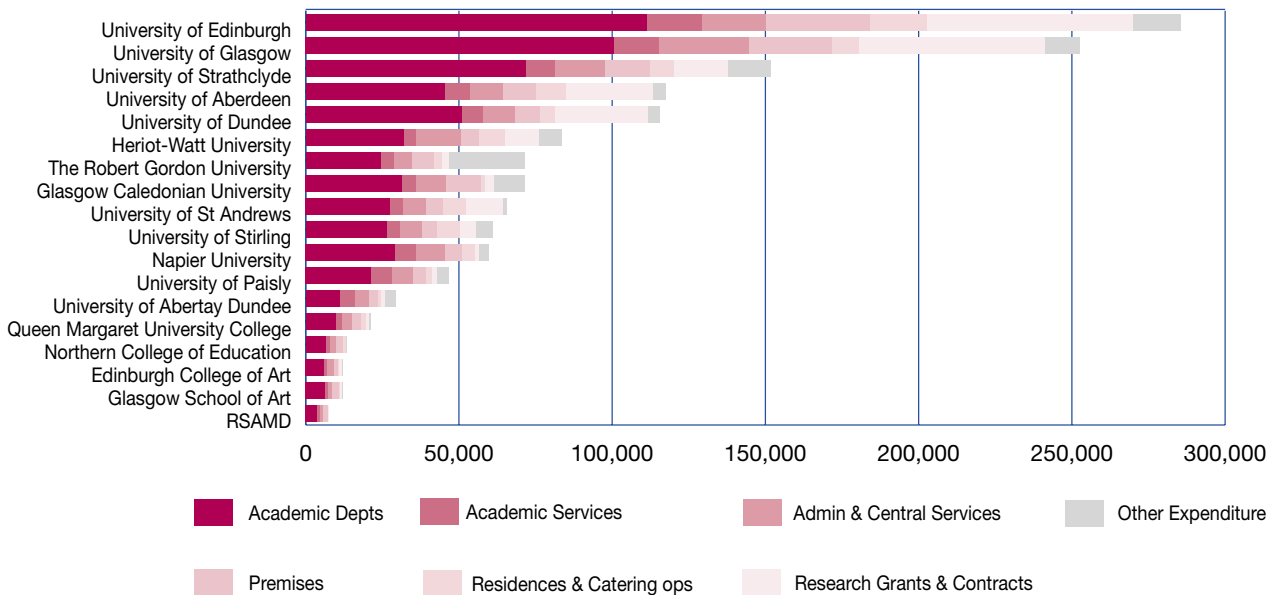
While recognising the diversity within the higher education sector, this report also recognises the contribution that Further Education Colleges make to delivering HE in Scotland (principally at the sub-degree HNC/D level). Whereas the figures in this report refer to the funds distributed by the Scottish Higher Education Funding Council (SHEFC) and relate only to funding to Scotland's HEIs, this HE/FE provision is funded separately by the Scottish Further Education Funding Council (SFEFC). By comparison, all HE in the English sector is funded by the Higher Education Funding Council for England (HEFCE).

The overall variance and diversity of different income and expenditure streams is illustrated below.

Income of HEIs 2001- 2002 - Overall



Expenditure of HEIs 2001-2002 - Overall





6.4 CURRENT INCOME LEVELS

In 2001/02 the total income for all 20 Scottish HEIs was £1.66 billion. This compares to a total income of £1.46 billion in 1999/00 and £1.51 billion in 2000/01.³⁸ Total income at Scottish HEIs in 2001/02 represented 11.5 % of income in all UK HEIs. This share remained fairly constant over the latest three years for which data are available.

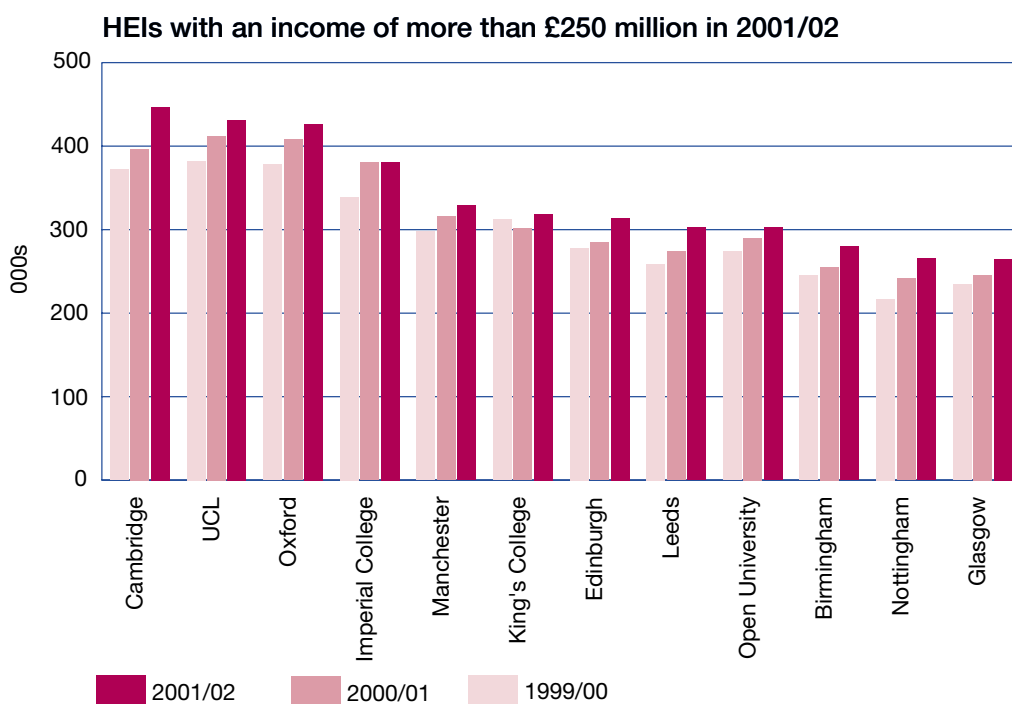
In 2001/02 the average income per institution in Scotland was £83.173 million. For the UK as a whole this figure was £84.742 million. Of the 20 Scottish institutions, only five had an average income above the UK average. This illustrates the skewed nature of institutional incomes toward the larger institutions, with the 12 HEIs in the UK with an income of more than £250 million accounting for 28% of the total income of all 171 HEIs in the UK.

In particular the income of the four largest UK institutions, Cambridge, UCL, Oxford and Imperial College, accounted for 11.6% of all income in 2001/02. These four institutions had a slightly larger combined income than that for all 20 institutions in Scotland. A similar situation occurred in Scotland with two institutions, Edinburgh and Glasgow, accounting for 35% of all HEI income in Scotland and 4% of UK income. Table 1 shows the income in each of the last three years of those 12 HEIs with income of more than £250 million in 2001/02.

CURRENT INCOME SUMMARY FINDINGS

- Scottish HEIs have a diversity of different income and expenditure streams.
- Incomes are skewed towards the larger HEIs – the 12 largest UK HEIs account for 28% of the total income of all 171 HEIs in the UK.

6.5 INSTITUTIONS WITH INCOME OVER £250 MILLION



³⁸ Figures for Bell College and UHIMI are included for 2001/02, but not for previous years.

Income at these 12 institutions grew by 13.2% between 1999/00 and 2001/02. Income at both Edinburgh and Glasgow was slightly under this over the same period at 13.0% and 13.1% respectively. Growth in the other 10 institutions was close to the average except at Cambridge (up 20.1% over the two years), Nottingham (up 22.2%) and King's College (up 2.2%).

These institutions have been selected for comparison in order to examine income trends in the HEIs with the highest income levels and to examine the position of the Scottish HEIs within that group. With the exception of the Open University, all institutions in the above chart are members of the Russell Group – a self-selected body of leading research-intensive universities. The Russell Group institutions, with the exception of the Scottish members, are most likely to charge the full £3,000 variable fee.

Looking at the shares of income by various sources at these 12 institutions in 2001/02 we can see that, with the exception of the Open University (predominately a teaching-based institution), a higher share of income comes from research grants and other income than from funding councils and tuition fees. In terms of income from research grants and other sources, Glasgow and Edinburgh are both on or above the average for the high income institutions, and above the UK average.

Sources of income in 2001/02 for those HEIs in the UK with total income over £250 million

	Total £ million	Funding Councils	Tuition Fees	Research Grants	Other Income
The University of Cambridge	447	31%	12%	33%	23%
University College London	432	30%	14%	34%	22%
The University of Oxford	427	32%	11%	35%	22%
Imperial College	381	30%	12%	40%	19%
University of Manchester	329	31%	22%	23%	24%
King's College London	319	32%	15%	29%	24%
The University of Edinburgh	314	36%	14%	28%	22%
The University of Leeds	303	35%	21%	23%	21%
The Open University	302	52%	35%	5%	8%
The University of Birmingham	280	32%	19%	24%	24%
The University of Nottingham	265	29%	25%	24%	22%
The University of Glasgow	265	40%	13%	29%	18%
All HEIs with income >£250 million	4,062	34%	17%	28%	21%
All UK HEIs	14,491	39%	23%	17%	11%

Source: HESA



An effect of skewing to institutions with a larger income in 2001/02 on the average is to place 60% of UK institutions below the UK average of £84.742 million. Fifteen of the 20 Scottish HEIs (i.e. 75%) are below the UK averages.

6.6 MEDIAN INCOME LEVELS

When examining skewed data it is important to look at median values as well as means. In 2001/02, nine of the 20 Scottish HEIs had a total income above the UK median income, with Stirling on the median income. The spread of incomes at Scottish HEIs among the quartiles of UK HEI income in 2001/02 was fairly uniform. The table below gives details of total income at Scottish HEIs in 2001/02.

Total income of Scottish HEIs in 2001/02			
	Total Income (£000)	Total Income Ranking (out of 171 UK HEIs)	UK Quartile
Scotland	1,663,461	-	-
UK	14,490,875	-	-
The University of Edinburgh	314,068	7	1
The University of Glasgow	264,845	12	1
The University of Strathclyde	158,765	21	1
The University of Dundee	130,776	26	1
The University of Aberdeen	124,961	28	1
UK Average	84,742	-	2
Scottish Average	83,173	-	2
Heriot-Watt University	82,069	69	2
Glasgow Caledonian University	76,430	73	2
The Robert Gordon University	73,402	77	2
The University of St Andrews	73,224	79	2
The University of Stirling	65,609	86	Median
Napier University	65,415	87	3
The University of Paisley	49,095	103	3
Scottish Agricultural College	45,831	106	3
UHI Millennium Institute	32,636	116	3
University of Abertay Dundee	29,430	119	3
Queen Margaret University College	22,241	124	3
Bell College	16,203	134	4
Edinburgh College of Art	13,131	140	4
Glasgow School of Art	12,442	141	4
RSAMD	8,150	152	4

Source: HESA

UK MEDIAN INCOME SUMMARY FINDINGS

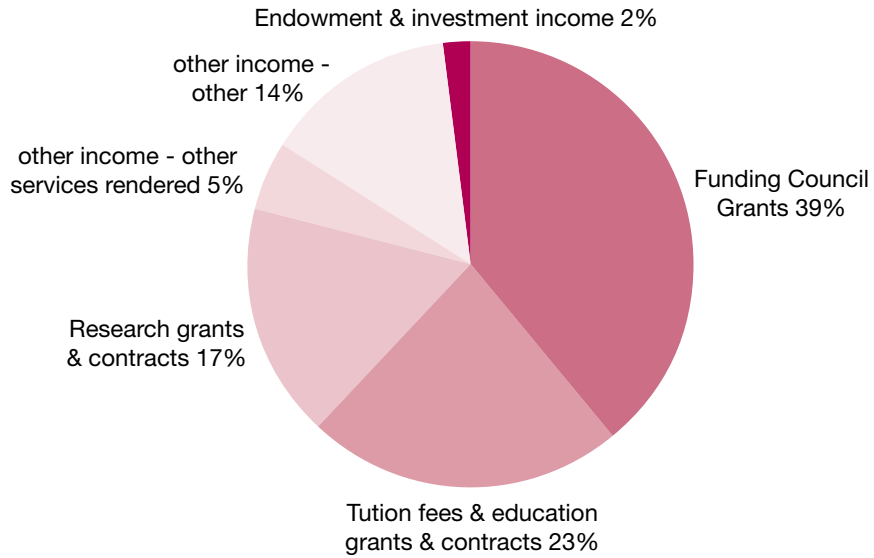
- Total income of Scottish HEIs in 2001/02 was 11.5% of income of all UK HEIs (compared to Scotland's 9% of the UK population).
- Nine out of 20 Scottish HEIs are above the median income level for UK HEIs.

6.7 SOURCES OF INCOME

6.7.1 Overview

Public funding is not the only income source for Scottish HEIs, and wider sources of income have been discussed by the group.

Sources of HEI Funding in UK, 2001-02





In 2001/02 Scottish HEIs obtained a lower percentage of their income from tuition fees than those in the UK as a whole. Tuition-fee income includes fees paid on behalf of home and EU students by government, fees paid directly by home students and fees from overseas students. In general, those Scottish HEIs with a higher UK ranking in terms of income per FTE student tended to receive a higher share of their income from research grants. The Scottish HEIs with a lower UK ranking in terms of income per FTE student tended to receive a higher share of their funding from the Funding Council.

There is a clear distinction between institutions which primarily provide teaching services and other institutions in terms of the share of income from research grants. The post-1992 group of institutions with a stronger teaching focus all derived less than 10% of their income from research grants in 2001/02.

The smaller specialist arts institutions, by comparison, attracted less than 5% of income from research grants during 2001/02, although they benefit from a further unique scheme of funding – the Small Specialist Institution Supplementary Grant, paid by the Scottish Higher Education Funding Council, which provides additional funds for teaching to the smaller arts institutions. The Council created this Small Specialist Institution status in recognition of the diseconomies of scale that these institutions face due to their size and specialist nature.

On average other sources of income beyond the three main streams of funding accounted for around a fifth of income at HEIs in Scotland and in the UK as a whole in 2001/02. Institutions such as The Robert Gordon University obtained a higher share of funding from other sources due to the specialist services they have developed.

Income from endowments and investments accounted for a very small share of HEI income in Scotland (1.5%) and the UK (1.8%) in 2001/02. Income from this source in the UK tends to be highly concentrated at Cambridge and Oxford. While Scottish HEIs accounted for 9.8% of all income at UK HEIs from endowments and investments, Cambridge and Oxford accounted for 18.9% and 11.5% respectively.

Edinburgh and Glasgow had the fifth and sixth highest income from this source of all UK institutions. Edinburgh accounted for 32% of all Scottish HEIs' income from endowments and investments in 2001/02 while Glasgow accounted for 28%. These two institutions accounted for a combined share of 5.8% of all UK HEIs' income from this funding source.

Distribution of income at Scottish HEIs in 2001/02

	Income from Funding Councils ¹	Income from Tuition Fees	Income from Research Grants	Other Income
Glasgow School of Art	66%	24%	4%	6%
RSAMD	64%	18%	1%	17%
The University of Paisley	58%	27%	4%	11%
Edinburgh College of Art	57%	25%	7%	11%
University of Abertay Dundee	53%	24%	4%	18%
Queen Margaret University	52%	25%	8%	15%
Napier University	52%	32%	3%	13%
Glasgow Caledonian University	51%	17%	4%	28%
Bell College	48%	38%	0%	14%
UHI Millennium Institute	45%	10%	14%	31%
The University of Strathclyde	44%	26%	14%	15%
Scotland (Average)	42%	19%	19%	20%
The University of Aberdeen	41%	16%	27%	16%
The University of Glasgow	40%	13%	29%	18%
UK (Average)	39%	23%	17%	21%
The University of Stirling	39%	26%	11%	24%
England (Average)	38%	24%	17%	21%
The Robert Gordon University	38%	22%	2%	38%
Heriot-Watt University	37%	21%	15%	26%
The University of Edinburgh	36%	14%	28%	22%
The University of Dundee	36%	18%	29%	16%
The University of St Andrews	35%	20%	24%	21%

¹ The Scottish Higher Education Funding Council

Source: HESA

SOURCES OF INCOME SUMMARY FINDINGS

- Scottish HEIs received 13.2% of all UK research grant funding; nine out of 17 Scottish HEIs had research grant income above the median for UK HEIs, and three were in the top 20.
- Scottish HEIs obtained a lower percentage of their income from tuition fees than those in the UK as a whole in 2001/02.
- In 2001/02 Scottish HEIs with a higher UK ranking in terms of income per FTE student tended to receive a higher share of their income from research grants.
- Scottish HEIs with a lower UK ranking in terms of income per FTE student tended to receive a higher share of their fees from the Funding Council in 2001/02.

6.7.2 Research Grant Income

Due to the combination of teaching and research at Scottish HEIs, and the recognised quality of research in Scotland, Scottish institutions tend to raise more research grant funding than the bulk of their counterparts in the rest of the UK.

Research income at Scottish HEIs, 2001/02

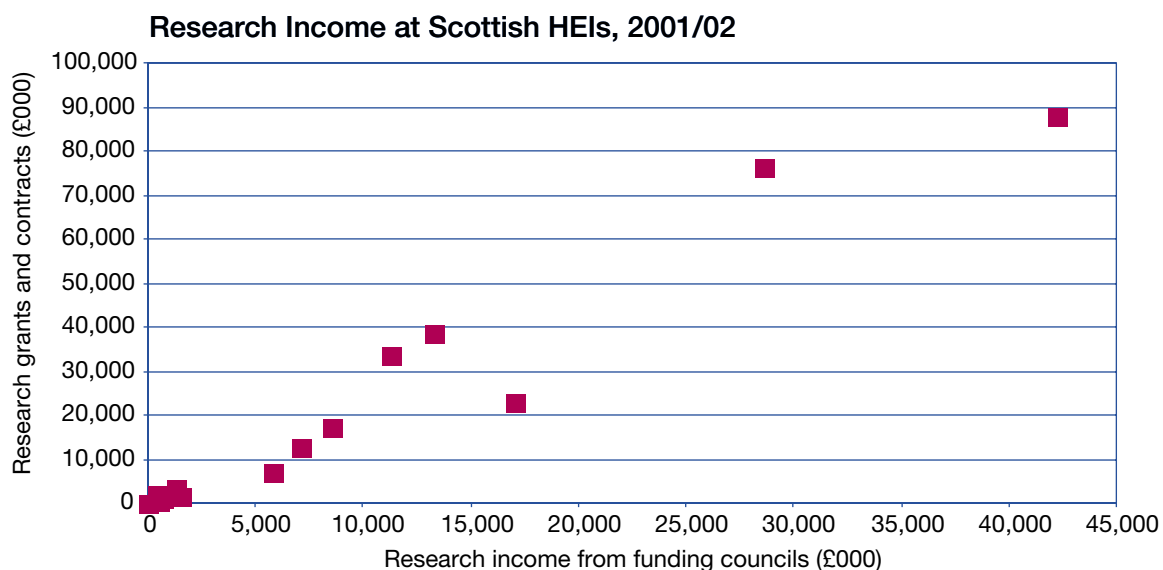
	Research income from funding councils ² (£000)	Research grants & contracts (£000)	Total research income (£000)	Total income (£000)	Research income as a share of total income
Total ¹	141,013	308,956	449,969	1,564,053	29%
The University of Edinburgh	42,290	87,833	130,123	314,068	41%
The University of Glasgow	28,599	76,379	104,978	264,845	40%
The University of Dundee	13,330	38,493	51,823	130,776	40%
The University of Aberdeen	11,239	33,554	44,793	124,961	36%
The University of Strathclyde	17,032	22,672	39,704	158,765	25%
The University of St Andrews	8,550	17,287	25,837	73,224	35%
Heriot-Watt University	7,113	12,451	19,564	82,069	24%
The University of Stirling	5,818	7,036	12,854	65,609	20%
Glasgow Caledonian University	1,296	3,294	4,590	76,430	6%
The Robert Gordon University	1,555	1,625	3,180	73,402	4%
Napier University	1,238	1,868	3,106	65,415	5%
Queen Margaret University College	679	1,834	2,513	22,241	11%
The University of Paisley	411	1,903	2,314	49,095	5%
University of Abertay Dundee	491	1,224	1,715	29,430	6%
Edinburgh College of Art	689	854	1,543	13,131	12%
Glasgow School of Art	521	558	1,079	12,442	9%
RSAMD	36	91	127	8,150	2%

Source: HESA, SHEFC

¹ Excludes Bell College, UHIMI

² Includes technology transfer funds

There is a reasonably close relationship between income from SHEFC and income from research grants and contracts from other sources, as the table below shows.



In 2001/02 Scottish HEIs received 13.2% of all research grant funding at UK HEIs compared to their 11.5% share of all income at UK HEIs, and higher than Scotland's 11.5% share of all research staff at UK HEIs.

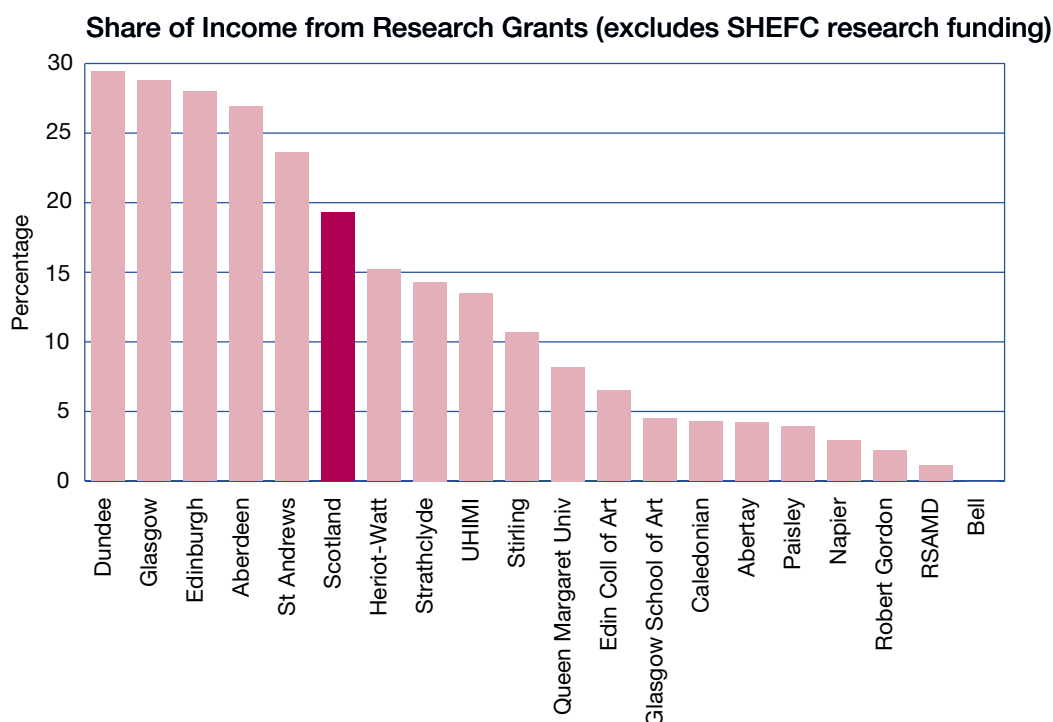
This is reflected in the relative position of Scottish HEIs compared to other UK HEIs in terms of research grant income. In 2001/02 nine out of 17 Scottish HEIs had research grant income above the median for UK HEIs – three were in the top 20.

As noted at 3.12.3, a large proportion of research income is generated by the activities of a small minority of key personnel. The group examined university research income by member of research staff using available sources of information on the grounds that it could be useful in identifying which institutions are most exposed to the risk of losing research staff. However, doing this exercise revealed anomalies which suggested problems with the underlying data in terms of comparability between institutions and more work would need to be done to refine this before publishable figures could be made available.

Taking into account the impact that the White Paper proposals may have on research income for Scottish HEIs – increased funding for English HEIs generally, and increased selectivity of research funding – the group has examined data on flows of research income by source across Scottish HEIs. By examining areas where individual institutions have been able to increase funding from a particular source, it may be possible to further identify areas of best practice.



The following chart shows the share of total income at Scottish HEIs in 2001/02 from research grants.



As can be seen in 2001/02 research grants accounted for 15% or less of total income at most Scottish HEIs. Of those institutions where research grants accounted for more than 20% of total income, only St Andrews was outside the top 25 HEIs in the UK in terms of the number of research staff.

It is likely that the most significant group of academic staff who could be attracted away from Scottish HEIs will be the group of leading researchers currently working in Scotland and such staff are already likely to be offered posts at other institutions at present (See 3.12). Until the situation in the rest of the UK becomes clearer in terms of the extent that variable fees will be charged and what the money raised through variable fees will be spent on, it is not possible to make firm predictions about the numbers who will be attracted away and the cost in terms of lost research grants. However it is clear that this is a significant future risk particularly at individual departmental level.

A further issue discussed by the group was that a greater recognition was needed from business and industry that expertise coming from HE sector needs to be paid for at full consultancy rates, and research paid for at full economic cost (FEC). However, this is not just a costing issue. It is necessary to ensure that (FEC) costs of research are owned and understood by academic staff engaged in making research grant applications or managing research projects. The group understands that SHEFC are undertaking work into developing guidance on the extension of the transparency (TRAC – Transparent Approach to Costing) methodology so that HEIs are able to calculate the full economic cost of research projects and indeed other contracts and activities. If these costs are met by commissioning research bodies, this should result in increased research revenue.

RESEARCH INCOME SUMMARY FINDINGS

- In 2001/02 Scottish HEIs received 13.2% of all research grant funding at UK HEIs compared to their 11.5% share of all income at UK HEIs. This figure was achieved by Scotland's 11.5% share of all research staff at UK HEIs.
- Nine out of 17 Scottish HEIs had research grant income above the median for UK HEIs, and three were in the top 20.
- In Scottish HEIs, a large proportion of research income was generated by the activities of a small minority of key personnel. It is this significant group of academic staff – the group of leading researchers currently working in Scotland – who could be attracted away from Scottish HEIs assuming increased spending power of English HEIs following the introduction of variable fees.
- Greater recognition needed from business and industry that expertise coming from HE sector needs to be paid for at full consultancy rates, and research paid for at full economic cost.

6.7.3 Income from Tuition Fees – from Non-EU Students

As can be seen in the table below, income from non-EU students' tuition fees represents a significant and growing income stream for the sector.

The figures below are on a sector basis as provided by the institutions in their Strategic Plan Forecasts in June 2003. Further breakdown of the figures by institution cannot be provided as this is classed as commercially sensitive information. The figures presented include all fees from full-time non-EU students taking degree, diploma or similar HE award or credit-bearing courses who are charged overseas or full cost.

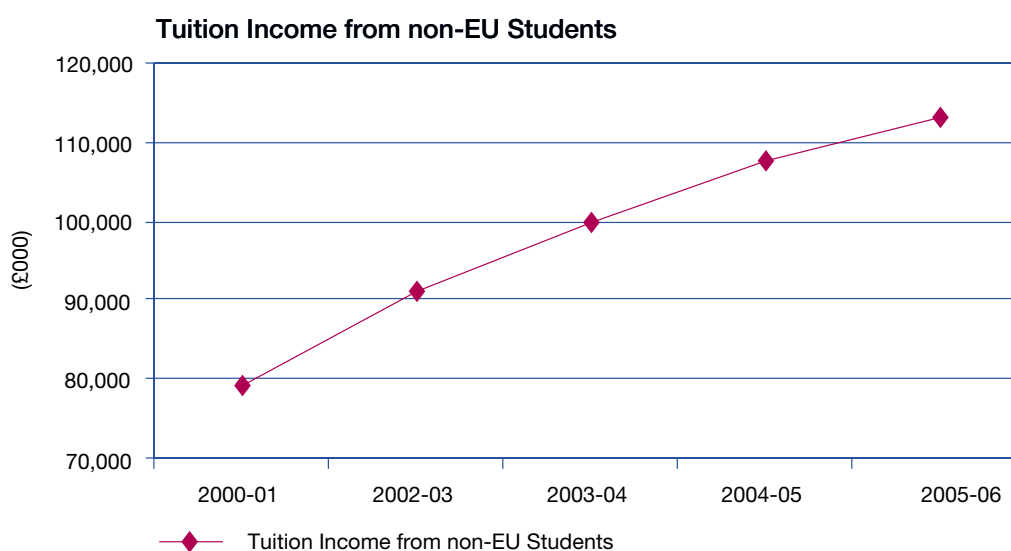
Full-time Higher Education Course Fees for non-EU students – Scottish Higher Education sector (2000/06)

	£	% change
2000/01 Actual	79,193,000	-
2002/03 Forecast ¹	90,965,000	14.90%
2003/04 Budget ²	99,969,000	9.90%
2004/05 Plan	107,547,000	7.60%
2005/06 Plan	113,105,000	5.20%

Source: SHEFC

1. The 2002/03 forecast figure is collected at the point when the institution can supply 11 months of actual results and one month of forecast information. The 2003/04 figure is the budget for that year set by the institution.
2. The 2003/04 figure is the budget for that year set by the institution.

The graph below demonstrates that Scottish HEIs forecast a reduced rate of increase in income levels from this source – although still an increase.



Latest figures from UCAS present a more favourable position. The number of non-EU overseas students accepted to Scottish institutions in the current year rose 26.1% to 1,954 compared to 1,550 in 2002. It is likely that given the increase in the numbers of non EU overseas students, HEIs will revise their forecasts upwards. Numbers have grown particularly from those countries targeted by Education UK Scotland.

Numbers of non-EU students at Scottish HEIs are shown in the table below, and the percentage of non-EU students compared to the entire student body by institution.

Non-EU students¹ at Scottish HEIs, 2001/02

	All students	Non EU students	Non EU students as a share of all students
Total	197,096	12,939	6.6%
The University of Edinburgh	24,667	2,122	8.6%
The University of Strathclyde	21,692	1,595	7.4%
The University of Dundee	15,584	1,537	9.9%
The University of St Andrews	7,576	1,299	17.1%
The University of Aberdeen	13,753	1,055	7.7%
The University of Glasgow	23,510	1,007	4.3%
Heriot-Watt University	7,368	893	12.1%
The Robert Gordon University	11,200	885	7.9%
Queen Margaret College	4,416	546	12.4%
Napier University	13,568	436	3.2%
The University of Stirling	8,751	382	4.4%
Glasgow Caledonian University	15,170	348	2.3%
University of Abertay Dundee	4,617	251	5.4%
The University of Paisley	10,794	238	2.2%
Edinburgh College of Art	1,731	153	8.8%
Glasgow School of Art	1,442	113	7.8%
RSAMD	666	43	6.5%
UHI Millennium Institute	5,922	18	0.3%
Bell College	3,957	13	0.3%
Scottish Agricultural College	712	5	0.7%

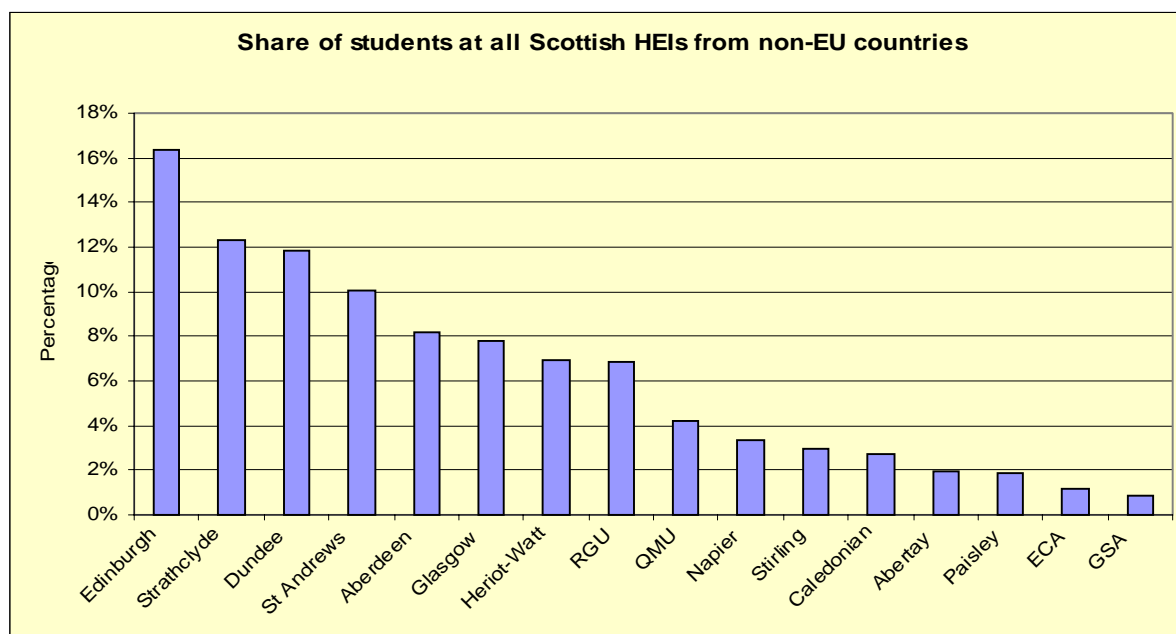
Source: HESA

1. Excludes students studying outwith the UK.

In terms of the number of students from outside the EU the share of all students who fall into this category is fairly evenly spread across Scottish HEIs with Heriot-Watt and Queen Margaret College University having significantly higher than average shares of non-EU students.

When figures for postgraduate non-EU students are added, excluding distance learners, for 2001/02 the total number of students rises to 12,939.

The table below shows the distribution of 1st degree non-EU students studying in Scotland, with percentages of the 1st degree non-EU student population in Scotland presented by institution.



5.12.1 sets out the longer-term risk to Scotland of HE in England being perceived as better quality, as a result of investment made with extra tuition-fee income. A perception such as this, were it to develop, may lead to overseas students being more likely to apply to study in England. The table above shows which institutions may be most at risk from a reduction in the number of non-EU students applying to Scottish HEIs.

As noted at 5.7.1, an institution's Research Assessment Exercise rating is a significant factor in non-EU student choice. Similarly, given that fee-paying non-EU students are attracted to study in Scotland due to the overall reputation of its research intensive institutions, there is potential impact for a reduction in overall fee income should these research departments lose their best research staff. In other words, there are potential linkages between different income streams.

OVERSEAS STUDENTS INCOME SUMMARY FINDINGS

- In 2001-02 nearly 13,000 fee paying non-EU students studied at Scottish HEIs – representing an income stream of £80 million.
- Income from this stream has grown relatively quickly – but it is an income stream vulnerable to competitive pressure.
- However, latest UCAS figures show a significant increase (26%) in applications to Scottish HEIs by non-EU students. The number of non-EU overseas students accepted to Scottish institutions in the current year rose to 1,954 compared to 1,550 in 2002.

6.7.4 Endowment Income of Scottish HEIs

The group has drawn together and discussed reports and statistics on endowment funding of HEIs, including a report from The Sutton Trust: University Endowments – A US/UK comparison. In examining these figures, it is important to be clear about the distinction between balances and the income generated from these balances.

In the context of table 8, below, it is worth comparing the position of the two leading Scottish HEIs – Glasgow and Edinburgh – first, to other universities in the UK, particularly Cambridge and Oxford, and noting that they are the only two universities in Scotland with a competitive UK position with regard to levels of endowment fund, and secondly, in comparison to other Scottish HEIs and the extent to which their endowment fund far exceeds that of other institutions in the sector (and also the Scottish mean and median figures). The Universities of Glasgow and Edinburgh hold more than twice the endowment of the other Scottish HEIs combined. The table below also reflects the general position in the UK that the oldest universities are the ones which tend to have the largest endowments.

Endowment Capital Balances – Scottish HEIs, 2000/02			
Institution	Millions 31-Jul-02	Difference 2000/02	Millions 31-Jul-00
The University of Edinburgh	142	-13.40%	163.97
The University of Glasgow	91.2	-28.70%	127.91
Scotland (Median)	71.1	n/a	n/a
The University of St Andrews	29.2	-26.20%	39.57
The University of Aberdeen	22.8	-19.30%	28.25
Scotland (Average)	20	n/a	n/a
The University of Strathclyde	16.2	15.40%	14.04
The University of Dundee	11.4	-20.20%	14.29
Heriot-Watt University	4.96	0.80%	4.92
Edinburgh College of Art	3.22	-17.10%	3.88
Scottish Agricultural College	2.63	n/a	n/a
The Robert Gordon University	1.77	-24.20%	2.34
RSAMD	1.57	6.60%	1.47
Glasgow School of Art	1.33	-5.50%	1.41
The University of Stirling	1.19	-11.30%	1.34
Queen Margaret University College	1.11	-10.40%	1.24
Glasgow Caledonian University	0.357	-14.40%	0.42
University of Abertay Dundee	0.483	6.90%	0.45
Napier University	0.198	-4.80%	0.21
The following institutions have no endowment			
Bell College			
The University of Paisley			
UHI Millennium Institute			

Source: THES [The following institutions have no reported endowments for this period: Bell College, The University of Paisley, UHI Millennium Institute.

The figures in the above table were reported in 'The Times' Higher Education Supplement.

The balance sheets used to calculate the figures were supplied by the Higher Education Statistics Agency and are for the year to July 31, 2002. Comparisons are with the year to July 31, 2000]



The current annual income available from endowments is around 3.5% of the Endowment Capital Funds. In the context of the above table it is also worth noting the Scottish Parliament's Enterprise and Culture Committee report on its Scottish Solutions inquiry which states, 'Scottish universities currently earn around 2% of their income from endowments and investment income. Recent stock market fluctuations clearly have an impact on this income source; and the SPICe briefing 'Funding Higher Education in England and Scotland' demonstrates that endowment income is not reliable from year to year. Percentage changes year on year from 1995/96 to 2000/01 range from increases of 11% and 16% to falls of 12% and 18%'.

As well as noting the year-on-year variance in endowment income, the sub-group meetings recognised that endowment funds were often linked to specific purposes, while commercially 'earned' income had the added value of being free for the HEIs to use as they chose, although specific endowment funds could sometimes be used to replace (and therefore release) existing funds previously allocated to those purposes. The group recognised the need to break down data on endowment funds allocated for specific actions, as compared to funds gifted for general purposes.

Investment by some HEIs in fund-raising activities should be compared with the value of the additional funds attracted as a result. The Sutton Trust report points to the need to recruit dedicated fundraising staff in UK HEIs, which would add to these costs. In many cases institutions raise sponsorship funding which is simply spent as recurrent income in the year in which it is obtained. Where previously large multi-national corporations might have given very large capital sums, the income from which could be used to fund lectureships or professorships, it is more common now to find that institutions report the best that can be obtained is a modest recurrent sum over a period of five years or so, which simply pays the actual costs of a specified activity.

It is noted in the Report of the Scottish Solutions inquiry that 'endowment funding is still perceived as individual donations, often linked to specific activities or benefits. The Committee is of the view that much more work of this nature actually goes on than is recognised, in terms of sourcing and accessing charity funding, "altruistic" business donations, etc. The Committee considers that universities should build on this area of their work, continuing to professionalise their approaches, and again investigating any possible areas of creative and productive collaboration. There is a need to capture best practice in this area to ensure that all universities are working to expand this area of their income... The Committee recognises the benefits of endowment funding, and recommends that universities should continue their efforts in this area. The Committee believes that in the longer term there is no reason why it should not become a more significant part of university funding than is now the case'. This is an area where further work could be useful, particularly when the DfES Endowment Task force produces its report.

In the context of the evidence presented to the group, and in light of a conclusion in the report of the 'Scottish Solutions' enquiry that this funding stream should become 'a more

significant part of university funding in the future', a number of key questions have emerged:

- How can universities encourage a culture of charitable (endowment) giving in terms of both individual alumni and organisational/ business donations? In its comparison of UK and US universities endowment-raising activity, the Sutton Trust report states that charitable giving in the UK stands at 0.6% of GDP, compared to 2.0% of GDP in the US. How would this attitudinal change be stimulated by taxation incentives?
- How can universities make best use of both specific and general endowments while recognising concerns about the reliability and sustainability of the funding stream and implications for use of endowment income for core-funding activities?
- How can universities develop further strategies to expand the area of endowment expansion and income generally?

The Executive has recently organised a meeting between colleagues from Department for Education and Skills (DfES) and representatives of Scottish HEIs to discuss the DfES Endowment Task force, and will continue to monitor DfES activity in this area.

ENDOWMENT INCOME SUMMARY FINDINGS

- Only two Scottish HEIs demonstrate a competitive UK position with regard to levels of endowment fund.
- Income from endowments and investments accounted for a very small share of overall HEI income in Scotland (1.5%) and the UK (1.8%) in 2001/02.
- Whilst potential may exist to grow endowment income, the proportionate contribution this makes to overall income is likely to remain very low.

6.7.5 Commercial and Other Income

The Higher Education Business Interaction Survey is undertaken annually across the UK Higher Education Sector to collect data on the institutions' strategies and activities pursued during the previous academic year to commercialise knowledge. The Scottish results highlighted in this report are based on responses by 19 Scottish Higher Education Institutions for 2001/02.

In 2001/02, as in previous years, Scotland has, according to the survey, been generally more active in knowledge transfer than the UK as a whole. This is due to a combination of three factors: relative to its population Scotland has more HEIs and a commensurate higher level of research funding; Scottish HEIs tend to have a medium or higher Research Profile, measured by their share of research funding relative to total funding; individual Scottish institutions are more active on some of the indicators.

Second only to the provision of education, Scottish institutions mentioned knowledge transfer as the area through which they make their greatest contribution to economic development, particularly in the areas of medical science & technology, biotechnology and information & communications technology.



During 2001/02, Scottish Higher Education Institutions:

- signed 967 contracts with businesses worth 9% of the UK total and with an average value of just over £40,000.

The proportion of UK HEI contracts with business signed by Scottish HEIs remained constant in 2001/02 (9%; 967 contracts). The average value of the contracts was £40,500, about 37% more than the UK average, giving Scotland 12% (£39,171,000) of total UK contract income.

- provided equipment-related services to industry (16 HEIs), involving 443 firms, 7% of all UK firms involved; the value of these contracts was £20 million, 39% of the UK total

Sixteen of the 19 Scottish institutions provided such services, a higher proportion than in the UK as a whole. However, the number of firms involved was relatively low (7% of the UK total; 443 firms). Because of services to the offshore industry the value of such contracts is high, £20 million, 39% of the total UK income from such services

- filed 167 new patent applications, 17% of the UK total compared to 12% during the previous year; had 42 patents granted, 21% of the UK total (previously 12%), and; executed 102 licences, 17% of the UK total, compared to 107 licences (14%) in the previous year

The total revenue from intellectual property commercialisation activities in 2001/02 in Scottish HEIs was £9.9 million, excluding income from equipment-related services. This is 30% of the UK total and a two-fold increase on Scottish HEIs revenue in 2000-01. The cost to protect intellectual property was reported as £1.6 million, 13% of UK total

- provided consultancy to 977 firms, averaging 51 firms per institution, compared to 115 consultancies on average per UK institution

There has been a considerable (30%) decline in the number of firms assisted through consultancy by Scottish HEIs, falling from 1,391 firms in 2000/01 to 977 firms in 2001/02, which represents only 5% of all firms assisted by UK HEIs. On average 51 firms were assisted by each Scottish HEI compared to more than twice as many, 115 firms, per UK HEI. This may reflect the lower R&D spending of Scottish businesses relative to that in the UK.

The number of contracts from consulting activity handled through formal channels has however remained stable (1,627 in 2001/02 compared to 1,605 for 2000/01), and the total income of these activities increased by half to £15.4 million, representing 13% of the UK total for 2001/02 compared to 10% in 2000/01.

- created 23 spin-off companies with some HEI ownership, 12% of the UK total, eight fewer than in the previous year
- contributed intellectual property to 34 other known spin-offs and start-ups, 9% of the UK total (31 in the previous year)
- placed 11,293 undergraduates in businesses, 9% of the UK total, compared to 13,289 placements in 2000/01.

The ability of HEIs to raise income levels by increasing interaction with business has been considered by the Parliamentary Enterprise and Culture Committee's Scottish Solutions Inquiry. The Committee recognised the successes of Scottish HEIs in increasing their income from commercialisation and other non-governmental sources.

This is an area where the Scottish HE sector already performs relatively strongly – but there are aspects of this type of activity, such as consultancy to business, where at first sight there is scope to expand activity further. Nonetheless it is generally recognised, even by institutions in the US such as MIT, that this activity is in most cases unlikely ever to provide a large source of discretionary income to institutions.

6.8 IMPACT OF FEE CHANGES ON INDIVIDUAL INSTITUTIONS

The group recognised that there remain many uncertainties surrounding the introduction of variable fees. The group did not come up with a form of modelling for effects which it felt was satisfactory at this stage, although this is clearly an area to pursue further collaboratively. In particular, any modelling which is to be useful would need to be done in such a way as to compare institutions of similar type.

6.8.1 Indicative Estimate of Impact

Although more work needs to be done on detailed modelling, a simple analysis shows that an institution with 10,000 full-time undergraduate home students in England which is able to charge the full fee will receive an additional £1800 (£3000 – less £1200 fee) per student per year. Allowing for the requirement to provide bursaries of at least £300 a year to the least-well off students, and taking the DfES estimate that bursaries should not account for more than around 10% of fee income, that implies that, other things being equal, an institution of this size may have around £16 million more than before in net income for the same number of students, by the time that all students are in the new regime.

6.8.2 Impact on Competitive Advantage

The level of educational provision and research activity currently provided by Scottish HEIs is funded from current income. The introduction of variable fees in HEIs elsewhere will not of itself reduce the levels of income provided by the Scottish Executive.

There may be effects on future income should Scotland lose the competitive advantage afforded by the current set-up, particularly in light of the potential impact of the increased spending power of English HEIs. Maintaining a competitive edge in income should allow a competitive edge in facilities and staff.

Fee Income

Regardless of actual income differences there is a risk that students may regard Scottish HEIs less favourably simply because they do not have the extra income stream from variable fees. Such attitudinal changes might affect the competitive standing of Scottish HEIs. This could have some effect on other income, especially from non-EU students who pay full course fees.

Research Income

The introduction of variable fees is likely to have some effect on the UK market for top research staff. As detailed at 6.7.2, a loss of key researchers can be expected to lead also to loss of research income.

Other Income

The range of other income streams into HE is very wide and there is clearly scope for further work to identify the potential for growth in these.



Income from other services provided is sometimes related to the research capability and reputation of an institution, and might be affected by any drift of leading research academics from Scottish HEIs to institutions in the rest of the UK. However, certain specialised services are unique to a handful of institutions which are UK and in some cases European and world leaders in the field. This means that this type of income is unlikely to be affected by the introduction of variable fees in the foreseeable future. Equally, income which can be generated by providing, for example, consultancy to local businesses is less likely to be affected by fee changes in England.

The ability of institutions to raise corporate sponsorship and partnership funding is dependent on a range of factors not least of which is the general economic situation. Notwithstanding the effects of the economic cycle, corporate sponsorship is most often associated with research capability. Any loss or perceived loss of research capability within Scottish HEIs as a result of the introduction of variable fees elsewhere might lead to some reduction in corporate sponsorships and partnership.

Are Scottish Institutions at Risk?

As far as we can see at this stage there are two factors following the proposed introduction of variable fees which might lead to significant difficulties at Scottish HEIs in terms of income generation.

First, the departure of top research staff and the associated loss of research income might affect the financial position of Scottish HEIs. Secondly, any loss of prestige at Scottish HEIs in the eyes of fee paying students from outwith the EU might lead to losses in fee income.

Other effects such as some loss of top teaching staff might have a negative effect on the quality of the sector's outputs, but these are unlikely to affect income significantly at least in the short and medium term due to the historically high level of demand for HE places from within Scotland.

6.9 HE IN FE COLLEGES - INCOME

As highlighted at the beginning of this report, funding in Scotland is distributed on an institutional basis to HEIs (by SHEFC) and FECs (by SFEFC). By comparison, in England funding is distributed by level of course. This means that HEFCE funds all HE provision no matter where it occurs, resulting in HE teaching and capital funding grant being allocated to universities, HE colleges and FE colleges from one central budget at a standard unit of resource. Added to that the unit of resource currently made available colleges to deliver HNC/Ds is substantially less than that made available to universities for degree provision.

Given that DfES plans to drive expansion in HE through the new Foundation Degree, any increases in grant funding available to expand HE provision in England does not just affect the competitiveness of HEIs in Scotland. The report recognises that this may also affect the Scottish colleges delivering sub-degree provision which is broadly comparable to the proposed Foundation Degrees.

6.10 INTERNATIONAL COMPARISONS IN HIGHER EDUCATION

The Review highlighted the need for more data on which to base meaningful international comparisons in terms of Scotland's HE system, with a particular focus on income.

Research is being commissioned under the Review to identify:

- Countries which would serve as the most meaningful cases for comparison with Scotland.
- Groups of institutions, from different countries (including RUK), which could be meaningfully compared with groups of Scottish institutions.
- Individual institutions, from different countries (including RUK), which could be meaningfully compared with individual Scottish institutions.

Specific areas to research will be as follows:

- Investigation of sources and uses of income for comparison against figures for Scottish HEIs: international averages, and case study comparisons of individual RUK HEIs.
- Categorisation of institutions UK-wide, to list 4 or 5 different categories of institution, and list institutions by category.

The research will be required to draw conclusions about the balance of income, and changes in this balance, by types of institution in the UK. It will identify, in particular, institutions which demonstrate a growth in non-public funding over the past 5 to 10 years, to shed light on any practices that could be pursued at Scottish institutions deemed to have comparable potential.

6.11 WHAT WOULD WE LIKE TO KNOW IN THE FUTURE?

- During group discussions, the top line was – ‘What will happen if the DfES White Paper is approved’. At the time of writing the Higher Education Bill is yet to be firmly endorsed by the UK Parliament. There remain many uncertainties: which universities will introduce variable fees; how much variance will they use; what will be the impact on student flows; to what extent will a funding gap emerge?
- Impact of commercialisation activities in HE: there needs to be a sophisticated understanding of the potential for income from this source. Not all commercialisation activity is – or should be expected to be – profitable. It should be noted that an HEI's share of a spinout company is quickly diluted by the introduction of essential venture capital from other sources. This significantly decreases the institution's income from spinouts. Knowledge transfer clearly can be a helpful additional income source to institutions.
- In the timescale available to this review, it has been impossible to exhaustively consider the potential ability of HEIs to grow non-government income streams. However, evidence reviewed to date suggests that within current models, the potential is limited.
- An issue considered was the implication for additional funding to the Scottish Budget (Barnett consequentials) should any increased funding be available as a result of the changes planned in England. Specifically, whether any extra income would be distributed to the HE sector.

6.12 WHAT ISSUES ARE LIKELY TO BE IMPORTANT IN THE FUTURE?

A few key issues have emerged from the meetings:

- The level of Scottish Executive support for the activities the Executive looks to the HE system to provide.
- Commercialisation and alternative (non-SHEFC) areas of income generation. Recurrent income from the commercialisation of intellectual property generated through R&D is unlikely ever to be a major source of income – its main benefit ought to be for the economy at large.
- The group recognises the importance of the value of the HE sector in developing the Scottish economy. Universities should be encouraged while seeking a return from their intellectual endeavours, not to do so to the extent at which they may damage the possibility of successful exploitation by industry. As noted previously, spin-out companies, to be successful, require several rounds of venture funding which dilutes the university interest considerably.
- The introduction of ITIs was discussed in terms of their future impact on income for Scottish HEIs – this will be an issue for future monitoring and analysis.
- It is a recommendation in the Scottish Solutions report that ‘universities have a responsibility to continue to seek other sources of funding, and to work to maximise best value for public funding. The Committee considers that there is considerable scope for universities to increase their links with business, industry and employers, and recommends that universities, their representative bodies, the Funding Council and the Executive considers carefully the findings of the Lambert Review with a view to stimulating such links’.

The Scottish Executive is considering the recently published Lambert Review of Business-University Collaboration, set up to examine how the long-term links between business and British universities can be strengthened to the benefit of the UK’s economy. In this context the group considers that greater recognition is needed from business and industry that expertise coming from the HE sector needs to be paid for at full consultancy rates, and research paid for at full economic cost. The Executive will continue to follow the progress of recommendations made in the Lambert Review.

- The need for investment in the capital estate in Scottish Universities, and implications for future expenditure. Linking with the capital sub-group has highlighted the need for significant future investment in the capital estate of Scottish HEIs.

6.13 WHAT CAN WE DO NOW?

- The Executive must continue to monitor closely developments in relation to variable fee policy and maintain updated models which would enable comparison on the position of institutions on either side of the border.
- The Executive should disseminate the results of the further research into those areas where there is evidence HEIs have in recent years been able to increase non-funding council income.
- Consideration should be given to how Executive funding can be used most effectively to assist HEIs in leveraging in funds from other sources, whether public (such as Research Council) or private.
- The Executive should support HEIs in charging full market rates for services provided to others, such as consultancy to business, and the Executive itself.

Glossary

Glossary of Terms

BCIS – Building Cost Interp Service

DfES – Department for Education & Skills

DDA – Disability Discrimination Act

EIB – European Investment Fund

EMS – Estate Management Statistics

ETLLD – Enterprise, Transport and Lifelong Learning Department

EU – European Union

FD – Foundation Degrees

FE – Further Education

FEC – Further Education College

FTE – Full Time Equivalent

GDP – Gross Domestic Product

HE – Higher Education

HEFCE – Higher Education Funding Council for England

HEI – Higher Education Institution

HESA – Higher Education Statistics Agency

HNC – Higher National Certificate

HND – Higher National Diploma

ITI – Intermediate Technology Institute

JIF – Joint Investment Fund

JMC – JM Consulting

JNCHES – Joint Negotiating Committee for Higher Education Staff

LEC – Local Enterprise Company

MA – Modern Apprenticeship
OECD – Organisation for Economic Co-operation and Development
PFI – Private Finance Initiative
R & D – Research and Development
RAE – Research Assessment Exercise
RICS – Royal Institute of Chartered Surveyors
RUK – Rest of the United Kingdom
SAAS – Student Awards Agency for Scotland
SCQF – Scottish Credit and Qualifications Framework
SFEFC – Scottish Further Education Funding Council
SHEFC – Scottish Higher Education Funding Council
SHOP – Scottish Heads of Personnel
SRIF – Science Research Investment Fund
SRIF 2 – Science Research Investment Fund 2
SR2004 – Spending Review 2004
SQA – Scottish Qualifications Authority
SVQ – Scottish Vocational Qualification
THES – Times Higher Education Supplement
TIF – Teacher Infrastructure Fund
TTA – Teacher Training Agency
UCAS – Universities and Colleges Admissions Service
UCEA – The Universities and Colleges Employers Association

Annex A.1

ANNEX A.1 Comparative summary of academic staff indicators for Scottish and RUK HEIs 2001/02

	Scottish HEIs	RUK HEIs
Number of academic staff	16,760	128,477
% teaching & research	55%	60%
% research only	35%	31%
% teaching only	10%	10%
Student to academic staff ratio	12.1 students	15.8 students
Student to teaching staff ratio	18.7 students	22.8 students
Average age of all academic staff	41.2 years	41.9 years
- male staff	42.7 years	43.1 years
- female staff	38.6 years	40.0 years
Percentage of academic staff who are female	37%	38%
teaching & research	30%	33%
research only	45%	43%
teaching only	46%	48%
Percentage of academic staff who are part-time	14%	17%
- male staff	10%	13%
- female staff	22%	25%
Average academic staff cost per member of academic staff	£27,892	£31,099
Percentage of all academic staff with annual salary:		
£15000 and under	9%	12%
£15001 to £20000	13%	11%
£20001 to £25000	17%	16%
£25001 to £30000	13%	14%
£30001 to £35000	19%	20%
£35001 to £40000	13%	12%
£40001 to £45000	6%	6%
£45001 to £50000	3%	3%
Over £50000	7%	6%
Percentage of academic staff employed on:		
permanent terms	53%	55%
Fixed-term contracts	46%	42%
other terms	1%	5%
Percentage of all staff who are fixed-term contract research only staff	33%	29%
Staff new to their current HEI as a share of all academic staff in 2001/02	15.40%	16.10%
Staff who departed their HEI as a share of all academic staff in 2001/02	14.90%	13.50%
Permanent staff new to their current HEI as a share of all permanent academic staff in 2001/02	5.30%	7.90%

ANNEX A.1 (cont'd) – Comparative summary of academic staff indicators for Scottish and RUK HEIs, 2001/02

	Scottish HEIs	RUK HEIs
Permanent staff who departed their HEI as a share of all permanent academic staff in 2001/02	6.70%	7.10%
Known previous year's employment of academic staff new to their HEI in 2001/02:		
Other HEI/Educational Institution	33%	34%
Student	28%	22%
UK Public Sector	13%	15%
UK Private Sector	12%	12%
Overseas HEI	6%	8%
Other Overseas Employment	4%	4%
Not in regular employment	3%	2%
Overseas Research Institution	2%	3%
Known destination of academic staff who left their HEI in 2001/02		
Other UK HEI/Educational Institution	24%	28%
Retirement	17%	18%
UK Private Sector	13%	11%
Not in regular employment	12%	12%
UK Public sector	10%	10%
Student	7%	4%
Overseas HEI	7%	8%
Overseas Research Institution	5%	3%
Other Overseas Employment	4%	5%
Death	1%	1%
Length of time spent by academic staff at their current HEI		
0-4 years	50%	50%
5-9 years	19%	21%
10-14 years	11%	12%
15-19 years	6%	5%
20-24 years	4%	4%
25-29 years	4%	4%
30+ years	6%	5%
Percentage of academic staff who have been at their current HEI for less than 10 years	69%	70%
Aged under 25	100%	100%
Aged 25-29	100%	100%
Aged 30-34	98%	98%
Aged 35-39	84%	86%
Aged 40-44	68%	70%
Aged 45-49	52%	56%
Aged 50-54	36%	43%
Aged 55-59	28%	34%
Aged 60+	23%	31%

Annex A.2

To inform the work of the Staffing Group, Scottish Heads of Personnel (SHOP) undertook an informal survey to seek views about factors influencing staff choice at Scottish HEIs. The table below is a summary of the results produced by SHOP.

	Glasgow Area	Highlands/NE and Central Scotland	Edinburgh area/SE Scotland
Recruitment and retention issues	Difficult attracting best people from industry into HEIs. Partly reputation of universities but mainly because competitive reward packages are unaffordable	Salaries higher in other sectors Geographic 'isolation' Limited regional skills pool Full employment in major cities e.g. Inverness	Increased competition from English and Ivy League HEIs who can offer higher salaries for top academics Insufficient infrastructure (facilities/support) to attract best academics Need Flexible reward systems to attract high-income generating staff Housing costs in Edinburgh area Limited fringe benefits compared to other industries/sectors

	Glasgow Area	Highlands/NE and Central Scotland	Edinburgh area/SE Scotland
Reasons for Leaving	Returning to NHS Promotions to other HEIs	Lower teaching hours in other HEIs Higher Salaries in other sectors Career progression to other HEIs	Promotion to other HEIs Perception of better funding in England Lack of resources/facilities in some area Higher salaries in industry Too much 'admin'

	Glasgow Area	Highlands/NE and Central Scotland	Edinburgh area/SE Scotland
Reasons for Staying	<ul style="list-style-type: none"> – Job Security – Collaboration with industry – In support areas, reasonable opportunities – Secure pension schemes 	<p>Commitment to the vision of the university</p> <p>Academic freedom/culture</p> <p>Quality of Scottish Life</p>	<p>FE64 odd style contract</p> <p>Pension schemes perceived as generous and safe</p> <p>‘Academic Freedom’</p> <p>Quality of life and schooling in Scotland</p> <p>Subject area reputation</p> <p>Convenience (esp, local, lower grade staff)</p>
	<p>McCrone pay deal for school teachers limits those who would move to HE</p> <p>Old-style FE64 academic contracts which staff ‘lose it’ they move</p> <p>Age profile – over 50s are high proportion and reluctant to move</p>	<p>NE location can be a barrier to attracting high quality staff</p> <p>House prices beginning to boom</p>	<p>FE64 contract inhibits movement out</p> <p>Age profile. Significant numbers in mid-50’s who rarely move</p> <p>Rigid salary scales plus structures</p> <p>Lack of career progression to higher academic grades</p>

	Glasgow Area	Highlands/NE and Central Scotland	Edinburgh area/SE Scotland
Subjects/disciplines/staff/groups most affected	<ul style="list-style-type: none"> - Academic clinicians (doctors and Dentists) - Posts requiring high level IT skills - Vision sciences - Law - Radiography - Statisticians - Electrical/Electronic Engineers - Some Technicians 	<p>Senior Secretaries/PAs Economics/Law/ Accountancy</p> <p>Engineering/Computing</p> <p>Pharmacy and other professions allied to medicine</p> <p>Post requiring high level of IT skills</p>	<p>Sciences (esp. Food, Sports, Chemistry, Maths, Physics, Biology)</p> <p>Accountants, Computing, Economics and other Business Subjects</p> <p>Engineering</p>
Overseas Applications	Reasonable in older university. Most interest is in the Engineering shortage areas	<p>Reasonable numbers of academic and research applications in Aberdeen area</p> <p>Most frequent in Engineering and Computing disciplines</p>	<p>Significant numbers in old universities-but increasingly from Far East and Eastern Europe.</p> <p>In post-92 institutions <5% of applicants. Very difficult to attract from the USA due to salary constraints</p>
Other Comments	<p>Pension capping in public sector schemes stops top quality NHS researchers into HEIs</p> <p>Strict pension rules (SOPA) also dissuade movement from England/Wales (lots of benefits)</p> <p>Increased likelihood of 'poaching' of high quality</p> <p>Difficulty attracting top quality academic staff for post-92 institutions (funding and reputation)</p> <p>More overseas interest in Research Assistant posts</p>	As for Glasgow	<p>As for Glasgow, Edinburgh cost of living (especially property) moving closer to London/SE but without any @ London Weighting element</p> <p>Lack of opportunities for fast-track career development can put off applicants from other sectors</p>



Annex B.1

Estate returns

The Estate Management Action Plan return was piloted in 1996-97 with the first sector-wide results published in 1998. The return has been developed over the years to improve consistency with institutions' financial forecast returns and to facilitate the collection of information relating to the management of the estate, such as estate condition, space management and the costs of legislative compliance.

A key purpose of the return was to enable a year-on-year comparison between planned and actual expenditure on estate development and maintenance in light of the move to merge formula estate grant with the main teaching and research grant from 1998/99 onwards.

Due to increasing confidence in the Estate Management Statistics project (see below) the return was simplified in 2003 and now only requests project based information on current and planned estate development and property disposals.


Estate Management Statistics (EMS) project

This project was initiated by UK Directors of Estates and piloted in 1998. It is the established primary source for estates information in higher education. Institutions provide information annually in a common data template and the project has now produced four years of results for almost 200 performance ratios.

EMS is essentially a benchmarking exercise that enables institutions to assess their own performance over time and with their peers, with the aim of improving strategic and operational decisions. The project produces an annual report and an interactive CD that enables institutions to carry out benchmarking.

The project is undertaken by IPD Occupiers Property Databank in association with GVA Grimley and is managed by a Steering Group with representation from the UK Funding Councils. The project produces an annual report with information on key estate ratios compiled from the data fields.

The project provides a unique and centralised information resource of reliable and consistent data. The number of institutions involved in the project during 2002 was 157 (of the 160 UK institutions) and the accuracy and completeness of the data continues to increase.



While there are some issues related to definitions, completeness and accuracy of some of the data sources in these returns, SHEFC, subject to these qualifications, considers that the information provided gives a reasonable picture of the sectors' estate. As a result though, the figures provided in this paper should be treated as approximates.

Annex B.2

Scottish higher education institutions

Aberdeen University

Abertay University

Bell College of Higher Education

Dundee University

Edinburgh College of Art

Edinburgh University

Glasgow Caledonian University

Glasgow School of Art

Glasgow University

Heriot-Watt University

Napier University

Open University in Scotland*

Paisley University

Queen Margaret University College

Robert Gordon University

Royal Scottish Academy of Music and Drama

St Andrews University



Stirling University

Strathclyde University

UHI Millennium Institute*

* Estate information not gathered on these institutions

Annex B.3

Background Information on JIF / SRIF / SRIF2

The Joint Infrastructure Fund (JIF) was set up in 1998 to tackle the deficits emerging across the physical science infrastructure in the UK and to improve the international competitiveness of the UK science base. The aim of JIF was *to transform the working environment and enhance the research capability of the UK academic research community by creating a flexible scheme that can respond to the real needs of the community.*

The JIF scheme was a joint collaboration between the Wellcome Trust, Office of Science and Technology (OST) and The Higher Education Funding Council for England (HEFCE), with a total contribution of £750 million over two years, available to UK universities. HEFCE funds were used to support applications from English universities only, leaving Scottish universities to seek funding from the Wellcome Trust and/or OST. SHEFC also made additional grants to JIF projects and supported projects that did not win JIF funding through its Research Development Grant.

JIF invited bids from universities over five rounds during a two-year period, beginning from 1999. In that time, Scottish institutions were awarded just under £68 million of the £750 million (i.e. 9% of the total share). JIF was regarded as having made a valued contribution to the research base after years of under investment and it also helped research departments to attract funding from other sources.

The SHEFC Research Investment Fund: in 2001/02 SHEFC offered additional funding of £15 million to institutions in advance of the introduction of SRIF in 2002/03. This was to provide HEIs with access to a predictable funding stream for the science research infrastructure to allow them to plan their strategic investment priorities over a three-year planning horizon.

The Science Research Investment Fund (SRIF) followed on from the success of JIF, as the continued need for funding of the research infrastructure was highlighted. SRIF began its two-year programme of funding higher education institutions to provide world class buildings and equipment in 2002 with £375 million coming from OST and £300 million from DfES. Scotland's share of the £675 million total is scheduled to be a little over £64.5 million – £44.5 million from DTI and just over £20 million from SHEFC (who also administer it). Payments are made on a quarterly basis.

The Science Research Investment Fund 2 (SRIF2): with funding increased to £1 billion, SRIF 2 is designed to build upon the success of SRIF 1 by improving the quality of existing research infrastructure. Scottish higher education institutions will also benefit from the increase in funding receiving grants totalling £98 million over two years – an increase of over 50 per cent from SRIF 1. £68 million will come from OST and £30 million from SHEFC, during 2004/05 and 2005/06. SRIF 2 will differ from SRIF 1 by allowing institutions to invest a proportion of their income on research infrastructure into arts and humanities.

Annex C.1

TUITION AND MAINTENANCE SYSTEMS: SCOTLAND AND ENGLAND

Tuition Fee and Maintenance cost for full-time students at Scottish HEIs.

	Scottish Students	RUK Students	EU Students	Overseas students
Tuition Fees	No tuition fees	Liable to pay an income assessed contribution to fees. Final year fees paid from 2004-05 (where equivalent course could have been completed earlier elsewhere).	No tuition fees	Liable to pay full tuition costs
Maintenance	Means Tested Student Loan, Young Students Bursary (may replace part of the loan), Mature Students Bursary, Supplementary Grants Hardship Funds	Means Tested Student Loan, Supplementary Grants, Hardship Funds	Not eligible for maintenance support	Not eligible for maintenance support
Payments due on graduation	Graduate Endowment - May be liable to make one-off payment c. £2000 (Exempt graduates include mature students, lone parents, students with a disability and students undertaking sub-degree courses). Can be paid by taking out a student loan	Not Applicable	Graduate Endowment - May be liable to make one-off payment c. £2000 (Exempt graduates include mature students, lone parents, students with a disability and students undertaking sub-degree courses). Can be paid by taking out a student loan	Not Applicable

	Scottish Students	RUK Students	EU Students	Overseas students
Repayments of Student Loans	Repaid after graduation at 9% of earnings over £10,000	Repaid after graduation at 9% of earnings over £10,000	(GE loan only) Repaid after graduation at 9% of earnings over £10,000	Not Applicable

Tuition Fee and Maintenance cost support for part-time students at Scottish HEIs

	Scottish Students	RUK Students	EU Students	Overseas students
Tuition Fees	Liable to pay tuition fees, but some students families may be eligible for free waiver.	Liable to pay tuition fees, but some students families may be eligible for free waiver.	Liable to pay fees, but some students from low may be eligible for fee waiver.	Liable to pay tuition costs
Maintenance	£500 Loan for course related costs, Disabled Students Allowance, Hardship Funds.	£500 Loan for course related costs, Disabled Students Allowance, Hardship Funds.	Not eligible for maintenance support	Not eligible for maintenance support
Payments due on graduation	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Repayments of Student Loans	Repaid after graduation at 9% of earnings over £10,000.	Repaid after graduation at 9% of earnings over £10,000.	Not Applicable	Not Applicable

Current Tuition Fee and Maintenance support for full-time students at English HEIs

	Scottish Students	RUK Students	EU Students	Overseas students
Tuition Fees	Liable for income assessed contribution to tuition fees	Liable for income assessed contribution to tuition fees	Liable for income assessed contribution to tuition fees fee waiver.	Liable to pay full tuition costs
Maintenance	Means Tested Student Loan, Supplementary Grants, Hardship Funds, Young Students Outside Scotland Bursary	Means Tested Student Loan, Supplementary Grants, Hardship Funds,	Not eligible for maintenance support	Not eligible for maintenance support
Payments due on graduation	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Repayments of Student Loans	Repaid after graduation at 9% of earnings over £10,000.	Repaid after graduation at 9% of earnings over £10,000.	Not Applicable	Not Applicable

Current Tuition Fee and Maintenance support for part-time students at English HEIs

	Scottish Students	RUK Students	EU Students	Overseas students
Tuition Fees	Liable to pay tuition fees, but may be eligible for fee waiver	Liable to pay tuition fees, but may be eligible for fee waiver	Liable to pay tuition fees, but may be eligible for fee waiver.	Liable to pay full tuition costs
Maintenance	£500 Loan for course related costs, Disabled Students Allowance Hardship Funds.	£500 Loan for course related costs, Disabled Students Allowance, Hardship Funds.	Not eligible for maintenance support	Not eligible for maintenance support
Payments due on graduation	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Repayments of Student Loans	Repaid after graduation at 9% of earnings over £10,000.	Repaid after graduation at 9% of earnings over £10,000.	Not Applicable	Not Applicable

Proposed Tuition Fee and Maintenance Support for full-time students at English HEIs

	English Students	Scottish Students	EU Students	Overseas students
Tuition Fees	From 2006-07 Students liable to pay variable tuition fees up to £3000. Can apply for tuition fee loan of up to £3000	From 2006-07 Students liable to pay variable tuition fees up to £3000. Loan availability for fees still to be decided	From 2006-07 Students liable to pay variable tuition fees up to £3000. Can apply for tuition fee loan for up to £3000	Liable to pay full tuition costs
Maintenance	From 2004-05 means tested student loan, supplementary grants, HE Grant up to £1000 and Access to Learning Fund. From 2006-07 Means tested student loan, supplementary grants, Combination Grant of up to £2700, £300 bursary from institutions (charging £3000 fees) and Access to Learning Fund.	Means Tested Student Loan, Supplementary Grants, Access to Learning Fund, Young Students Outside Scotland Bursary	Not eligible for maintenance support	Not eligible for maintenance support
Payments due on graduation	See below	See below	See below	Not Applicable
Repayments of Student Loans	From April 2005, repaid after graduation at 9% of earnings over £15,000. From 2006-07, repaid after graduation at 9% of earnings above £15000, outstanding loan debt written off after 25 years, or	From April 2005, repaid after graduation at 9% of earnings over £15,000. Outstanding loan debt written off at 65 years of age, or becomes unfit to work because of a disability, or on death.	(Tuition fee loan) From 2006-07, repaid after graduation at 9% of earnings above £15,000, outstanding loan debt written off after 25 years, or at 65 years of age, or becomes unfit to work because of a disability, or on death.	Not Applicable

Proposed Tuition Fee and Maintenance Support for part-time students at English HEIs

	English Students	Scottish Students	EU Students	Overseas students
Tuition Fees	Some liable for pro-rata fees	Liable to pay tuition fees, but may be eligible for fee waiver.	Some liable for pro-rata fees	Liable to pay full tuition costs
Maintenance	Students may be eligible for grant of £250, Access to Learning fund.	£500 Loan available students for course related costs, Disabled Allowance, Access to Learning Fund	Not eligible for maintenance support	Not eligible for maintenance support
Payments due on graduation	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Repayments of Student Loans	Not Applicable	From April 2005, repaid after graduation at 9% of earnings over £15000. Outstanding loan debt written off at 65 years of age, or becomes unfit to work because of a disability, or on death.	Not Applicable	Not Applicable

Annex C.2

SAAS expenditure and loan allocation, 2002/03 by domicile & location of institution

	Awards	Fees	Loans	Total
Total	£84,490,623	£124,891,706	£228,728,087	£438,110,416
Scotland	£82,604,059	£121,602,304	£210,958,740	£415,165,103
Outwith Scotland	£1,886,564	£3,289,402	£17,769,347	£22,945,313
Total	£84,490,426	£119,583,892	£228,728,087	£432,802,405
Scotland	£82,603,862	£116,309,890	£210,958,740	£409,872,492
Outwith Scotland	£1,886,564	£3,274,002	£17,769,347	£22,929,913
Total	£197	£5,307,814	£0	£5,308,011
Scotland	£197	£5,292,414	£0	£5,292,611
Outwith Scotland	£0	£15,400	£0	£15,400

SAAS calculates a student's loan entitlement but the Student Loans Company administers the loan. Therefore it is not known whether the student took up their full entitlement

SAAS expenditure and loan allocation, 2002/03 Award, fees & loan as a % of the total amount spend

	Awards	Fees	Loans	Total
Total	19%	29%	52%	100%
Scotland	20%	29%	51%	100%
Outwith Scotland	8%	14%	77%	100%
Total	20%	28%	53%	100%
Scotland	20%	28%	51%	100%
Outwith Scotland	8%	14%	77%	100%
Total	0%	100%	0%	100%
Scotland	0%	100%	0%	100%
Outwith Scotland	0%	100%	0%	100%

SAAS calculates a student's loan entitlement but the Student Loans Company administers the loan. Therefore it is not known whether the student took up their full entitlement

SAAS expenditure and loan allocation, 2002/03 Domicile & insitution of location as a % of the award, fee & loan spend

	Awards	Fees	Loans	Total
Total	100%	100%	100%	100%
Scotland	98%	97%	92%	95%
Outwith Scotland	2%	3%	8%	5%
Total	100%	96%	100%	99%
Scots Domiciled	98%	93%	92%	94%
Scotland	2%	3%	8%	5%
Outwith Scotland	0%	4%	0%	1%
Total	0%	4%	0%	1%
EU Domiciled	0%	0%	0%	0%
Scotland				
Outwith Scotland				

SAAS calculates a student's loan entitlement but the Student Loans Company administers the loan. Therefore it is not known whether the student took up their full entitlement

Total amount spend on supplementary awards, 2002/03

	2002/03 Total Amount Paid
Total Award Payments	£84,490,623
Standard Maintenance Allowance	£9,572,938
Travel Expenses	£15,468,980
Young Students Bursary	£30,177,163
Young Students Outside Scotland Bursary	£146,664
Mature Students Grant	£0
Dependants Grant	£15,394,264
Lone Parents Grant	£4,400,618
Lone Parents Childcare Grant	£1,569,671
School Meals Grant	£2,187,799
Disabled Students Allowance	£5,128,226
Adhoc Payments	£245,908
Adjustment Payments	£16,445
Two Homes Grant	£182,001

Note figures not summing due to rounding errors

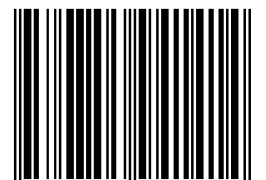
Part Time students' loan allocation, 2002/03

Total Loan	£317,000
Non Means Tested Loan	£317,000
Means Tested Loan	£-
Additional Means Tested loan	£-

*Part time students are entitled to a £500 non means tested loan
SAAS calculates a student's loan entitlement but the Student Loans Company administers the loan.
Therefore it is not known whether the student took up their full entitlement*

Source: SAAS

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