

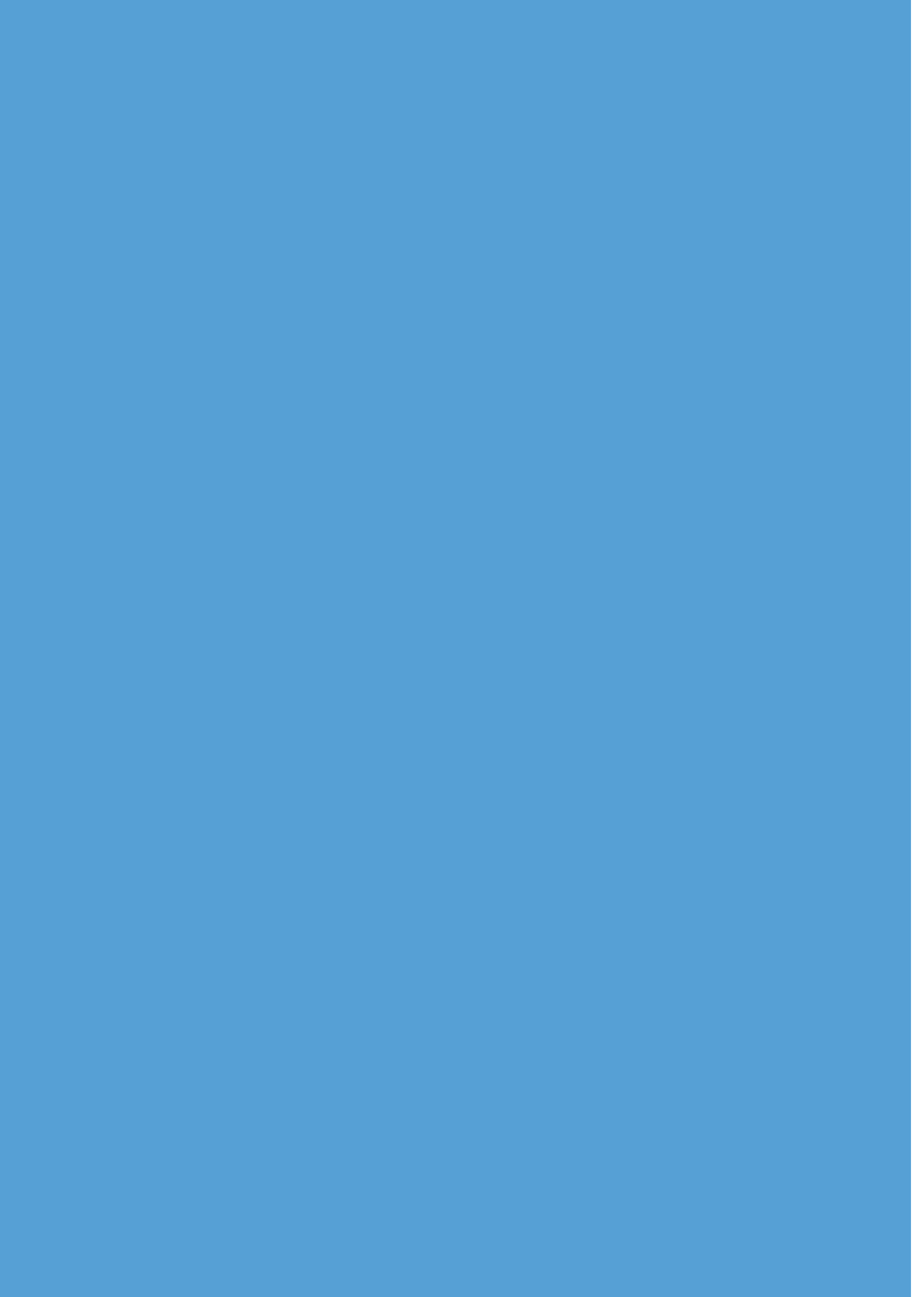


Paying Dividends

Measuring the impact of public investment in Scottish higher education

Highlights:

- Universities are highly effective at leveraging-in income from other sources.
- Of £1 billion of planned investment in estates: 26 per cent will come directly from the public purse; 30 per cent from institutional budgets and 44 per cent from external sources.
- The amount of research income universities were able to raise from external sources increased by more than five times the increase in public investment in the same period.
- Scottish universities were able to attract a higher proportion of non-UK research staff to work in Scotland when compared with the previous year.
- Universities were able to generate ten times the amount of resources available from public funding for knowledge transfer activities from external sources.
- Scottish universities increased the amount of income from consultancy work undertaken with small and medium size enterprises by more than 40 per cent in one year.
- For every £2 of public investment in human resource modernisation – only £1 of it is paid for by the public purse.



For every £1 of public investment in estates higher education expects to deliver £4 of development

For every £1 of extra public investment in research universities generate an extra £3 of research activity

For every £1 of extra public investment in knowledge transfer Scotland gets more than £10 extra activity

For every £1 invested in pay modernisation only 50p came from the public purse

Introduction

In the 2004 Spending Review investment in higher education increased by 18 per cent in real terms by 2007-08. The majority of the money was invested in estates, in research and knowledge transfer, and in human resource modernisation.

Scotland's higher education institutions fully appreciate the need to ensure value for money and are eager to demonstrate the rate of return they will deliver for Scotland as a result of this significant public investment. This report will assess how the public investment enabled higher education institutions to lever in investment from other sources so that Scotland gets more than its money's worth from the sector.

We are currently mid-way through the 2004 Spending Review period and therefore higher education institutions have received only one full year of the increased funding at the point of publication. The data used in this report is taken from a survey of Universities Scotland members and other sources. The survey generated high response rates but it was not possible for all higher education institutions to respond to every question given the timescale. These factors mean that there is a degree of estimation in the report but this is the best assessment of performance available at this point.

Estates

In the 2004 Spending Review, the higher education sector was awarded £148 million of investment over three years to help update teaching infrastructure and renovate estates. This investment allowed the sector to successfully lever in money from other sources, taking the total value of the sector's planned redevelopment to over £1 billion.

The results of the survey of member institutions show the scale of investment planned:

- Four complete campus redevelopments
- The refurbishment of engineering laboratories
- New learning centre
- Refurbishment of Undergraduate laboratories and Lecture Theatre
- New animal teaching facility
- Upgrading and replacement of Audio Visual Equipment
- Refurbishment of a Student Support Facility
- New teaching block
- New library
- Science Teaching Centre for the College of Life Sciences and Medicine
- Reconfiguration and Refurbishment of Analytical Laboratories
- New arts building

Energy efficiency and environmental sustainability have been at the core of refurbishment plans and new building design with many institutions making use of cutting-edge technology in this field. Some examples include:

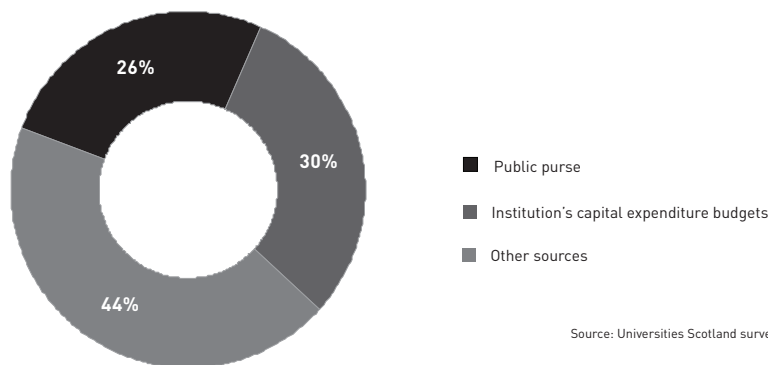
- Addressing emerging issues of sustainable construction and design quality
- All building projects are initiated after careful consideration of opportunities to improve space utilisation, rationalise the estate and, where possible, ultimately reduce space
- Installation of state of the art biomass boiler to remove dependence on non-renewable fossil fuels.
- Incorporation of energy-efficient light switches and water saving features

Of this £1 billion of planned investment:

- 26 per cent comes directly from the public purse
- 30 per cent comes from institutions' capital expenditure budgets
- 44 per cent comes from other sources

The sector is therefore able to generate leverage of 1:3 so that the total project costs planned for the sector's estates are almost four times the value of the core public investment made in estates.

Figure 1: £1 billion investment in estates by source



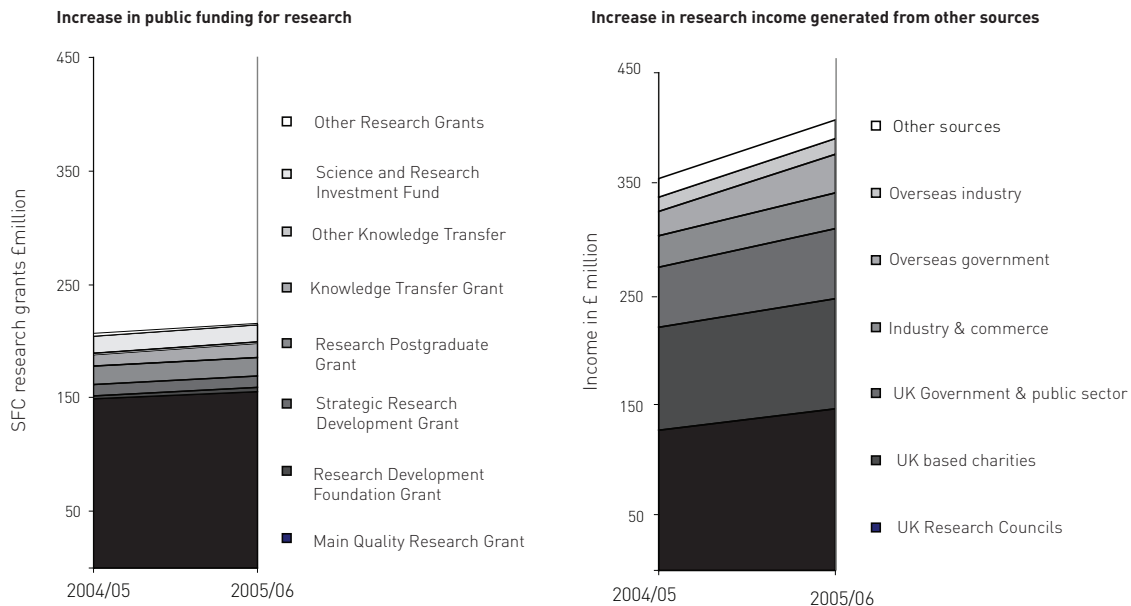
Source: Universities Scotland survey 2006

Research and knowledge transfer

Scottish higher education institutions received a 4.5 per cent increase in total research funding between 2004/05 and 2005/06. This provides a foundation on which institutions are able to attract additional funding from other sources. In the same timeframe Scotland's higher education institutions increased their research income from other sources by 15 per cent.

Figure 2 and 3 show that between 2004/05 and 2005/06 the public investment in research increased by just over £9.5 million (after adjustment). In the same timeframe the amount of additional research funding raised by the sector increased by £53.2 million.

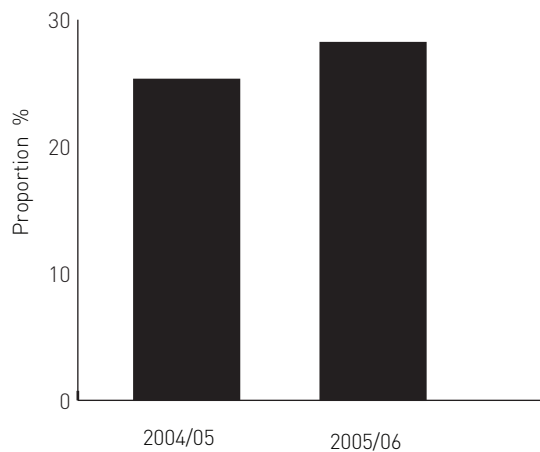
Figure 2 & 3: Increase in public investment in research compared to increase from other sources between 2004/05 and 2005/06.



Research Staff

Another measure to indicate the improvement in research performance is the sector's ability to attract the best research staff from overseas. Scotland increased the number of non-UK research-intensive staff as a proportion of all research staff from 25.3 per cent to 28.2 per cent in one year.

Figure 4: Non-UK research staff as a proportion of total research staff



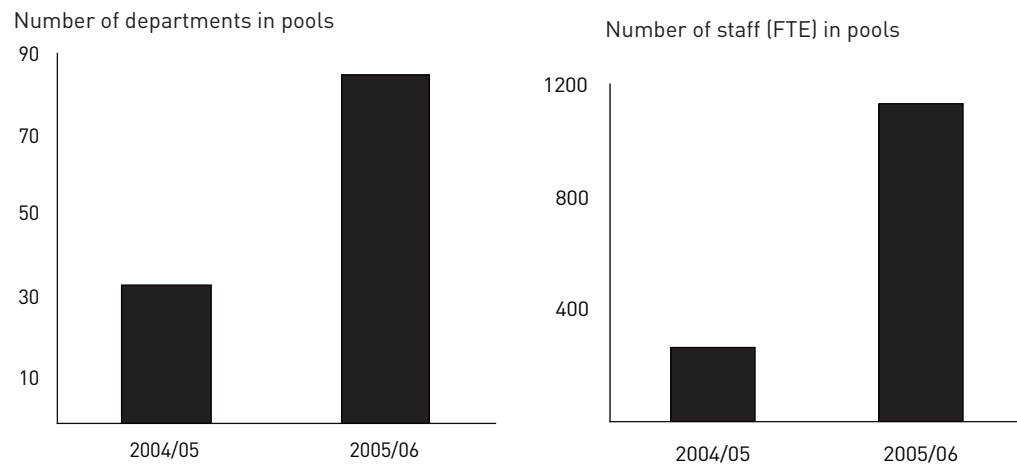
Source: Universities Scotland survey

Research pooling

Part of the increased funding in the 2004 Spending Review was to establish a new initiative called research pooling. Research pooling is a collaborative way of working to strengthen the critical mass of Scotland's research base and to get better value from public resources.

Over 80 per cent of respondents are involved in research pools only one year after funding became available. Between 2004/05 and 2005/06 the number of departments involved in pools increased by 153 per cent with a resultant 333 per cent increase of participating staff (FTE).

Figures 5 & 6: Growth of research pooling since funding was made available in 2004 Spending Review



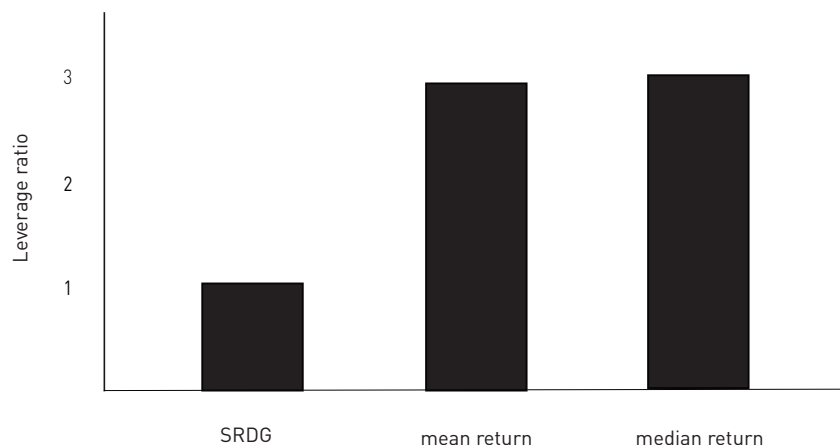
Source: Universities Scotland survey 2006

Strategic Research Development

Strategic Research Development Grants are designed to enable Scotland's higher education institutions to accelerate significant strategic investments in research infrastructure to allow them to respond to Scotland's strategic needs and opportunities. The public investment (in the form of SRDG) enables institutions to attract investment from other sources.

Not all higher education institutions were in receipt of SRDG in 2005/06 nor were all those surveyed able to respond to this question in the timeframe available. However of the sample that were able to provide data the results showed a leverage ratio for strategic research development of between 1:0.06 to 1:5.8 with a mean of 1:2.85 and a median of 1:2.9.

Figure 7: Returns on public investment in the Strategic Research Development Grant

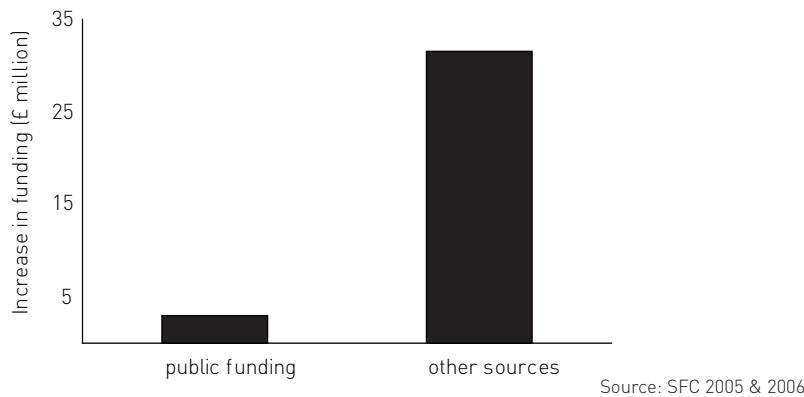


Source: Universities Scotland survey

Knowledge Transfer

Knowledge transfer involves the dissemination and exploitation of the outputs of research, knowledge, skills and expertise to achieve economic, educational, social and cultural benefits for society. Between 2004/05 and 2005/06 the knowledge transfer grant increased by £3million. In the same period the sector was able to increase its knowledge transfer income from other sources by over £31million pounds.

Figure 8: Increase in knowledge transfer income between 2004/05 and 2005/06 by source

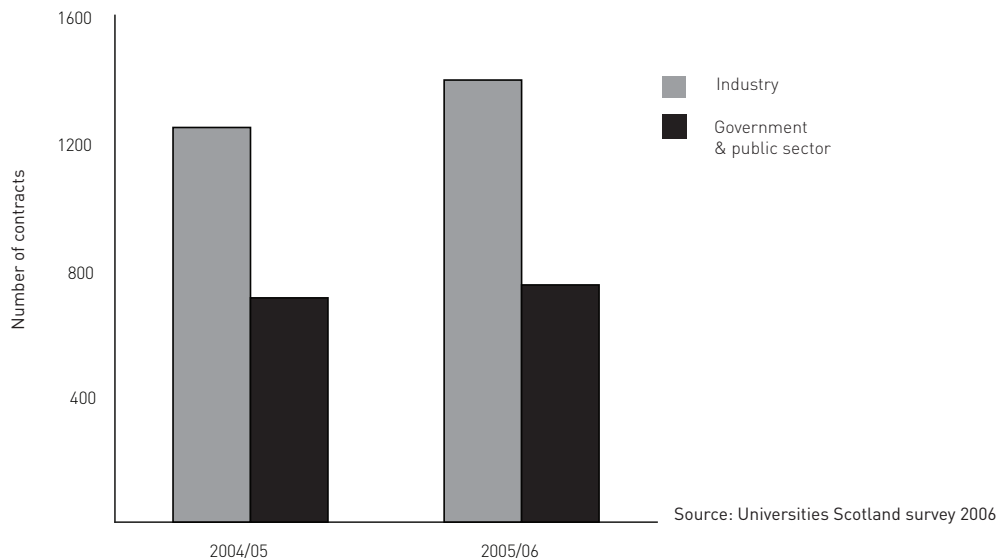


Consultancy

Between 2004/05 and 2005/06 there was a steady increase in the demand for consultancy from institutions as the number of consultancy contracts increased from 1,954 to 2,150. This trend is particularly marked in the business and industry sector where the number of consultancy contracts won from this sector increased by 12.4 per cent in one year compared with a 10 per cent average increase.

These results are borne out by the Scottish Funding Council's knowledge transfer metrics which show that the amount of income generated from consultancy contracts increased markedly between 2004/05 and 2005/06. The returns show an increase in income from consultancy activities of nearly 50 per cent in one year from over £31 million to over £46 million.

Figure 9: Increase in consultancy contracts won by HEIs (displayed by sector)

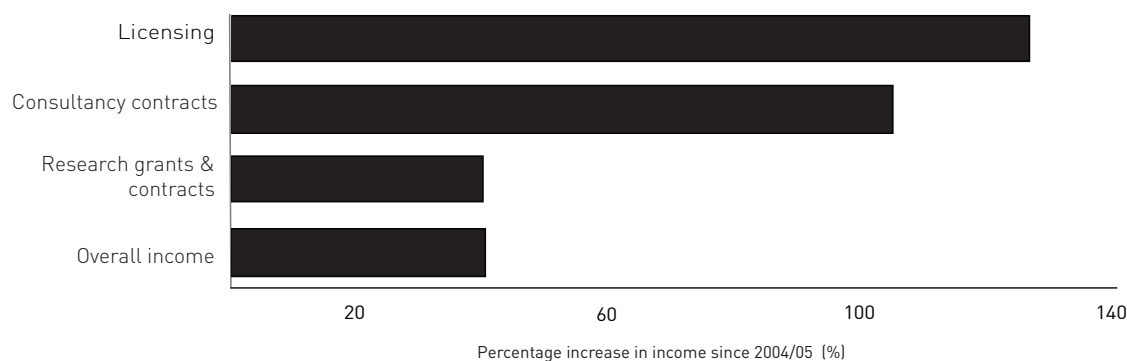


Relationships with Small and Medium Enterprises (SMEs)

Significant improvements were made in the amount of income higher education institutions received from SMEs between 2004/05 and 2005/06. The level of activity with SMEs as measured by total income increased by over 40 per cent in one year taking the total income generated from SMEs from £15.3million to £21.5million.

Knowledge can be transferred from higher education institutions to SMEs in many ways such as through consultancy services, continuing professional development and licensing. As the public investment in knowledge transfer increased by 31.5 per cent between 2004/05 and 2005/06 the income from consultancy and licensing with SMEs increased by 104.5 per cent and 126.0 per cent respectively

Figure 10: Increase in income from selected knowledge transfer activities with SMEs between 2004/05 and 2005/06



Source: SFC KT returns 04/05 & 05/06

Human resource management

In the 2004 Spending Review the higher education sector was awarded investment, rising to £30 million by 2007/08, to help implement pay modernisation. The Framework Agreement has delivered significant benefits for all staff in higher education, including:

- harmonization of terms and conditions
- more coherent human resource policies to address forthcoming equalities legislation
- pay and performance are now better linked so that good staff are rewarded and remain motivated
- a reduction in the working week for many members of staff
- human resources policy is more family-friendly for staff
- increased transparency in pay and conditions allows HEIs to be more competitive with other employers in their local economy for non-academic posts
- staff development acknowledged throughout the sector as an entitlement
- beacons of good practice emerging throughout the sector to help efficiently deliver on its commitment to staff development

It is difficult to make an accurate assessment of the impact of this investment as not all public funding for pay modernisation has been received by the sector at the point of publication. The Scottish Funding Council has commissioned an assessment of the impact of implementation which will deliver further evidence in this area. However this report offers the best estimate available at this time.

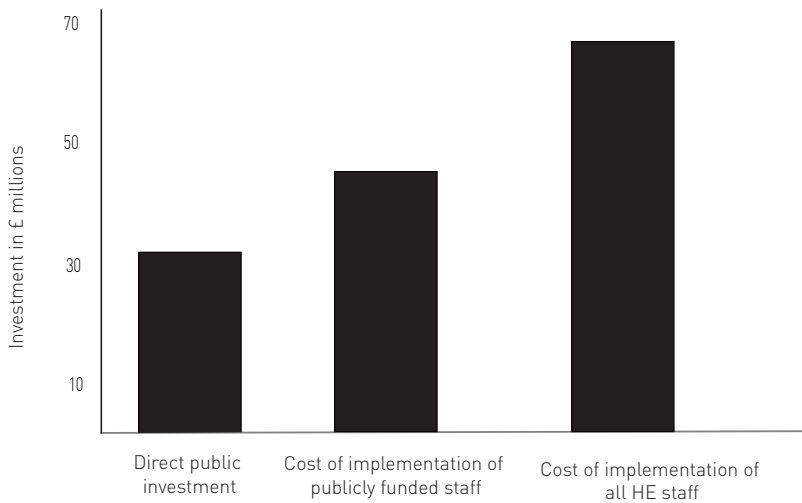
Estimates of the cost of the Framework Agreement in the UK, produced by UCEA, puts the cost of modernisation of pay structures in Scotland at £64.9million.

The public investment of up to £30 million, as allocated by the Scottish Funding Council in academic year 2007/08, covers 46 per cent of the full cost leaves institutions to raise 54 per cent of the cost from other sources.

Approximately two-thirds of staff in higher education institutions are wholly-institutionally financed; the remaining third are financed by external sources. Even if we consider the cost of modernisation for only wholly-publicly funded staff the cost of modernisation still exceeded the public investment by over £14 million which institutions had to find themselves.

For every £2 of investment in pay modernisation only £1 is covered by the public purse.

Figure 11: Cost of implementation relative to direct public investment



Source: UCEA estimates applied to Scotland

This is a sector-wide estimate and will not represent the ratio of investment at every institution.

Conclusion

In the 2004 Spending Review universities received significant public investment in their estates, research and knowledge transfer and pay modernisation.

An analysis of the difference this investment has made shows that:

- For every £1 of public investment in estates higher education expects to deliver £4 of development.
- For every £1 of extra public investment in research universities generate an extra £3 of research activity.
- For every £1 of extra public investment in knowledge transfer Scotland gets more than £10 extra activity.
- For every £1 invested in pay modernisation only 50p came from the public purse.

We think that this shows that higher education can be trusted to use public money well and that investment in higher education pays dividends for Scotland.

